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Abstract

This study considers whether the concept of **locus of control** can differentiate between children who present behaviour problems and whether this creates more understanding for all the actors involved.

The subjects of the study are children aged between 9 and 16 years who were referred to the Sunderland Educational Psychology Service on the grounds of their severe behavioural difficulties either in school, at home or within the wider local community. These children attended a variety of mainstream and special schools and units for disruptive pupils.

All the children in the study (n=259) were administered the Nowicki-Strickland locus of control scale in a one to one interview setting. In addition, 41 of the children took part in a semi-structured interview which explored their locus of control beliefs by means of a series of vignettes relating to key areas of their lives.

The relationship of locus of control scale scores to a range of demographic and behavioural variables was examined. To aid prediction, the scale items were also subjected to factor analysis, cluster analysis and nonmetric multidimensional scaling. Findings suggested that although such grouping techniques might be valuable, the relationship of scale scores to the study variables was generally low or non-existent whichever mode of analysis was employed. Comparison of extreme scorers indicated that the highly external population contained a higher proportion of girls and younger children.

There was very little relationship between the severity/frequency of the problem behaviours and locus of control scores. Although the literature has indicated that special populations tend to score more externally, the present study suggests that the relationship between locus of control and problem behaviour within such a special population is not strong.

The semi-structured interviews highlighted the conceptual and measurement difficulties of the locus of control construct. Consideration of issues within a specific area (e.g. dealing with teachers) is undertaken and illustration is provided by the presentation of responses from a variety of informants. In addition, a detailed case study is provided which demonstrates an individual's responses across a range of areas.

Blind ratings of internality/externality based upon a selection of interview transcripts by experienced practitioners varied substantially and, furthermore, there was little indication that subjects' interview responses reflected their extreme scores on the locus of control scale.

In the light of the findings from both quantitative and qualitative analyses and the conceptual and methodological difficulties encountered, the study questions claims that the locus of control construct has a central place in clinical work with children with emotional and behavioural difficulties. In particular, it challenges the frequently repeated claim that therapeutic interventions should be established to increase internality in such populations.

It is recommended that researchers and clinicians should consider the potential value of the broader issue of personal control, of which locus of control is but one element. The use of longitudinal case studies is recommended as preferable to current studies which often employ short interventions and seek statistical, rather than clinically meaningful, significance.

LOCUS OF CONTROL IN CHILDREN WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES: AN EXPLORATORY STUDY

VOLUME ONE

by

Julian G.C. Elliott

**A thesis submitted for the degree of
Doctor of Philosophy**

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DECLARATION

This is to certify that none of the material offered in this thesis has previously been offered by me for a degree at the University of Durham or at any other institution.

Gender Wherever possible, the writer has endeavoured to avoid the use of the male pronoun when referring to both sexes. In some instances, however, this proved unavoidable. In such cases the male form is employed as a generic term for both boys and girls.

Acknowledgements

I should like to record my sincere gratitude to the following individuals:

- Professor Frank Coffield, my supervisor, whose guidance, support and encouragement proved so valuable during the course of this study. That he serves as a model for me in my own supervision of students is, perhaps, the greatest compliment I can pay him

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- Those colleagues in Educational Psychology Services and in schools and units who assisted in the research exercise

- The children who are the subjects of this study. I hope that their wishes for the future shall be realised

- My wife, Ruth, and children, Aidan and Elizabeth, for their patience, acceptance and love

Chapter I Introduction

In 1977, shortly after qualifying as a teacher, the writer started work in a girls' remand home. The doors and windows were locked; spartan dormitories were provided for groups of four girls who were permitted few personal possessions. Institutional life was regimented and seemed to lead to the negation of a sense of personal identity.

On one, particularly memorable occasion, the writer found himself engaged in a battle of wills with a fifteen year old girl. The conflict centred upon her unwillingness to brush her teeth. The rules of the establishment were that the girls should prepare for bed at 9.00 p.m. and as this young woman stood in pyjamas outside the dormitory hysterically screaming defiance, the writer's thoughts were dominated by a pressing desire to obtain her conformity. It was only later, as prolonged thought was given to the meaning of this behaviour, that he came to understand that what initially appeared to be unreasonable, needlessly confrontational behaviour, could be equally construed as a desperate endeavour, on the part of the girl, to gain a sense of control over her life.

While our perceptions of others are the product of repeated interactions, it is often single incidents, such as that outlined above, which enable us suddenly to make sense of a series of earlier experiences and lead us to what may be more useful insights and greater understanding.

A further isolated incident also had a significant influence upon the writer's understanding of problem behaviour. Later, when he was teaching in a comprehensive school, he observed three twelve year old boys being cheeky and insolent towards a senior colleague. As they were finally dispatched to the Headteacher's office, the writer puzzled over the fact that their behaviour appeared to be in no way tempered by knowledge of the likely consequences. On subsequent occasions, when misbehaviour was witnessed, the writer often found himself pondering whether:

- the range of possible consequences had been considered by the children concerned

- if so, whether the risk of adverse consequences had been perceived as acceptable or unimportant or

- whether outcomes were considered to be unpredictable and/or largely largely unrelated to earlier actions.

The more these situations were examined, the more it appeared to the writer that, for many children, consequences were often random or unimportant and thus, played little part in guiding their actions. Such a perception is often shared by teachers who argue for a more systematic use of rewards and punishments. Speaking at the 1987 Annual Conference of the Professional Association of Teachers, for example, one delegate exemplified this perspective by stating:

> "Disruptive pupils should be made to realise that they have nothing to gain and everything to lose by their actions" (Guardian newspaper, 1.8.87., p. 3).

According to George Kelly, we are all scientists who continually attempt to make sense of our world. In his early years as a teacher, the writer's own naive theories concerning children's sense of control over their lives and their varied understanding of the contingencies between behaviour and outcomes, were the product of his own accumulated professional experiences filtered through a crude, yet developing, grasp of psychological theory. Gradually, it was assumed, he would build up a series of observations enabling him to gain an increasingly accurate understanding of the dynamics of children's behaviour.

Kelly, however, has contrasted the principle of **constructive alternativism**, which argues that there is always a different way of construing events, with that of **accumulative fragmentalism** which assumes that truth is collected piece by piece.

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While the former concept does not reject the notion of accumulated information, it suggests that truth cannot be determined merely by the size of the collection. To a significant extent, the writer's changed perceptions of the meaning and function of problem behaviour resembled a reconstruction rather than an aggregation of various observations and experiences.

During his first years as a teacher, the writer's initial perceptions of problem behaviour was that not only was it usually damaging to all parties, it was also meaningless. He interpreted many of the extreme behaviours which he witnessed (attempted suicide, assault with a deadly weapon, sexual assault) as little more than feral actions of unsocialised, confused girls with appalling life histories. Their behaviours, seemingly fuelled by the excessive lability of their emotions, appeared to be marked by impulsivity and a total lack of consideration as to outcomes. Each case file pointed to the lasting damage caused by early negative childhood experiences which seemed to have resulted in an unthinking, maladaptive hostility to the outside world. To what extent, however, did such behaviour have meaning? Could one interpret such behaviour as having a purpose or function?

> ".....whatever nature may be, or howsoever the quest for truth will turn out in the end, the events we face today are subject to as great a variety of constructions as our wits will enable us to contrive. This is not to say that one construction is as good as any other, nor is it to deny that at some infinite point in time human vision will behold reality out to the utmost reaches of existence. But it does remind us all that our present perceptions are open to question and reconsideration and it does broadly suggest that even the most obvious occurrences of everyday life might appear utterly transformed if we were inventive enough to construe them differently" (Kelly, 1970, p.1).

A key issue for the writer was whether in the light of Kelly's observation, an alternative interpretation of much of the challenging behaviour, noted above, was that it represented the child's somewhat immature and maladaptive attempts to exert control over a seemingly alien and unresponsive social world.

The writer was first introduced to the locus of control construct in 1980. As with the construct of cognitive dissonance, vastly influential in American social psychology during the 1960s, he perceived a theoretical perspective and accompanying literature which appeared not only to offer greater understanding of human behaviour (in particular, issues such as those outlined above) but might also help him to serve better the needs of the children with whom he worked.

In his subsequent practice as an educational psychologist, the writer came to realise that such theories could not provide simple answers to complex issues. Although confident that the locus of control construct had much to offer the researcher/clinician, he recognised that superficial understanding would only result in vague generalities and prescriptions.

The writer's interviews with children, who had been referred to him for psychological support/assessment, increasingly involved exploration of such issues as:

- Can you describe why you/others are concerned about your behaviour?
- Do you want this situation to change?
- Do you feel that you are in a position to effect this change?

While the answers to such questions were often illuminating, the writer considered that he was being guided by limited theoretical understanding and even less by a rationale for action. Turning increasingly to the 'control' literature, he found a vast diversity of papers which eventually led him to the seemingly paradoxical conclusion that:

a) the issue is far more complex than he had first considered

b) the literature often considered the issues more simplistically than was warranted

The majority of locus of control studies have tended to compare populations (e.g.

learning disabled versus normals), or to make pretest/postest comparisons following educational or therapeutic interventions. Locus of control assessment has tended to be undertaken by means of self-report questionnaires. Small, statistically significant differences on these measures have been seen as meaningful and resulted in claims that interventions should focus upon shifting subjects' locus of control in what is perceived to be a more desirable direction (i.e. that subjects should perceive a greater relationship between their actions and subsequent outcomes).

As a result of, literally, thousands of locus of control studies, the construct has become widely accepted as being of value to researchers and clinicians. Texts focussing upon children with behaviour problems routinely make reference to the construct (e.g. Lambley, 1989; Fontana, 1985; Montgomery, 1989), yet these rarely offer any examination of the conceptual or empirical difficulties which are a feature of this work. Although it may be argued that these are general texts and cannot, therefore, deal with such matters in detail, their authors' ready acceptance of the construct and its practical implications may be misleading to readers and have an unfortunate effect upon practice.

The difficulties of measuring locus of control are widely ignored in the literature. Wilson (1989) points out that in the social sciences there is often a logical gap between the concepts with which researchers begin and the research which follows it. This is, perhaps, particularly true of attitudinal/personality research. An important issue in this respect is whether an individual's locus of control can be operationalised and adequately measured, and, if so, by what means? Are self-report scales (almost universally employed in locus of control research) necessarily the best means of tapping the construct? Would other techniques offer complementary/opposing information?

The use of self-report scales has proven valuable to researchers dealing with large samples and employing quantitative methods of analysis. Findings from these studies have frequently

been used as a basis for offering suggestions for clinical intervention. For clinical work, however, such data sources may be insufficient:

> "Given the salience of a particular construct for clinicians, the acceptance of a tool bearing the name of that construct can occur all too easily, and it is in this leap from the demonstration of utility in nomothetic research to clinical purposes that difficulties abound. Clinical prediction requires much data from convergent and divergent sources to raise the probability levels of any prediction (Lefcourt, 1982, p.169).

Locus of control is an immensely appealing construct which appears to have high face validity. It is hardly surprising, therefore, that researchers and clinicians have been ready to offer the construct as providing a theoretical rationale for their observations or to justify a particular course of action. Gibb (1987) a university business school professor, for example, suggests that an internal locus of control is a valuable entrepreneurial attribute yet fails to provide or develop an argument, or set it in the context of the literature.

When a psychological construct moves from the world of academe to citation in the lay press, it is well on its way to unguarded acceptance. Witness the absurd article, reproduced as Figure 1-1, which appeared in the Daily Mail newspaper. The piece represents a gross over-simplification of the construct and the 'three steps to success' which follow appear to have little to do with locus of control. Perhaps, with the advent of further features of this kind, the notion of the 'internal' or 'external' may enter lay consciousness and share equal place with the paranoid, the extrovert and the individual who had an unfortunate history of toilet training!

It has already been noted that one of the greatest difficulties of this work arises from the adoption of a nomothetic approach which, in most locus of control research, focuses upon the highlighting of small, statistically significant differences between individuals and groups on self-report scales. While this may be empirically sound, it is questionable

Figure 1-1   Extract from Daily Mail newspaper, 26.12.89

Three steps to change your life

AS the year-end approaches, many of us will be wondering how to turn those personal dreams, that didn't happen, into reality in 1990.

Making New Year resolutions is, to mis-coin a phrase, the annual triumph of hope over expectation. We resolve to change our lives in an effort to achieve what we may secretly suspect is unattainable.

It is also an attempt to impose a sense of order on a vast expanse of time. By using the calendar year we have a point at which to make a fresh start.

Individual determination plays a vital role in heading for these new goals. Psychologists have defined broad types of personality that indicate how successful we are going to be.

According to Martin Herbert, professor of clinical psychology at Leicester University, the need to be in control figures in everyone's life. At one extreme of the 'control continuum' are the 'inter-nals' — people who believe they can shape their lives by work and anything is possible once the target has been earmarked.

At the other end are the 'externals', those who believe that what happens to them is ordained.

Goal

'This tends to lead to feelings of helplessness and can breed apathy and dependence. Even when something goes right, externals will attribute it to luck,' said Professor Herbert. They don't usually make resolutions since they believe they have no control over their destiny.

Most people are some-where in the middle, con-cludes Herbert, who has worked with family situations and has written books on discipline.

'I feel that as people get older they are more inclined to make resolutions. They assess what they have achieved and compare it with what they hoped for. It's a chance to get their lives back on the tracks before it's too late.'

There are three steps to success with New Year resolutions, he says.

1. Make a written contract to achieve your goal. Write down what you want to do, why you want to do it and and be specific about how you're going to manage it. Set a timescale. Make it realistic. Having it on paper enables you to take it out to remind you where you're heading.

2. Give yourself incentives with little rewards. When you start to get results, treat yourself to a theatre trip or a long morning in bed.

3. Ask a relative or friend to monitor your progress. Sign your contract and have it witnessed — the formality makes it less likely you will jettison the goal.

whether researchers and clinicians should draw upon limited data to make therapeutic/ educational recommendations for work with children and adults. Many locus of control studies appear to lose sight of the fact that it is human beings who are being studied, not entries on a questionnaire. It may be possible to validate the construct, as measured by such scales, statistically, but does it have any real meaning in the phenomenological world of real people? We should not forget that the consequences of decisions taken by professionals in the light of their clients' responses on such measures, may be extremely serious.

This study represents an attempt to explore some of the issues outlined above. It attempts to combine the nomothetic and the idiographic, the quantitative and the qualitative, the statistical and the clinical. It takes one of the most widely used and accepted locus of control scales for children and, in the light of data obtained from a variety of methods and sources, endeavours to examine the extent to which the locus of control construct can help us to gain greater understanding of the difficulties and needs of children with emotional and behavoural difficulties.

Throughout this project an attempt has been made to ensure that the children in the study are not considered merely as an homogenous, administratively defined population but, equally, if not more importantly, as individual human beings.

> "The first thing the intellect does with an object is to class it along with something else. But any object that is infinitely important to us and awakens our devotion feels to us also as if it must be **sui generis** and unique. Probably a crab would be filled with a sense of personal outrage if it could hear us class it without ado or apology as a crustacean, and thus dispose of it. 'I am no such thing' it would say. I am **myself**, myself alone" (William James, Gifford Lectures 1901-2; cited in Bannister and Fransella, 1971, p.57; emphasis as in original).

Chapter 2 Locus of Control: a review of the relevant literature

The outline of this review

The locus of control construct has spawned a huge and complex literature which is difficult to review given the limitations of space upon a study of the present nature. This chapter, however, will attempt to consider those aspects of the locus of control literature germane to a study of children with emotional and behavioural difficulties. For this reason it will be necessary to explore the following elements:

i)   Locus of control as a personality variable

ii)   Conceptual confusion in the locus of control literature

iii)   The measurement of locus of control

iv)   Dimensions of locus of control

v)   Locus of control and demographic correlates

vi)   Locus of control and psychological adjustment

vii)   Modifying individuals' locus of control

viii)   The relevance of the literature for the present study

i)   Locus of control as a personality variable

The locus on control construct was born out of the social learning theory of Julian Rotter, first presented as a systematic statement in a 1954 text entitled, 'Social Learning and Clinical Psychology'. This title reflected Rotter's interests not solely as a theoretician but first and foremost as a practising psychotherapist.

Rotter's doctoral studies were completed at the beginning of the 1940s and his work was greatly influenced by the behavioural theories of Hull and Spence, the ideas of Skinner concerning reinforcement and the notion of expectancy developed by Tolman. He was also

influenced by the field theories of Lewin and was a keen follower of Adler's teachings (see Mosher, 1968). These latter theorists convinced him that behaviour should be described from the perspective of the person whose behaviour is under scrutiny rather than from the viewpoint of the observer and also that it was necessary to consider the perceived social context in addition to intrapersonal factors as determinants of behaviour. Rotter's theory, therefore, represents an attempt to integrate the reinforcement approaches of the behaviourists with the field theories of cognitive psychology (see Rotter, Chance and Phares, 1972, p.1).

A central tenet of Rotter's theory is that most learning occurs in interpersonal situations.

> "It is a social learning theory because it stresses the fact that the major or basic modes of behaving are learned in social situations and are inextricably fused with needs requiring for their satisfaction the mediation of other persons" (Rotter, 1954, p.84).

Although Rotter draws heavily upon learning theory, particularly upon the concept of reinforcement, he argues that this does not mean that cognitive factors can be ignored. Unlike animals, whose behaviour in experimental situations had been extensively studied by learning theorists and, as a result, acted as the progenitors of stimulus-response theories, humans do not passively respond to reinforcement, but actively interpret, predict and evaluate it while monitoring their own performance.

> "The role of reinforcement, reward or gratification is universally recognised by students of human nature as a critical one in the acquisition of skills and knowledge. However an event regarded by some persons as a reward or reinforcement may be differently perceived and reacted to by others. One of the determinants of this reaction is the degree to which the individual perceives that the reward follows from, or is contingent upon, his own behaviour or attributes versus the degree to which he feels the reward is controlled by forces outside of himself and may occur independently of his own actions. The effect of a reinforcement following some behaviour on the part of a human subject, in other words, is not a simple stamping-in process but depends upon whether or not the person perceives a causal relationship between his own behaviour and the reward" (Rotter, 1966, p.1).

Although few contemporary psychologists working with the locus of control construct draw upon, or make other than cursory reference to, its origins in Rotter's social learning theory, the basic concepts and propositions and their relationship to locus of control, are briefly outlined in Appendix 1. It is interesting to observe how one discrete aspect of a theory can capture the imagination and, like a fledgling cuckoo, gradually outgrow and supplant its origins.

It has been noted that Rotter's work was greatly influenced by his practice as a clinician and, as such, he has consistently endeavoured to derive theoretical ideas which have relevance to the practice of psychotherapy (see in particular Rotter, 1970, 1978). The stimulus for the study and development of the concept of locus of control stemmed from consideration as to why some clients in psychotherapy:

> ".... appear to gain from new experiences or to change their behaviour as a result of new experiences, (while) others seem to discount new experiences by attributing them to chance or to others and not to their own behaviour or characteristics" (Rotter 1966, p. 2).

This observation was stimulated by the case of Karl S. which is described at some length by Phares (1976). This client was seen in 1954 by Phares who acted as therapist with Rotter acting as clinical supervisor. Karl was receiving therapy for social-sexual and education-employment difficulties and it was considered by his clinicians that his problems centred on his virtual lack of interpersonal skills. For this reason, treatment took a didactic, educative form. Despite following his clinician's advice and highly specific directions and, as a result, becoming increasingly successful in his social and interpersonal dealings, Karl continued to be pessimistic about his future, failed to seek relevant information to help him to cope more effectively and continually ascribed his eventual successes to mere good fortune. Phares began to recognise that his initial assumptions were insufficient to explain this phenomenon

> "Therapeutic efforts were predicated on the assumption that as Karl tried out various behaviours and witnessed their reinforcement, this would increase both his expectancy that these and similar behaviours would be successful in the

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future and his willingness to repeat them .... This seemed to be the path of a 'tried and true' psychological principle" (Phares, 1976, p. 2).

Karl's response to reinforcement demonstrated to Phares and Rotter the inadequacy of learning theory.

"The view that behaviors followed by reward tend to be repeated while behaviors not rewarded tend to disappear is just too simple" (Phares, 1976, p.3).

Gradually it was recognised that Karl saw reinforcement as beyond his control, that his behaviour was not a major determinant in the receipt of rewards and, correspondingly, there was little reason to expend energy in the pursuit of success. It was from this insight into Karl's phenomenological world that the locus of control concept developed as an element of Rotter's existing social learning theory (Phares, 1976).

It was several years later that Rotter produced a systematic outline of the locus of control concept in a 1966 paper entitled Generalised expectancies for internal versus external control of reinforcement.

Rotter's 'ideal' definition which describes the internal-external variable is as follows:

"When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labelled this a belief in **external** control. If the person perceives that the event is contingent upon his own behaviour or his own relatively permanent characteristics, we have termed this a belief in **internal** control" (Rotter, 1966, p.1; emphasis as in original).

Although the research literature often makes reference to 'internals' and 'externals' it is important to note that this is merely a semantic convenience. Rotter (1975) points out that at no time did he hypothesise a typology or bimodal distribution.

"Rather, we assumed that with internal-external control something approximating

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a normal curve described the populations that we were interested in" (Rotter, 1975, p.57).

As has been the case with many of the great theorists in psychology, Skinner, Vygotsky, Piaget, Eysenck, aspects of Rotter's work have been seized upon by others whose interpretations and recommendations do not suggest a sound grasp of underlying principles. A common inclination to provide simple descriptive labels for people, such as introvert, externally controlled, concrete operational, can lead to the misrepresentation and undermining of the construct and its eventual rejection.

Early attempts to examine the influence of control expectancies upon an individual's behaviour took place as controlled experimental studies. Several studies involved the manipulation of control expectancies through the allocation of subjects to what they were led to perceive as skill or chance conditions (e.g. James, 1957; James and Rotter, 1958; Phares, 1957). In one such study, Phares (1957) presented subjects with a perceptual discrimination task involving the matching of colours and length of lines. The tasks were ambiguous to the extent that subjects could not know with any certainty whether their answers were correct. Half of the subjects were informed that the task was so difficult success was primarily a matter of luck. The others were told that task success depended on skill. All subjects received the same prearranged feedback informing them of success and failure and were asked to wager poker chips to indicate their expectancy that they would be correct on each succeeding trial.

The results were as anticipated. Shifts in expectancy were much greater and more frequent under skill than chance conditions although in the chance condition there were significantly more expectancy changes which failed to reflect the experience of prior trials.

This series of experimental studies demonstrated that when reinforcement is perceived as contingent upon skill and thus under personal control, subjects are more likely to draw upon their past experience as a basis to predict their likelihood of future success or failure. However, when subjects believe they do not control the occurrence of reinforcement they

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generalise less from the past and fail to learn from experience. Thus reinforcement alone cannot explain or predict behaviour; it is necessary to understand how that reinforcement is interpreted.

Although the ecological validity of these early experiments is open to doubt, given the artificiality of the laboratory setting and the use of simple tasks, they nevertheless proved instrumental in developing interest in the notion of internal-external control and led researchers to believe that such ideas may play a significant part in everyday behaviour. Arising from this work was the development of paper and pencil assessment scales and it was these measurement devices which ultimately led to the phenomenal growth in locus of control studies.

ii) Conceptual confusion in the locus of control literature

"One of the most pervasive problems of research with the I-E (internal-external) dimension has to do with the differing definitions that have been attached to this construct" (Strickland, 1978, p. 1204).

Not only has the construct been interpreted by different researchers to mean different things but also other constructs often appear to be very similar.

Palenzuela (1984) has noted two major areas in which researchers have confused the concept of locus of control. These relate to:

a) confusion between locus of control and causal attribution

b) the place of locus of control within the wider 'control' literature

The writer shall deal with both in turn.

a) Confusion between locus of control and causal attribution

In the major texts on locus of control (Phares, 1976; Lefcourt, 1982) and in the great majority of published empirical studies, the distinction between locus of control and causal attribution has not been made. Some writers, however, (e.g. Weiner, Heckhausen, Meyer and Cook 1972; Weiner 1974) have explicitly placed locus of control within a wider attribution model. Weiner's model of perceived control has a number of dimensions. The first is the internal-external dimension, where a causal attribution is made either to factors within the person or in the environment (Heider, 1958). A second dimension (Weiner, Frieze, Kukla, Reed, Rest and Rosenblaum, 1971) concerns the stability/unstability of these causes. Ability, for example, could be considered as internal and stable while mood would be internal and, perhaps, unstable. Task difficulty could be considered external and stable while luck would be external and unstable.

A third dimension, that of controllability (Weiner, 1979) was introduced to account for the fact that some internal-unstable factors may be more controllable than others, for example, effort as opposed to mood. To illustrate these dimensions, Weiner (1992) presents eight possible causes for social rejection which involve permutations of the three variables. These are reproduced in Table 2.1.

Table 2.1   Perceived causes of social rejection on the basis of a Locus x Stability x Controllability Scheme (from Weiner, 1992, p. 253).

Dimension Classification	Reason for Social Rejection
Internal-stable-uncontrollable	physically unattractive
Internal-stable-controllable	always is unkempt
Internal-unstable-uncontrollable	coughing when making the request
Internal-unstable-controllable	did not call sufficiently in advance
External-stable-uncontrollable	religious restrictions
External-stable-controllable	rejector always prefers to study at night
External-unstable-uncontrollable	rejector must stay with sick mother that evening
External-unstable-controllable	the rejector wants to watch television that night

Although this conception appears to permit more sophisticated analyses than those using the single internal-external locus of control dimension, this researcher accepts the suggestion of many theorists (Gregory, 1981; Zuroff, 1980; Palenzuela, 1984; Pettersen, 1987) that locus of control should not be subsumed within an attribution framework.

Zuroff (op. cit.) argues that conceptually and operationally the two notions are very different. Locus of control, stemming from social learning theory, focuses upon an actor's expectancy of reinforcement and whether this is perceived as contingent on his or her own behaviour. Attribution theory developed from the theories of Heider (1958), on the other hand, is concerned with causal explanations of past events. The actor analyses an event and determines its causal factors. Thus, locus of control is evaluated before the occurrence of an outcome (a priori) whereas attributions are evaluated afterwards (post hoc). Zuroff also reminds us that in Rotter's theory, 'internal-external' refers to the range of beliefs that outcomes are contingent upon one's behaviour (behavioural outcome contingency), while in attribution theory these terms refer to the extent to which an individual perceives the

causes of an event as within or outside of himself. As Pettersen (1987) comments:

"...there is a difference between an individual's perceiving of a given determinant as a cause of what happens to him (causal attribution) and his believing that he can control what happens to him (behavioural outcome contingency). In the first case, the individual identifies the probable causes of an event, and each of these causes can be classified as internal or external in relation to himself. In the second case, however, once causality has been attributed to his own various personal characteristics or to the environment, the individual analyses the forces involved and he senses whether he can influence the outcome in question through his own behaviour" (p. 204).

Palenzuela (1984) and Pettersen (op.cit.) offer detailed critiques of the confusion which abounds in this area and argue that the two formulations should be kept distinct, despite noting that others view attribution models as more valuable (see, for example, Lowery, 1982). Pettersen (op. cit.) stresses that attempts should be made to ensure that ambiguities are recognised and agreement reached as to the meanings of the various terms involved. He adds that it may then be possible to combine locus of control and causal attribution simultaneously in a new and more effective model.

This writer recognises the continuing debate between those who argue that locus of control should be subsumed within an attribution model (Weiner, 1972, 1974) and those who hold that the two are conceptually distinct (Zuroff, 1980; Gregory, 1981; Palenzuela, 1984; Pettersen, 1987). This study will accept the latter position for both theoretical and empirical reasons. To accept an attributional model requires a shift from the original and valuable construct of locus of control as defined by Rotter. In addition, it is argued that by keeping expectancies and attributions distinct it will prove easier to gain understanding of how each may operate.

In the opinion of this writer, it may be comparatively easy for an individual to offer a causal analysis of a past event. When one considers the future, on the other hand, the uncertainties and abstractness of what are primarily hypothetical situations may render the provision of such detail highly problematic. This may be particularly true in the case of children.

Furthermore, children with behaviour difficulties are likely to have spent much time discussing (or, as is perhaps more likely, being asked to discuss) the reasons for their recently exhibited behaviour. It seems likely that explanations will involve a variety of defence mechanisms such as rationalisation and denial. Although the locus of control literature makes reference to 'defensive externality' (Rotter, 1966; Phares 1978, 1979), this population of children may find discussion of their expectancies less threatening as it refers to events which have yet to take place and for which they cannot be held culpable. It may prove productive to be in a position to analyse children's attributions for past behaviour independently of their locus of control expectancies for future outcomes. It has also been pointed out (Zuroff, 1980) that 'internal-external' has different meanings in locus of control and causal attribution and this distinction may prove helpful in the analysis of data.

This study will employ an interview format to consider children's causal attributions for success and failure at home, in school and in the wider community, although its principal concern relates to beliefs about future behaviour-outcome contingencies - the construct of locus of control.

b) Control-related confusion in the locus of control literature.

A number of writers (e.g. Lefcourt 1980; Strickland, 1978; Palenzuela 1984, 1987) have pointed to the differing definitions which have been applied to the locus of control contruct. Palenzuela suggests that many writers have confused locus of control with perceived or personal control (e.g. Lefcourt, 1976; Renshon, 1979; Strickland and Haley, 1980), while others appear to understand the term perceived control as a general concept which subsumes a number of other constructs including that of locus on control. This latter position appears to be gaining popularity in the 1990s.

The psychology of power/control draws upon a diverse theoretical field with numerous, often poorly defined concepts. As Seligman and Miller (1979) have pointed out:

"We are faced with a terminological mare's nest. In this nest are such terms as: choice, control, perceived choice and control, coercion, origin/pawn, internal/ external, controllable/uncontrollable, incompetence/competence/helplessness, self-administration, autonomy and many others." (p.367).

Palenzuela (1984) suggests that such terms could represent discrete sub-areas within the broader general framework of the psychology of control.

"Some such sub-areas may refer to outcomes or reinforcements, e.g. locus of control, learned helplessness, and success-failure causal attributions; others may refer to behaviour, e.g. origin-pawn, experienced control, self-control, and perceived freedom. Still others may relate to the self-perception one has of one's own abilities and competencies, e.g., self-efficacy or perceived competence" (p.697).

Although Palenzuela adopts the terms used by differing theorists, the present writer argues that this can obfuscate conceptual similarities and differences. Drawing upon various control-related theories, he outlines a number of sub-areas which are listed below. In order to assist in differentiating between them, their general nature, rather than the names offered by differing theorists are provided below.

a) behaviour-outcome contingency (i.e. referring to the contingent relationship between one's behaviours and subsequent outcomes)

b) personal competence (i.e. referring to one's ability to perform in a skilled fashion)

c) self-control (i.e. the ability to moderate one's behaviour as the actor deems appropriate)

d) control over the exercise of one's behaviour (i.e. having the freedom to act in the fashion the actor desires)

e) the ability to control others (i.e. i.e. the ability to motivate others to act in a desired fashion)

f) perceptions that one will be successful in a goal-directed activity

Although the task of the theoretician/researcher is, as far as possible, to ensure that concepts

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are used clearly and unambiguously, this is often difficult with regard to locus of control studies. All the above aspects of perceived control have, at times, been interpreted as features of the locus of control construct. Graybill (1977), for example, has argued that three of the above aspects of personal control: behaviour-outcome contingency, perceived competence and perceived control over behaviour are often used interchangeably in the locus of control literature although, in his opinion, it is only 'behaviour-outcome contingency' which is synonymous to the concept of locus of control as defined by Rotter (1966). This rather jargonised term has value in that it refers specifically to a definition of locus of control which relates to the perception of contingency between one's behaviour and subsequent outcomes. This is consistent with Rotter's definition in a way that many ostensibly similar concepts are not.

Graybill cites a number of studies (e.g. Doctor 1971; Getter, 1966) which ostensibly deal with locus of control although in actuality tap another aspect of perceived control, that of competence. Graybill (op. cit.), Graybill and Sergeant (1983), point out that an individual can be highly internal yet lacking in those skills necessary for success. Such a person would recognise that he could achieve desired ends if he developed necessary skills, for example, if he were to focus his energies on schoolwork more singlemindedly he would not continually fail his examinations. This distinction is recognised by Weisz and Stipek (1982) and Weisz (1983, 1986a) who propose a two-dimensional model of control which incorporates outcome contingency and perceived competence. Weisz (1983) defines control as the:

> "....capacity to cause an intended outcome...(and as such) is a joint function of two factors: outcome contingency and personal competence. The contingency of a target outcome...is defined as the the degree to which the outcome depends on the behavior of relevant individuals...Personal competence with respect to outcome is defined as the individual's capacity to produce the behavior on which the outcome is contingent, to the extent that contingency exists" (p. 290).

Locus of control, however, refers to actors' subjective perceptions and thus it is perceived control which is of relevance to the present study. In Weisz's two-dimensional model, perceived contingency (i.e. locus of control) refers to beliefs that an individual has about the

extent to which outcomes are contingent upon his/her behaviour, whereas personal competence refers to the ability an individual may have to exert control and thus refers to one's sense of personal effectiveness.

> "Individuals' judgements that an event is in some way contingent on their actions says nothing, however, about whether they will actually be able to influence events in the desired direction. The latter judgment requires synthesis of an assessment of the required skills and of one's own competence in those skills" (Coster and Jaffe, 1991, p.21).

This quotation illustrates the importance of examining both contingency beliefs and perceived competence and how these may interact. Many locus of control studies include items which tap both constructs yet fail to differentiate between them. This may reduce the value of such analyses as each may play an important and unique role. For example, in one study of children with adjustment problems, Weisz (1986b) found that contingency and competence beliefs were both related to beliefs about one's ability to produce a desired outcome but were not related to each other. In a subsequent study (Weisz, Weiss, Wasserman and Rintoul, 1987) it was shown that clinical depression in children was associated with low levels of perceived competence and feelings that one could achieve success but had no relationship with perceived contingency.

Stemming from the theories of Heider (1944, 1958) a large theoretical literature has focused upon individuals' perceived control over behaviour. An influential theorist, deCharms (1968) has coined the term 'personal causation' which refers to an individual's feelings of effectiveness in producing desired outcomes in his/her environment. DeCharms has also referred to this as the origin-pawn concept.

> "When a person initiates intentional behaviour, he experiences himself as having originated the intention and the behaviour. He is the locus of causality of the behaviour and he is said to be intrinsically motivated. Since he himself is the originator, we refer to the person as an origin.
>
> When something external to the person impels him to behaviour, he experiences himself as the instrument of the outside source, and the outside source is the locus of causality. He is said to be externally motivated. Since the person is

impelled from without we refer to him as pawn" (deCharms, 1972, p.96).

DeCharms (1981) illustrates the differences between personal causation and locus of control by providing a tale of two workmen. Consistent with the focus of this present study this writer will provide an analogous account of two schoolchildren which is heavily based on DeCharms' account, the debt to whose work is freely acknowledged.

Mary's teacher is an advocate of behavioural techniques as a means of helping children to learn. Mary, in common with her peers, is informed each morning of the prescribed activities for the day. A complex system of reinforcement operates in which, the more that Mary accomplishes in class, the greater the number of points she will receive. Points can then be exchanged for a range of tangible rewards. If Mary were able to articulate her perceptions of such a situation she might say, "I really like these arrangements. In the past I never knew whether I'd get praised or even a sweet from the teacher for working well. It seemed to depend on what mood she was in as much as anything else. Now I've got a target and know that the more work I complete the more rewards I'll get." Here, Mary feels that reinforcement is a direct result of her own actions.

John's teacher, on the other hand, is committed to notions of independent learning and the need to give responsibility to the children for their own learning. He has adopted an 'integrated-day' classroom environment which allows for cross-curricular activity and active pupil choice as to which of a number of activities they will engage upon. Within the overall demands of the curriculum John is free to select learning tasks according to personal preference, to explore a variety of experimental problem-solving techniques, and to choose to work alone or in the company of his peers. John might say, "I enjoy working together with my friends to solve problems. We are able to explore topics which really interest us and pursue any points which arise. I don't have to study mathematics because it's Friday afternoon; I am able to carry out my maths investigations whenever I choose, which might

be on Monday mornings."

In this scenario John:

> "... experiences the locus of causality for his actions (behaviour) as internal to himself. He experiences personal causation. He chooses his actions, owns them, and takes responsibility for his part of the group product. The emphasis here is on actions themselves (behavior), not on their consequences" (DeCharms, 1981, p.338).

Locus of control, of course, deals fundamentally with consequences and is not concerned with whether the individual is autonomous in his/her behaviour. Given these differences it is hardly surprising that when operationalised, measurements of locus of control and those of personal causation tend to be uncorrelated (e.g. Koenigs, Fiedler and deCharms, 1977). Despite this apparently clear distinction:

> "The literature of social, personality, and motivation psychology is strewn with confusions of these two concepts" (DeCharms, 1981, p. 338).

McReynolds (1987) provides an illustration of this confusion when he incorrectly states that work on locus of control:

> "....demonstrates the importance in behaviour of whether a person (i.e. as agent) believes that he or she is, or is not, in control of his or her own behaviour" (p.200).

Closely related to the notion of individual autonomy is that of control over others. It has been suggested (Burger and Cooper, 1979; Burger, 1982) that individuals will vary not only to the extent to which they perceive they can exercise interpersonal power but also to the degree that they desire to exercise control. Burger and Cooper (op. cit.) have designed a Desirability of Control Scale which endeavours to assess such predispositions as, "I enjoy being able to influence the actions of others". Other items appear more closely related to notions of perceived competence, for example, "I consider myself to be generally more capable of handling situations than others are".

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Although scores on this scale have been found to be only slightly related to scores on measures of locus of control (Dembroski, MacDougall and Musante, 1984; Burger, 1992), there does appear to be some overlap when the constructs are operationalised. Consider, for example, the similarity between the following question from the Desirability of Control Scale, "When I see a problem, I prefer to do something about it rather than sit by and let it continue" with that from the Nowicki-Strickland Locus of Control Scale, "Do you feel that one of the best ways to handle most problems is just not to think about them?" Although a difference can be identified, one must question the extent to which such subtleties can be differentiated when one is assessing the perspectives of children, particularly those who may have learning difficulties.

Many of the children in the present study experience considerable difficulty in exercising self-control. Their behavioural volatility and emotional lability often prove self-defeating and result in a failure to achieve desired ends. With this in mind, a number of writers have considered the relationship between locus of control and self-control (Berzins and Ross, 1973, Reid and Ware, 1974, Schlegel and Crawford, 1976).

Reid and Ware (1974) argue that self-control (defined as control over one's impulses, desires and emotional behaviour) represents one of three dimensions of locus of control (the other two being social systems control and fatalism) which originate from factor analytic studies of the Rotter I-E scale. They note that none of the items in Rotter's scale is worded in self-control terms although in his seminal 1966 paper, he comments:

> "...perhaps related to this feeling that one can control his environment is also a feeling that one can control himself" (Rotter, op. cit., p. 21).

Reid and Ware (op. cit.) produced a new locus of control scale for adults in which were contained a number of self-control forced-choice items. Examples of these are:

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" (A) When I put my mind to it I can constrain my emotions
   (B) There are moments when I cannot subdue my emotions and
        keep them in check"

" (A) Self-regulation of one's behaviour is always possible
   (B) I frequently find that when certain things happen to me
        I cannot restrain my reaction"

Factor analysis suggested that the self-control items formed an independent dimension and Reid and Ware argue that this finding supported their hypothesis that self-control was an element of locus of control.

Schlegel and Crawford (1976) point out, however, that such independence provides necessary but not sufficient evidence. In addition to demonstrating statistical independence it is necessary to offer a position which can be justified theoretically. Otherwise one might add a number of any closely related items to a scale and argue that these represent a new dimension independent of the other items. As Phares (1986) observes, Reid and Ware's findings are hardly surprising given the fact that their scale was constructed to reflect the dimensions identified.

Any conceptual dissimilarity between the two constructs does not, of course, invalidate the use of measures of perceived self-control which may have much to offer the researcher and the clinician. Craig, Franklin and Andrews (1984) and Haynes and Ayliffe (1991), for example, argue that the assessment of self-control is valuable for work in health-related areas. Craig et al. (op. cit.) designed a scale which purports to measure what they term an individual's locus of control of behaviour, i.e. one's own behaviour. Using this scale, Haynes and Ayliffe (op. cit.) found that active substance misusers (drugs) were more likely to score externally than non-users. While the writer recognises the scale's potential, in his opinion it does not appear to be measuring locus of control and the adoption of the term 'locus of control of behaviour' may prove misleading.

Schlegel and Crawford (op. cit.) note that self-control (an intrapersonal rather than an extrapersonal or interpersonal concept) does not fit Rotter's definition nor does it follow logically from his theory. Locus of control concerns the relationship between behaviour and

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outcomes. Behaviour (and, therefore, potential outcomes) will, of course, be significantly affected by the individual's capacity for self-control yet, in the opinion of this writer, this merely suggests that the constructs are closely related rather than conceptually overlapping.

The writer does not, therefore, accept the position of Denkowski, Denkowski and Omizo (1983), who on the basis of an earlier study examining biofeedback and perceptions of control (Stern and Berrenberg, 1977), argue that locus of control can be:

> "...used as an index of self-control since those two constructs are positively related" (p. 366).

Nevertheless, it is likely that measures of self-control and locus of control may have value if used in combination (e.g. Burton and Krantz, 1990). Kendall and Wilcox (1979) speculated that children with high levels of self-control are likely to score relatively internally on locus of control measures. This was supported by the findings of Ferrer and Krantz (1987) who added that the combined effects of locus of control and self-control had greater predictive value than univariate prediction in their study of social acceptance and rejection in children. It should be noted, however, that this employed measures of children's self-control as determined by teachers rather than one's own perceived self-control as measured by Craig et al.'s (1984) scale.

It could be argued that self-control is a feature of personal competence as poor control would suggest incompetence in one's dealings with others. The present writer, however, considers that it might prove more enlightening to examine these as two separate elements.

The expectancy that one will <u>achieve success in a specific goal-directed activity</u> is another important subarea of perceived personal control. This belief is most clearly identified by the work of Bandura (1977, 1982) on self-efficacy. As with that of Rotter, the theory developed from clinical observations that clients in therapy were unlikely to change their behaviour if they did not consider that this was likely to result in a successful outcome. Bandura's theory proposes that individuals hold two expectations with regard to their potential

behaviour in any forthcoming situation, outcome expectancies and efficacy expectancies.

> "An outcome expectation is defined as a person's estimate that a given behaviour will lead to certain outcomes. An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes" (Bandura, 1977, p. 193).

Bandura's theory assumes that the two expectancies are independent and that each has predictive power. This proposition has been supported by empirical work (e.g. Maddux, Sherer and Rogers, 1982; Barnes, 1985).

It is immediately apparent that Bandura's outcome expectation is conceptually similar to Rotter's locus of control, while self-efficacy approximates to notions of perceived (rather than actual) competence. Kirsch (1985) suggests that Bandura has produced, 'old wine with new labels' and this point is conceded to some extent by Bandura (1986).

One important difference between Bandura's and Rotter's expectancies concerns their differing degrees of specificity. Unlike Rotter's theory, Bandura considers self-efficacy and outcome expectancies to be specific cognitions relating to specific behaviours in specific contexts. Thus, while the locus of control literature may often describe individuals as generally internally or external, it is impossible to describe an individual as having high self-efficacy unless this refers to a particular set of behaviours in a specific situation. It has already been pointed out, however, that Rotter does differentiate between generalised and specific locus of control expectancies and, indeed, many researchers have endeavoured to develop situation-specific measures of locus of control.

Adelman, Smith, Nelson, Taylor and Phares (1986) offer a helpful distinction between control over processes and control over outcomes. The former concerns the degree of control individuals believe they have over events, tasks, situations rules and the like. Adelman et al. suggest that this relates to notions of perceived competence and self-efficacy. In the opinion of the present writer it would also appear to relate to notions of personal causation

and self-control. In contrast, locus of control relates solely to beliefs regarding outcomes. A similar distinction, that between control over actions and outcomes, is made by Lamb, Lalljee and Jaspars (1985).

In a study of this nature it is not possible to offer a detailed account of the nature and relationship of these closely related theories. What is necessary, however, is that one is clear what is meant by the locus of control construct, as acceptance of Rotter's definition has still resulted in a wide diversity of interpretations. Not only has conceptual confusion existed in theoretical discussion, it is also apparent in the measures used to assess the construct. This researcher has interpreted locus of control to refer to expectancies regarding behaviour-outcome contingencies and differentiates this from beliefs/expectancies concerning, personal competence, the ability to control one's own cognitions and behaviours, freedom to act in an independent fashion, the likelihood that one will achieve success in a given activity or the ability to exert control over others. It is considered that the distinction between control over processes/actions and outcomes assists in differentiating between constructs.

Although this distinction is relatively easy to make at a theoretical level, when one begins to examine specific scale items or engages in interview discussions, unpicking these various strands becomes highly problematic. Many of the most popular locus of control scales appear to incorporate items tapping other control-related beliefs..

Graybill (1977), for example, contends that behaviour-outcome contingency (locus of control), perceived competence and perceived control (personal causation) are confounded in the Rotter scale. Some items concern the relationship between behaviour and outcomes (e.g. 26a. 'People are lonely because they don't try to be friendly'); others the degree to which a person feels he can control or achieve success (e.g. 21b. 'Most misfortunes are the result of a lack of ability, ignorance, laziness or all three') while still others assess the extent to which a person feels he controls his behaviour or chooses what he will do (e.g. 28b. 'Sometimes I feel that I don't have enough control over the direction my life is taking').

Although Graybill appears to be making a useful distinction which has often been ignored or overlooked by researchers, when scale items are examined it can prove difficult to assess which of these three concepts is being measured. In the opinion of this researcher question 21b (see above) may be tapping locus of control beliefs. A respondent who provides a negative response may believe that, because outcomes are contingent upon his behaviour, his competence (or lack of it) cannot explain his misfortunes.

The most popular generalised locus of control scale for children, the CNSIE (Nowicki and Strickland, 1973) also includes questions tapping perceived competence,(e.g. "Are most of the other kids your age stronger than you?"), the ability to control others, ("Do you feel that it's easy to get friends to do what you want them to?") and control over one's behaviour (e.g. "Do you believe that your parents should allow you to make most of your own decisions?").

Although it is likely that such aspects contribute to an individual's locus of control, it may be valuable to consider these various features both discretely and in combination. In the present study the relationship between locus of control and other similar constructs will be explored in a series of semi-structured interviews.

iii) The measurement of Internal-External Control

a) the development of the Rotter Internal-External Scale

In order to determine the extent to which a generalised personality variable such as locus of control relates to human experience and functioning, it is necessary to have a technique or measuring device which differentiates between individuals.

The assessment of locus of control has almost exclusively utilised self-report questionnaires. Early attempts by Phares (1957) and James (1957) to develop simple questionnaires for use in laboratory experiments led to collaborative work by Liverant, Rotter, Seeman and Crowne which, following a series of refinements, led to what is known as the Rotter Internal-External Control Scale (Rotter, Liverant and Crowne, 1961). It was intended that this

instrument should be easy to administer with a low, if not zero, correlation with a social desirability scale, and which could investigate the potential operation of the locus of control variable in a broad range of specific situations. The scale consists of 29 items, 23 of which measure perceived internal versus external control, the remaining six being filler items. Although some of the items dealing with academic achievement had to be discarded because they correlated highly with social desirability, it was believed that those which remained sampled a wide range of areas in which behaviour might be affected by internal-external attitudes such as achievement, affiliation, business and world affairs. This lack of specificity, of course, limits its power of prediction:

> "(The scale)..was developed as a broad gauge instrument - not as an instrument to allow for very high prediction in some specific situation, such as achievement or political behaviour, but rather to allow for a low degree of prediction across a wide range of potential situations" (Rotter, 1975 p. 62).

Rotter (1966) points out that the Scale endeavours to measure an individual's current perceptions rather than his or her desires.

> "A careful reading of the items will make it clear that the items deal exclusively with the subjects' **belief** about the nature of the world. That is, they are concerned with the subjects' expectations about how reinforcement is controlled. Consequently the test is considered to be a measure of a generalised expectancy. Such a generalised expectancy may correlate with the value a subject places on internal control but none of the items is directly addressed to the **preference** for internal or external control" (Rotter, 1966, p. 10; emphasis as in original)

It could, of course be equally argued that responses reflect not only the respondent's beliefs but also his interpretations of the test, its purposes, his mood and level of motivation, his relationship to the tester and how much of his true beliefs he cares to reveal (see chapter 6 for discussion of impression management).

The Rotter Scale is described by its author as an additive measure sampling beliefs across a wide range of situations. Because of this, he argues that moderate internal consistency estimates between .65 to .79 (Rotter,1966) are acceptable. Rotter (op. cit.) reports adequate

test-retest reliability varying from .49 to .83 depending upon samples and time intervals. Some, including this writer, might argue that the lower estimates of reliability are unacceptable although this point is rarely made in the literature. Phares (1976) argues that in some ways the psychometric qualities of the Rotter Scale are unimpressive yet adds that the large number and range of studies in which it has been employed bear testament to its validity. Lefcourt's (1982) detailed review of the locus of control literature comes to a very similar conclusion.

The Scale was developed on U.S. college students and this must raise questions as to its generalisability. It could be argued that these origins are reflected in its focus upon academic, political and vocational issues which may be less important to other societal groups. Thus the Scale's wording and content may not be particularly appropriate for all.

Locus of control scales, however, have not been standardised on a large representative sample as, for example, have I.Q. tests, and comparisons of scale scores between studies are seldom undertaken. As a result a mean score of 10.5 on the Rotter scale for one group in one study has no meaning relative to a population, as does a Wechsler I.Q. score of 112. Many trends have been noted, however, particularly the shift of mean scores in the external direction since the 1950s. Rotter (1975) and Phares (1976) have suggested that this reflects growing social alienation and disenchantment in America since the Scale's conception.

Many writers have pondered as to the phenomenal success of the concept of locus of control. Rotter (1975, 1982b) argues that it may reflect the perception of increasing social problems and the complexity of our world with the attendant feelings of powerlessness and vulnerability. Lefcourt's wide-ranging review (1982) reaches a similar conclusion. Rotter (1990) later suggested that a more important reason than social change was the heuristic value of the construct.

The development of Rotter Scale served as a trigger for the mushrooming of locus of control studies. Its success has led its eponymous author to observe:

"I was walking in the woods, lit my pipe and threw away the match, and when I looked behind me there was a forest fire." (cited in Weiner, 1992, p. 203).

Rotter (1990) has noted that by end of the 1980s there had been 4,700 citations of his seminal 1966 monograph in the psychological and social sciences literature. Garfield (1978) pointed out that between 1969 and 1977 it was cited more than twice as often as any other article in the social sciences.

As an index of interest in this construct, the writer summated the number of published articles referenced under the heading 'internal-external locus of control', which were cited in Psychological Abstracts for the single years, 1972, 1977, 1982, 1987, 1992. These were as follows:

$$
\begin{array}{rcl}
1972 & = & 202 \\
1977 & = & 197 \\
1982 & = & 192 \\
1987 & = & 180 \\
1992 & = & 163 \\
\end{array}
$$

Although this index is unlikely to yield a fully accurate picture, undoubtably excluding much work in this field, it does suggest that interest in locus of control has not declined substantially during the past twenty years.

A number of researchers have argued that scales should explore the influence of various agents of external control. Levenson (1973), for example, sugests that there may be significant differences between those who believe that fate or luck rule events and those who believe that powerful others are in control. Levenson's Internality, Powerful Others and Chance Scale measuring internal and two forms of external belief has been widely employed (see Levenson, 1981, for a review).

Of relevance to a study of behaviourally disordered individuals are the Spheres of Control scales developed by Paulhus and Christie (1981), from a model based on:

"...theoretical conceptions of the underlying structure" (Paulhus, 1983, p.1253).

Paulhus and Christie argue that individuals may have different control expectancies in different behavioural spheres. They suggest three conceptually independent behavioural dimensions which they label:

   a) personal efficacy
   b) interpersonal control
   c) sociopolitical control

Personal efficacy, in this context, concerns an individual's attempts to control his or her nonsocial environment e.g. making models, riding a bike. Interpersonal control concerns the domain of individual and group relationships. Finally, sociopolitical control refers to action within wider societal groupings, for example, demonstrating at political gatherings or writing to the press to complain about a new housing development.

Paulhus and Christie argue that individuals may have very different expectancies in these domains of interaction with the world and thus, contend that generalised measures such as Rotter's (or indeed, Nowicki and Strickland's CNSIE) may not adequately characterise an individual. The authors state that support for the Scales' construct validity is provided by a number of studies examining the profiles of different athletic groups (Paulhus, Molin and Schuchts, 1979), the voting behaviour of university students (Paulhus, 1977) and an experimental button-press study (Grunberg, Straub, Apple and Schachter, 1978).

In the study of athletic groups, tennis players, American footballer players and nonathletes acted as subjects. As the researchers had predicted, the tennis players, with their sport's

emphasis upon individual competition scored highest on personal efficacy whereas the team-oriented football players scored highest on interpersonal control.

Subjects in Grunberg et. al.'s experiment had to depress a button as many times as possible during a two minute spell. It was found that the amount of effort expended in certain experimental conditions was related to scores on the Personal Efficacy scale but not that on Interpersonal Control or Sociopolitical Control. The researchers argued that these findings were as expected because the experimental task was associated with personal achievement. The task is, however, trivial and its generalisability is questionable.

Analysis of these three areas of personal functioning could be valuable in a study examining locus of control beliefs in conduct-disordered children. As such children often experience poor relationships with adults and peers, a focus upon interpersonal control would appear particularly desirable. Unfortunately, further consideration of the Scales suggested that they were not appropriate for the present study. Many items from the Interpersonal Control scale are inappropriate to a juvenile population although several items could be modified. Although certain items from the Personal Efficacy scale may be of value, they often mirror others in more generalised scales such as the CNSIE. The Sociopolitical Control scale concerning such topics as political corruption and the use of the vote, is less relevant to a school-age population.

A more fundamental criticism relates to the authors' use of the construct 'control'. In a lengthy review of the Spheres of Control Battery, Palenzuela (1987), highlights a number of conceptual weaknesses which lead to the question as to whether the scales are really measuring the locus of control construct as defined by Rotter (1966). He notes that Paulhus and Christie prefer to adopt the term 'perceived control' as a more 'general' label yet adds that in much of their writing 'perceived control' and 'locus of control' are used synonymously. As already indicated, control may subsume a variety of different, albeit related, constructs. Palenzuela's analysis of the scales demonstrates that many of the items have more to do with competence than contingency. This is particularly true with respect to the interpersonal

scale (for example, Item 2, "I have no trouble making and keeping friends") and Palenzuela (1984, 1987) notes that many items are very similar to those contained in a scale of personal self-efficacy (Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs and Rogers, 1982). Palenzuela (1987) administered a number of scales to Spanish undergraduates. These included scales of locus of control (Rotter, 1966; Levenson, 1981; Lefcourt, 1981), self efficacy (Sherer et al., 1982), interpersonal competence (Holland and Baird, 1968) and the spheres of control battery (Paulhus and Christie, 1981). An exhaustive correlational analysis demonstrated, as Palenzuela had predicted, that the interpersonal subscale from the S.O.C. battery correlated significantly more highly with social self-efficacy and interpersonal competence than with the locus of control measures. Palenzuela concluded from his analysis that,

> "..the Interpersonal Control subscale seems to be measuring perceived self-efficacy or perceived competence in situations of interpersonal relations and not locus of control or perceived contingency, as seems to be patent in Paulhus and Christie's conceptual model" (p. 281).

Analysis of experiments by Paulhus and Christie (see above) would seem to confirm Palenzuela's analysis that the scale items relate more to competence than contingency. The athlete study, for example, could be seen to demonstrate that tennis players believe that they are capable and competent individuals whereas footballers see themselves as socially skilled team members.

Palenzuela (1987) observes that Paulhus (1983) reports a multiple correlation of .75 between Rotter's scale and the three S.O.C. subscales. He supports his earlier analysis, however, by pointing out that the subscale with most overlap is that of Sociopolitical Control, while Interpersonal Control has the least.

Paulhus and Van Selst (1990) subsequently accepted Palenzuela's criticism that the Scales' emphasis was primarily upon perceived competence rather than contingency. In a search for

'conceptual purity' (p. 1032) the scale was rewritten as a measure of perceived efficacy. Interestingly, some of the new items (e.g. "Bad luck has sometimes prevented me from achieving things", "Most of what will happen in my career is beyond my control"), appear to be related to locus of control. Indeed, the questions could be tapping either construct. An individual might disagree that bad luck has prevented achievement and prefer to attribute failure to a lack of competence. Alternatively, he might see his own efforts, good or bad, as insignificant, believing outcomes to be primarily a matter of fortune. Thus, the same question may be interpreted by a respondent either as a competence or a contingency issue - something which could not necessarily be ascertained by examining the respondent's negative or affirmative response.

This review is unable to discuss all the measures available for, even five years ago, it was estimated (Palenzuela, 1988) that there were approximately fifty locus of control scales measuring generalised or sphere-specific beliefs in children and/or adults, with new scales continually being devised. Scales exploring specific beliefs pertain to such diverse areas as health, (Kirscht, 1972; Wallston, Wallston, Kaplan and Maides, 1976; Wallston and Wallston, 1981), mental health (Hill and Bale, 1981), alcoholism (Donovan and O'Leary, 1978; Worell and Tumilty, 1981), smoking (Bunch and Schneider, 1991; Georgiou and Bradley, 1992), political detention (Perkel and Govender, 1990) economic success (Bonnett and Furnham, 1991) and marital satisfaction (Miller, 1981). A more esoteric measure, examining locus of control in spiritualists (Richards, 1990), includes such questionable items as, "Whether or not someone becomes my friend depends on our attunement at a spiritual level".

Palenzuela (1984) has argued persuasively that aspects of some of these scales appear remote from Rotter's definition of the locus of control construct. Similarly, it is the opinion of the present researcher that little progress can be made when a form of psychometric 'Chinese whispers', (by which the meaning of a construct become progressively misrepresented), operates to the extent that new measures no longer tap the same construct as those from which they evolved. Reference has already been made to the dangers of using

the locus of control construct in an ill-defined fashion and, for this reason, the present study will endeavour to employ the construct in a highly specific way (i.e. in accordance with Rotter's definition).

b) Locus of control measures for children

The first published measure of locus of control for children was the Bialer scale (Bialer 1961). Based upon earlier scales designed for college students (James, 1957; Phares, 1955), it took the form of a 23 item yes/no questionnaire and was designed for normal and mentally handicapped children between the ages of 6 and 14 years. Examples of this Scale are as follows:

- "Can you do anything about what is going to happen tomorrow?"
- "Is it hard for you to know why some people do certain things?"

In MacDonald's (1973) review of locus of control scales, reference was made to the Bialer's low reliability coefficients with normal samples and the lack of sufficient validity data. It is perhaps for this reason that the Bialer Scale has been used relatively rarely.

By far the most widely employed generalised locus of control scale for children is that constructed by Nowicki and Strickland (1973). By the middle of 1992, Nowicki (personal communication) had compiled a database of approximately one thousand studies involving the scale. Furthermore, it has been translated into over two dozen languages (Strickland, 1989).

Based upon the Rotter scale the Nowicki-Strickland Locus of Control Scale for Children (henceforth referred to as the CNSIE - see Appendix 11) is a paper and pencil instrument consisting of 40 questions that are answered yes or no. The items describe reinforcement situations across interpersonal and motivational areas of achievement, affiliation and dependency.

Nowicki and Strickland (1973) report results for boys and girls from grades three to twelve (age 8 - 18). Scores have been shown not to be related to social desirability or intelligence but were related to achievement. As Nowicki and Strickland predicted, scores became more internal with age.

Internal consistency and test-retest reliabilities were moderately high with split-half correlations ranging from .63 (grades 3-5) to .74 (grades 9 - 11) and test - retest correlations (6 weeks) ranging from .63 for grade 3 to .71 for grade 10. Other studies (Allie 1979; Anderson 1976; Deysach, Keller, Ross and Hiers 1975) report broadly similar results. Nowicki and Strickland state that, as with the Rotter scale, since the test is additive and the items are not comparable, the split-half reliabilities tend to underestimate the true internal consistency of the scale.

In an attempt to provide evidence of convergent validity Nowicki and Strickland report data showing moderate relationships among the CNSIE and other measures of locus of control. Furnham (1987) analysed five children's (including the CNSIE) and two adult locus of control scales. Despite the fact that there was little item overlap, correlations were moderately high (ranging from .41 - .81) and half were .70 or above, suggesting, according to Furnham, conceptual similarity. It might be equally argued that these correlations are rather unimpressive. Even if one accepts these test correlations as adequate the scales are still open to the charge that, as in the case of I.Q. tests, they may not be measuring that which they purport to measure, (i.e. they are all equally wide of the mark).

Gilmor's (1978) review of children's locus of control scales concluded that the Nowicki-Strickland scale was the most attractive choice for measurement of generalised locus of control expectancies. He noted its ease of administration and the fact that initial studies indicated no significant social desirability or differences between boys and girls with respect to measurement or scale validity. Analysis of approximately one hundred studies including the Nowicki-Strickland (n = 32), Bialer (n = 19) and Rotter (n = 17) scales led Gilmor to

conclude:

> "The comparability of results obtained ... supports the predictive and criterion-related validity of (these) measures of generalised locus of control expectancies" (p.20).

A derivative form of the CNSIE for a British population, the Children's Attribution of Responsibility and Locus of Control Scale (CARALOC) was produced by Gammage for a English nation cohort study (Child Health Education Study, 1980). Although, this measure is syntactically and grammatically more accessible to children than the CNSIE (e.g. its sentences are shorter and easier to understand and there is less use of complex structures such as double negatives), its primary focus tends to be upon academic achievement and there are few specific references to parental or peer relationships.

The CARALOC has not been widely employed by researchers who, in both Britain and the United States have tended to employ either the CNSIE or its only serious competitor, in terms of popularity, the Intellectual Achievement Responsibility Questionnaire (I.A.R.Q.) (Crandall, Katkovsky and Crandall, 1965).

Whereas the CNSIE assesses generalised expectancies across a range of situations, the I.A.R.Q. focuses primarily upon academic expectancies. Its authors did not consider beliefs across reinforcement areas to be consistent and, therefore, they sought to measure children's locus of control solely in the context of intellectual/academic achievement situations. An interesting aspect of I.A.R.Q. is that it separates out beliefs regarding success and failure as its authors contend that such beliefs may be independent of each other.

The I.A.R.Q. also differed from such scales as Rotter's and Nowicki and Strickland's in its specification of external agents of control. Crandall et al. suggested that, to the child 'significant others', parents, teachers and peers, were more relevant than the fate, chance, and social systems aspects of the Rotter Scale.

The present study is intended to focus upon generalised locus of control beliefs across a wide

range of situations. The children in the sample were likely to encounter substantial difficulties in a variety of different settings, home, school, with friends, in the wider community, and for this reason the I.A.R.Q. was deemed inappropriate.

It is recognised that valuable information may be obtained when children are asked to consider which agents they consider have control over outcomes. To some extent, this information can be derived from analysis of responses to specific items in generalised scales. It was also considered that the use of semi-structured interviews in the present study would enable consideration of such matters.

The grammar and vocabulary employed by the CARALOC and its development for a British sample rendered this scale attractive for use in the present study yet, as has been indicated, its breadth is somewhat limited as many of the items focus upon academic issues.

Given the massive accumulation of data obtained from the CNSIE, the clear focus upon different aspects of children's lives provided by its forty items, and its apparent acceptability to British researchers (e.g. Charlton, 1977, 1980, 1985a; James, Charlton, Leo and Indoe, 1991; Raine, Roger and Venables, 1981; Lindal and Venables, 1983), it was decided that this measure would be employed in the present study, should a pilot study verify the items' suitability for the population concerned.

There are a number of difficulties in assessing locus of control beliefs which are not necessarily apparent from an analysis of obtained scores. These result from the measures employed and the tendency of respondents to provide answers which may not fully reflect their true perspectives.

Self-report scales, with their sometimes trite and trivial questions, are crude ways of attempting to understand people and are susceptible to error or bias distortions by the respondent, deliberate or otherwise. It is interesting to note how rarely the potential weaknesses of self-report methodology are considered or addressed in the locus of control

literature.

One particular source of bias concerns the tendency of some individuals to provide responses which appear to be most appropriate to their needs. It has been suggested (Phares, 1978, 1979; Rotter, 1966) that external responses can be offered for reasons which do not reflect the subject's true beliefs. Those individuals whose external responses appear to reflect their true experiences and perceptions are sometimes referred to as congruent externals, while those who espouse external beliefs as a defence against anticipated failure are described as defensive externals. Consider a child who is repeatedly failing in his schoolwork. Although the child may accept that a lack of personal effort and engagement is reducing his attainment, the ascription of outcomes to factors beyond his control (e.g. a teacher who doesn't like him) is a means of rationalising the present circumstances and defending himself against suggestions that he should increase his efforts.

A similar notion from sociology is that described as the consolation-prize theory of alienation (cf. Mirowsky and Ross, 1990), which states that low-status individuals tend to reject responsibility for outcomes in their lives as a means of reducing stress. Merton (1949) theorised that a belief in luck would help individuals to preserve a sense of self-esteem in the face of failure yet also noted that this could have the unfortunate effect of reducing sustained endeavour. Although the notion of defensive externality (a psychological rather than a sociological construct) has not been closely linked to issues of socio-economic inequality, such influences have been associated with externality in its wider sense (cf. Rotter, 1966, p.3). Cummings (1977), for example, suggests that an external belief system may serve a functional role for individuals who live in an environment in which failure is common.

It should be noted that many of the children in the present study live in highly disadvantaged circumstances (see chapter 4). Furthermore, the majority will have experienced frequent conflict with authority figures and are likely to have been asked repeatedly to account for their actions. It would not be surprising, therefore, if a number employed defensive

externality as a means of exculpation.

Although the theoretical distinction is easy to make, defensive (as opposed to congruent) externality may be more difficult to recognise in practical situations. Even more problematic is ascertaining whether an individual knowingly adopts such a stance as a means of defence from the potential censure or disapprobation of others, or whether it reflects the individual's subjective perception derived from a psychological need to maintain self-esteem.

A further source of bias, sometimes known as hedonic or self-serving attribution bias, refers to the tendency of individuals to take more credit for success than for failure. Weiner (1992) suggests that such a tendency may result from the desire to appear favourably to others and/ or to maintain one's own sense of self-esteem. He adds that this may also result from the tendency of many individuals (particularly the ubiquitous U.S. college student) to have had general success in life and expect further success in the future. If such success is forthcoming, an internal ascription will result as this is consistent with past experiences. Failure, however, is not consistent with prior outcomes and is likely, therefore, to promote an external attribution.

Although it could be argued that this conception is more relevant to causal attribution theories which examine past events, than expectancies for the future which, it has been argued, are addressed by locus of control, some locus of control scales such as the Intellectual Achievement Responsibility Questionnaire, (Crandall et al., 1965) have included separate measures of success and failure.

Many of the children in the present study have experienced repeated failure both in their interpersonal dealings at home and at school and in the pursuit of academic success and it is these areas which are generally examined in such scales as the Nowicki-Strickland (1973). It is likely that such children often anticipate failure rather than success. It is conceivable, therefore, that such mechanisms as defensive externality and the self-serving attribution bias will encourage a tendency to distance one's actions from observed outcomes. When one

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considers future expectancies, as opposed to past experiences, it may prove more difficult to separate out notions of success and failure. In addition, the areas to be explored will often concern issues where a history of failure is the norm.

A common error in the measurement of locus of control concerns the tendency of researchers to classify subjects as externals or internals on the basis of a set of scale scores. This begs the questions as to:

- which scale is being used and

- where the cut-off points are located

Lefcourt (1982) points out that often in psychology specific measures have defined constructs (e.g. authoritarianism has become defined by the California F scale) to the ultimate detriment of theoretical and/or clinical advance. This is less of a problem in locus of control research where a wide range of scales has been employed.

The second issue presents a greater problem. This point, often made in the literature has gone unheeded by many researchers, who make reference to internals and externals based upon differences on scale scores. What may be considered to be an 'internal' score is a subjective estimate for one population at a particular time. Rotter (1975), for example, points out that since the development of his scale, mean scores for college students have risen over time to the extent that subjects who might, on the basis of their test scores, have originally been classified as 'externals' would now be classified as 'internals'.

Of course, some researchers cognisant of this point, would argue that their use of such expressions as 'internal or 'external' is merely a shorthand means of simplifying complex and lengthy terms. The present study, for example, uses such notation to describe those subjects who scored at the polar ends of the internal-external dimension and were subsequently compared on a range of behavioural and demographic variables. There are

inherent dangers in this, however:

> "Typological phrasing is a simple condensation that allows for the communication of considerable information. To say 'high anxious subjects will... ' conveys in highly condensed form the more cumbersome, if accurate, 'persons who answered a large proportion of items on a scale that assumedly contains independent items adjudged to be relevant to feelings of apprehension or dread will....' Unfortunately, the casting of scale scores into condensed nominal classifications can have the effect of reifying the relationship between scale scores and constructs that, in turn, can eventually erode interest in the construct when the scales lose their utility or fail to afford the precise predictions required for clinical concerns. The awareness that many measurement devices are not meant to be more than crude approximations of an individual's position with respect to a particular construct is easily lost in the pursuit of research employing group statistics with limited criteria" (Lefcourt, 1982, pp. 168-169).

Although this study makes reference to internals and externals, Lefcourt's warning is heeded. It is recognised that reliance upon simple scale scores may often prove insufficient and, as a result, alternative means of exploring the construct (i.e. interviews and the use of case studies) are proposed.

The potential use of semi-structured interviews for locus of control research has been largely ignored. In his search through the literature, this researcher was only able to locate a handful of studies which have attempted to explore alternative assessment techniques. This is, perhaps, because most studies have searched for statistically significant relationships between relatively large groups and thus have placed a premium upon ease, speed and standardisation of administration. The simplicity of most locus of control scales may, in turn, help to explain the construct's popularity amongst American researchers.

Where such techniques have been employed, they have not, in the opinion of the writer, considered locus of control but, other closely related constructs. In his classic studies of personal causation, for example, DeCharms (1976) drew upon the content of stories written by children to explore perceptions of control over actions. Fondacaro and Heller (1990), in contrast, use hypothetical vignettes in interview situations to explore causal attributions of aggressive adolescent boys.

Ortman (1988) used a semi-structured interview with sixteen adolescents to explore the control they felt they had over eight aspects of their lives (e.g. at home, with friends, in the United States) and asked them to give each a rating on a scale of zero to ten. They were then asked to consider an important decision that they had made, examine the degree of control they had exerted and discuss how they felt about this. Finally, they were asked to discuss situations over which they had total control, partial control and no control in each of the eight areas which they had previously rated. Ortman made no attempt to define what is meant by control for her subjects prior to the interviews; indeed their differing definitions and understandings was one of the paper's discussion points.

Shore, Milgram and Malasky (1971) suggested that supplementary questions are important when using locus of control scales with young children as they may not fully comprehend the questions. These authors devised an interview schedule containing items similar to many other locus of control scales but which followed up by asking 'what? why? how?' supplementary questions. Somewhat surprisingly, however, items were scored:

> "...according to whether an action would be taken and **how appropriate the response was**" (p.443; present writer's emphasis)

Although the use of follow-up questioning may yield valuable data, it is questionable whether the system of scoring employed reflects perceived locus of control.

Dies (1968) argued that the use of projective measures for locus of control had been neglected and added that these might provide increased sensitivity to individual and situational differences. Accordingly, he devised an adult measure of internality-externality based upon written responses to Thematic Apperception Test cards. Dies reported a statistically significant middle-order correlation (0.44) between the Rotter I-E Scale and the projective measure. It is notable, however, that with few exceptions (Adams-Webber 1969; Costello and Wicoff, 1984), this approach has been generally disregarded by other researchers. Not only would the present writer question the assumption that accounts

attributed to pictorial representations reflect personal perceptions of control, but also such measures appear to draw upon wider control related beliefs such as perceived competence and personal power.

An alternative form of projective measure, the Children's Picture Test of Internal-External Control (Battle and Rotter, 1963) asks subjects to imagine they are in situations portrayed by six cartoons. The children are required to indicate, 'what they would say' if they were in each situation. Their responses are scored on a seven point scale for the degree of internality-externality. Consistent with the general preference for self-report questionnaires, MacDonald (1973) reported that this measure was unpopular because it could not be administered to large groups and because there were concerns about its reliability.

Zaffran (1983) has also argued that self-report scales may be insufficient means of exploring locus of control. He advocates a complementary case study approach which, he contends, has a number of distinct advantages:

" 1) case studies acquire information that might otherwise be overlooked
2) they present a picture of a situation that is more understandable than one offered by statistics
3) they make the description of individuals' experience more human than statistical studies
4) they decrease the tendency to misinterpret statistical data
5) they show relationships between isolated factors more clearly than statistical studies" (p.271).

Zaffran's study of four gifted adolescents drew upon a wide data source including, subjects' personal essays, discussion of recreational pursuits and personal interviews. These were subjected to rigorous analysis and resulted in a rich and insightful account of respondent attitudes.

It is important to note, however, that although Zaffrann repeatedly makes reference to locus of control, he equates this term to 'attitudes about control' (p.269), and his use of internal-

external is correspondingly wider than that employed in the present study.

This researcher takes the position that interview and case study approaches may contribute to an understanding of subjects' locus of control beliefs. As far as he knows, there has yet to be any published study which has employed such techniques to explore locus of control (as opposed to general control-related) beliefs. An aim of this study will be to distinguish between such constructs and examine the usefulness of a narrower and tighter definition of locus of control.

This study will also use hypothetical vignettes focusing upon important aspects of children's lives (e.g. home, school, friends) and will attempt to differentiate between past attributions and future expectancies. From his review of the literature, the writer considers that his attempt to explore behaviour-outcome expectancies (locus of control) through the use of vignettes in interview, represents a significant departure from extant work. Of particular interest will be the value of such an approach with troubled, and potentially troublesome, children for whom communication with adults (and peers) is often difficult.

Finally, an illustrative case study will be included in the hope that this may assist in exploring the value of the locus of control construct in work with children with emotional and behavioural difficulties.

iv) Dimensions of locus of control

Although locus of control has been perceived as a generalised expectancy, an individual might still have differing beliefs relating to various aspects of his or her life. Early research (Franklin, 1963; Rotter, 1966) suggested that responses to the Rotter scale were unidimensional or at least one general factor explained most of the variance in the total score. More recently, this assumption has been challenged by researchers (e.g. Prociuk, 1977; Marsh and Richards, 1987) who argue that the early studies may reflect limitations in the factorial analyses of that time. Rotter (1975) accepts that more than one factor may be

operating but suggests that later findings may be explained by increasing differentiation of society's attitudes, although he fails to elaborate upon this point. Following from the early experimental studies and the development of locus of control scales a key task of locus of control researchers has been to determine whether the construct is multidimensional and whether such a discovery can improve understanding and prediction.

"If the locus of control construct is truly multidimensional, it is critical that the subfactors be clearly identified. Otherwise, the nature of the construct and predictions based thereon are equivocal. Furthermore, if behavioural and personality correlates of the construct are not determined separately for each factor, the significance of such relationships must remain ambiguous." (Paulhus and Christie, 1981, p.162).

A number of researchers have demonstrated that people hold internal beliefs about personal matters yet external ones about social and political concerns (Gurin, Gurin, Lao and Beattie, 1969; Lao, 1970). It is highly credible that an individual may believe that by working hard it is possible to achieve educational or professional success yet simultaneously feel powerless to have any influence upon national or international affairs. Such a distinction was found when Mirels (1970) factor analysed the Rotter scale responses of college students. Mirels found two distinct factors; one, focusing upon mastery over the course of one's life, the other concerning the extent to which an individual citizen can exert control over political and world affairs. MacDonald and Tseng (1971) found the same two factors in a male sample although with a female sample a third factor was also identified comprising items pertaining to social achievement reinforcements. Abrahamson, Schuderman and Schuderman (1973) also reported a three factor solution in which the third factor contained social or interpersonal items. In other studies involving more than two factors, researchers have found an academic (e.g. Little, 1977; Watson, 1981) and/or an occupational factor (e.g. O'Brien and Kabanoff, 1981). The number of factors extracted has varied and although most studies have identified two or three factor solutions, others have argued that the scale has as many as five (Garza and Widlak, 1977; Little, 1977; Watson 1981) or six (O'Brien and Kabanoff, 1981). Phares (1976) has commented that this disagreement may arise from the differing methods of factor analysis used and the fact that the studies sampled different

populations.

As has been noted earlier in this chapter, having factor analysed the Rotter scale and replicated Mirels' (1970) findings, Reid and Ware (1973) added a further eight items and obtained the same factors which they labelled 'fatalism' and 'social system control'. Noting references in the locus of control literature to self-control, they sought to determine whether this represented a third dimension independent of existing measures. Reid and Ware added a further eight items measuring 'self-control' to the modified Rotter scale and concluded on the basis of a factorial analysis that there was support for their suggestion that self-control represented a third dimension. It has already been noted that this finding is hardly surprising given the fact that Reid and Ware constructed a scale containing self-control items. It is important to bear in mind, therefore, that factor analysis is a means of examining the dimensionality of a given scale, not necessarily the construct which the said scale purports to examine.

In an attempt to explain the many contradictory findings of factorial studies Rotter (1975) observes that factor structures may vary from one population to another and that changes to a scale may result in a changing factor pattern.

> "...such factor analyses do not reveal 'the true structure of the construct'; they
> only reveal the kinds of similarities perceived by a particular group of subjects
> for a particular selection of items ... (factor analyses) ... may be useful if it can
> be demonstrated that reliable and logical predictions can be made from the
> subscales to specific behaviours and that a particular subscale score produces
> **a significantly higher relationship than that of the score of the total test"**
> (p63; present writer's emphasis).

Kendall, Finch and Mahoney (1976) concur with Rotter and suggest two ways in which factor analysis can prove particularly valuable. Firstly, distinct factors can be examined and evaluated separately leading to enhanced predictions; secondly, it may be more powerful to differentiate between groups on the basis of factor specific rather than upon overall scale scores.

The Children's Nowicki-Strickland Internal-External Scale (CNSIE) has been repeatedly factor analysed, although, as with the Rotter scale, there is little consensus regarding the number of factors, the items contained within them and the labels which they have been given. Some common themes, however, have been identified:

a) powerlessness/helplessness

b) luck, fatalism, superstition

c) achievement

There are, however, inconsistencies in the application of labels to the extracted factors. Lindal and Venables (1983) argue that although the labels are similar across studies, the specific items comprising the different factors have varied considerably.

In an analysis of those factor analytic studies which detailed which items were contained in each factor, the present researcher found the following CNSIE items frequently included under the label 'helplessness/powerlessness':

7,12,14,16,18,29,31,33,36,37,39

Metcalfe and Dobson (1983) locate items 7, 16, 18, 31, 33, and 37 within their first extracted factor which they label 'chance'. In the second of their two factor analytic studies, Raine, Roger and Venables (1981) located virtually the same items - 7, 16, 29, 33 and 37 - in their first extracted factor, labelled 'fatalism'. This researcher would contend that these labels have very different meanings; chance relates to an uncertain future and the exercise of luck while fatalism stresses a belief in the operation of preordained outcomes.

It is also notable that although both of Raine et al.'s analyses produced factors labelled 'powerlessness', only four items - 5, 12, 14, 31 - were common to both. The authors argue that despite this limited overlap, inspection of the relevant items in both studies:

"... were concerned primarily with the theme of powerlessness in relation to peers and parents" (p.762).

Although a powerlessness/helplessness factor is commonly found in studies which have factored the CNSIE, others such as Lindal and Venables (1983) argue that this construct is common to all the extracted factors and should not be used as a factor label. A key issue which follows from this is how such terms as 'powerlessness' are understood by different writers (see Palenzuela, 1984, pp.688-689, for a review).

Piotrowski and Dunham (1983) compared their findings with that of Nowicki (1976) arguing that:

> "...if some consistency in factor structure could be found (e.g., Factor 1 items) across several factor analytic studies with the CNSIE, then researchers could depend with confidence on utilising those items in more satisfactory testing of theoretical hypotheses" (p. 15).

Piotrowski and Dunham (op. cit.) found a substantial overlap with respect to the first obtained factor, although factors two and three did not appear stable across populations or within the same sample across time.

Kendall, Finch Little, Chirico and Ollendick (1978) compared factors obtained from administration of the CNSIE to three groups: normal, emotionally disturbed and delinquent children. Separate analyses resulted in eight factors for the normal group, five for the disturbed and six for the delinquent population. Kendall et al. suggested that a clear difference between the groups concerned the themes that constituted the factors. In contrast to the generalised expectancy which emerged from the normal group, factors from the emotionally disturbed group constituted feelings (e.g. helplessness, persecution) and from delinquents, situations (at home, with peers/parents).

Raine, Roger and Venables (1981) argue that the factoring technique used by Kendall and his associates led to the extraction of too many factors. Although Kendall et al. failed to

provide a breakdown of items contained in each factor, the relevant data are contained in an unpublished paper (Nowicki, 1979) which indicates that for the normal group the first factor was defined solely by four items, with only two items for each of the remaining six factors.

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Raine et al. also criticise the factoring techniques used in Nowicki's (1976) study. They point out that while each factor contains more items than Kendall et al., Nowicki used a minimum eigenvalue (a measure of the total variance in the variables) of 0.8 for initial factor extraction, a less conservative criterion than that which is usually used.

In their study of an English adolescent population Raine et al. identified, in their first analysis, a factor which accounted for much of the variance which they labelled 'powerlessness, particularly in adverse parental and peer-group situations (PPP)'. Having already completed a study employing a number of measures of socialisation (Raine, Roger and Venables, 1980), the relationship between socialisation and the 'helplessness' factor was considered with the prediction that as:

"...parental and peer-group experiences ... constitute powerful sources of reinforcement during the socialisation process..." (p.763).

there would be a significant relationship between these two variables. It was further predicted that as the other three factors obtained in Raine et al.'s study were orthogonal to PPP, these would not be related to socialisation. Finally, it was predicted that the composite socialisation score would correlate more highly with the PPP factor score than with the total CNSIE score. Raine et al.'s (1981) findings are presented in Table 2.2.

Table 2.2   Correlations between factor scores and socialisation measure (Raine et al., 1981)

Factor	Correlation	Significance
Factor 1 (Powerlessness P.P.P.)	0.55	(p<.001)
Factor 2 (Fatalism)	0.19	(p<.05)
Factor 3 (Optimism)	-0.11	(N.S.)
Factor 4 (Uninterpretable)	-0.04	(N.S.)
Total CNSIE score	0.42	(p<.001)

The correlations presented in Table 2.2 indicate that all three predictions were supported, lending credence to the notion that identification of factor stuctures can lead to enhanced prediction and greater scale utility.

In addition to comparing factors with other variables for a population, it is also possible to compare different populations by factor specific scores. Kendall, Finch and Mahoney (1976) used factor structures derived from an earlier study (Kendall, Finch and Chirico, 1974) to compare two groups of normal and emotionally disturbed children. They found that for the overall scale and four of the five factor dimensions there were no significant differences betwen the groups. Scores on the extracted factor, 'helplessness' were significantly greater for the emotionally disturbed than the normal children. Kendall et al. (1976) concluded that:

> "In light of the present findings it appears that factor analysis, with subsequent identification of subvariables, can lead to improved ability in differentiating groups" (p.44).

It has been noted that different populations may vary on their factor specific scores and Nowicki and Duke (1983) observe that this may be most likely when comparing normal with special populations (e.g. children with learning difficulties). Nowicki and Duke advise particular caution when generalising research findings across such populations. Such a view is supported by the Kendall, Finch, Little, Chirico and Ollendick (1978) study which demonstrated that the patterning of factors differed between normal, disturbed and delinquent

groups. These authors question the extent to which one can assume that scores on a particular inventory reflect the same construct for differing subject groups especially when contrasting 'normal' and 'non-normal' populations.

Palenzuela (1988) has argued that one reason why scales such as Rotter's have produced several factors may be because the various items they contain cover different areas of reinforcement (e.g. academic achievement, sociopolitical, interpersonal). Thus, the number of derived factors could be increased simply by introducing to the scale new areas to examine (e.g. sporting success). In such a case, multifactoriality would have become confused with a generalised scale which has merely been split into a number of subscales.

The present study will explore whether the derivation of factors can, as suggested by Raine et al. (op. cit.), increase the predictive power of the CNSIE. Chapter 5 notes, however, that concerns have been raised about the appropriateness of this statistical technique with binary data. It is striking that locus of control research has not employed alternative, albeit related, techniques such as cluster analysis and non-metric multidimensional scaling. These make less assumptions about the nature of the data and may be more appropriate for scales such as the CNSIE. Accordingly, the present study will employ factor analysis, cluster analysis and non metric multidimensional scaling and will assess the potential contribution of each (see chapter 5 for detailed discussion).

v) Locus of control and demographic correlates

The locus of control literature includes a vast number of studies which involve exploration of the relationship between this construct and a wide range of demographic variables such as age, sex, socio-economic status, race, academic achievement, I.Q. and family influences. Conclusive findings are rare and an attempt to offer an overview is complicated by the tendency for these to be used as mediating variables in a very large number of studies using very different samples, designs and measurement devices.

Although this chapter cannot fully review this literature, the following section represents an attempt to provide a brief overview of relevant findings. The implications of these for the present study will be indicated.

a) age

It has generally been considered by locus of control researchers (Bradley and Webb, 1976; Lefcourt 1976) that as the child matures, s/he is likely to become more internal:

> "...with increases in....chronological age, individuals come to perceive themselves
> as more able to determine the events around them" (Lefcourt, 1976, p.114).

Indeed, for some, a developmental trend towards internality is seen as an potential indicator of a scale's validity (see, for example, Nowicki and Strickland, 1973; Sherman 1984).

Weisz and Stipek (1982) reviewed twenty locus of control studies and found that eleven of these revealed significant increases in internal control with age, a further three showed a similar trend but did not include significance tests, while the remaining five did not demonstrate consistent developmental differences. Weisz and Stipek concluded that although these nonsignificant studies tended to examine narrower developmental ranges, this analysis:

> "....must raise some doubt as to the consistency of developmental change in
> perceived internal control" (p.254).

These authors suggested that the discrepancies in these studies may result from artifacts of different scale characteristics and from the fact that perceived competence and perceived contingency were often confounded. These arguments were sufficient for Lefcourt (1982) to change his earlier (1976) opinion that age and locus of control are demonstrably related.

Sherman (1984) argues that the studies reviewed by Weisz and Stipek were cross-sectional

and thus do not reflect individual changes over time. Longitudinal studies, on the other hand, are more effective in demonstrating developmental changes. Sherman (op. cit.) employed both cross-sectional (n=502) and longitudinal analyses (n=97) in a study of children aged eight to thirteen. He found that both analyses supported the anticipated developmental trend although there was a swing towards externality at age thirteen.

The developmental trend towards internality is generally considered to be the product of cognitive maturation although Sherman (op. cit.) speculates that the external shift observed in his study at age thirteen, may relate to cognitions about rapid physical maturation beyond the individual's control. Beauvois and Dubois (1988) observe that a developmental trend towards internality is also a feature of French studies although, as with Sherman's study, this is not always continuous. Beauvois and Dubois argue that age-related shifts (towards externality, as well as internality) cannot always be explained by cognitive factors and suggest that there may be associated age-related environmental factors, such as the age at which one transfers to secondary schooling, which are important influences.

It has been noted (Weisz and Stipek, 1982; Skinner and Chapman, 1987) that such findings do not concur with the Piagetian notion that as one matures and becomes less egocentric, one's sense of omnipotence declines. In their detailed discussion of this 'developmental paradox', Skinner and Chapman (op. cit.) conclude that this can be explained by discrepant definitions of perceived internality.

It is conceivable that children who have experienced high degrees of conflict and disharmony at home and at school will not show the same tendency to increase in internality with age as the more general child population. There are, however, few studies which have explored this relationship and findings are inconsistent. Particular difficulties are the different definitions of emotional disturbance/behaviour disorder utilised and variations in the age ranges studied. In a study of emotionally disturbed children (mean age eleven years), Finch, Pezzuti and Nelson (1975) found a relationship between age and increasing internality although this was not true of a study of hyperactive children aged between seven and nine

(Tarnowski and Nay, 1989).

The present study will examine whether there is a relationship between age and internality-externality in a sample of children who are perceived by significant adults (see chapter 3 and appendix 2) to have emotional and behavioural difficulties. It is recognised that the author's use of this term is but one formulation and no claim is made that the sample is more accurate or representative of such a population than that of other studies.

While recognising the weakness of a cross-sectional design (Sherman, 1984), procedural constraints limit the opportunity to retest subjects as part of a longitudinal analysis. Accordingly, the study will compare mean locus of control scores for each year group.

b) sex

> "....it seems obvious that sex differences are a most important variable to consider when predicting from a locus of control base" (Nowicki and Segal, 1974, p.36).

As one might expect, a large number of studies have explored sex differences in locus of control. Many of these have focused upon student populations (e.g. McGinnies, Nordholm, Ward and Bhanthumnavin, 1974; DeBrabander and Boone, 1990) and findings tend to indicate that females score more externally than males. Studies of children are rather inconclusive. Foon (1988a), for example, found no significant sex differences.

It has been suggested (DeBrabander and Boone, 1990) that sex differences in responses to locus of control scales may reflect a greater tendency on the part of females to provide socially desirable responses reflecting:

> "...the general perception that in most societies women are more dependent than men on external factors" (p.272).

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This tendency has led some researchers (Nowicki and Walker, 1974) to suggest that some females may report external beliefs but behave in a manner more consistent with internal beliefs. The general picture, however, is still far from clear and there have been no recent findings to invalidate Dyal's (1984) conclusion, based upon a major review of cross-cultural studies, that:

> "...it seems possible that there is an external cross-cultural consistency for women to be somewhat more external; however, this fragile effect varies substantially (and capriciously) with the particular culture and sample characteristics" (p.268).

The present study will attempt to consider sex differences in children perceived to have emotional and behavioural difficulties. Assessing the likely influence of social desirability, however, is likely to prove highly difficult. Many of the girls in this sample, by virtue of their display of outward aggression and disruptiveness, would appear to have rejected societal pressures to act in a fashion which is generally deemed appropriate for a female. Others, whose aggression is turned inwards upon themselves, (e.g. by means of eating disorders, substance abuse) or by avoidance behaviours (e.g. truanting from school, leaving home) fit the stereotype of the maladaptive female more easily. Can one hypothesise, therefore, that social desirability will be more influential with some than others? Although this question cannot be overlooked, its resolution is beyond the province of this present research project.

This study will examine whether there are sex differences in locus of control scores of boys and girls. Further analysis will involve consideration of sex differences based upon groups of items obtained by factor and cluster analysis and non metric scaling. Such analyses may demonstrate more specific differences based upon themes such as luck, relations with parents or academic success.

c) socio-economic status and race

Studies have suggested that both factors may have a relationship to locus of control. It has

often proven difficult, however, to deal with race, independent of socio-economic status, as ethnic minorities are often found to be over-representative of the economically disadvantaged.

Several U.S. studies have indicated that black children (and adults) are more external than whites (e.g. Battle and Rotter, 1963; Rabinowitz, 1978). A recent wide-ranging review of published studies, however, (Banks, Ward, McQuater and DeBritto, 1991) has challenged the widespread belief that blacks tend to be more external

There are few studies of racial differences in the locus of control of children in the United Kingdom. Louden (1977) found that West Indians were significantly more external than English white or Asian children, although this study is criticised on methodological grounds by Remy (1983), whose own study found no differences between U.K. white, Afro-Carribean and Trinidadian samples.

Racial differences in locus of control studies have often been seen as the product of socio-economic inequalities and different child-rearing practices (Remy, 1983). The potential for confounding such variables is high.

Gilmor (1978) concludes from a brief review of relevant studies that socioeconomic status is more significant than race:

> "The tenor of these results is that beliefs in external control quite appropriately reflect the life conditions of less advantaged children and adolescents of the same or different race" (p.7).

In his review of cross-cultural studies, Dyal (op. cit.) comes to a similar conclusion:

> "The message seems to be clear and simple: locus of control is typically affected by real-world contingencies such that lower-class persons accurately perceive themselves to be more externally controlled than middle- or upper-class persons. This effect seems to be general across ethnicities and cultures (although the data base for this assertion is uncomfortably thin)" (p.279).

Locus of control studies exploring social class in children are comparatively rare. One might anticipate that more socio-economically advantaged children would show greater internality and this has been shown in some studies (e.g. Gruen and Ottinger, 1969; Nowicki and Strickland, 1973). Other studies (e.g. Gammage, 1974), however, have failed to find a relationship.

In addition to studies comparing different ethnic groups within the same country, much research has examined cross-cultural differences (see Dyal, 1984, for an extensive review). Although this topic is not a central feature of the present study, it is is important to recognise that the locus of control literature draws upon studies from around the world. Thus, contradictory findings may be explained by cultural differences. In their review of studies using the Nowicki-Strickland Scales, Nowicki and Duke (1983) note variations in mean locus of control across cultures and inverse relationships with age. Nevertheless, they found that regardless of mean scores, correlates of locus of control seem to be similar from group to group.

The exploration of socio-sconomic status and race requires a reliable measure of socioeconomic status and a sample which includes children from different races. The difficulties encountered with respect to the present study are discussed in appendix 3.

d) academic achievement / intelligence

According to Lefcourt (1976), it is reasonable to anticipate a relationship between locus of control and academic achievement:

> "........common sense suggests that a disbelief in the contingency between one's efforts and outcomes should preclude achievement striving. Without an expectation of internal control, persistence despite imminent failure, the postponement of immediate pleasures, and the organising of one's time and efforts would be unlikely. Common sense would dictate that these characteristics, essential to any prolonged achievement effort, will occur only among individuals who believe that they can, through their own efforts, accomplish desired goals; **that is, individuals must entertain some hope that their efforts can be**

effective before one can expect them to make the sacrifices that are prerequisite for achievement" (pp.66-67; emphasis as in original).

The locus of control construct received heightened exposure following the Coleman Report, Equality of Educational Opportunity (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, and York, 1966) which studied almost half a million children across the United States. These researchers found that not only was a sense of control over the environment a major determinant of school achievement but that this attitude factor, on the part of pupils, was more important than all school factors together in accounting for the poor school performance of disadvantaged children.

Nowicki and Duke (1983), in a review of studies using the CNSIE, conclude that internality has usually been shown to be related to greater academic achievement although most correlations are below .50. Interestingly, they add that such relationships are often stronger for grade point average than for standardised achievement tasks. Although Nowicki and Duke do not speculate on possible reasons for this, it is possible that this may reflect the existence of motivational and behavioural factors which have less influence in standardised assessment situations.

In a review of thirty six studies, Bar-Tal and Bar-Zohar (1977) noted that thirty one found a positive relationship between internality and academic achievement, one found a negative relationship between these variables, while the remaining four found no relationship.

Another large-scale meta-analytic review of 98 relevant studies using different scales (Findley and Cooper, 1983) resulted in the conclusion that more internal beliefs are associated with greater academic achievement, although the magnitude of this relation is only small to medium. In contrast to Nowicki and Duke's findings, however, it was found that stronger effect sizes were associated with standardised achievement than with teacher grades.

British locus of control studies have tended not to make comparisons on the basis of academic achievement. In a rare study of this nature, Thompson (1990) found a relationship between internality and higher levels of academic attainment.

An alternative means of exploring the relationship of these two variables is to compare groups of children who are categorised as normal, learning disabled, or academically gifted.

Bender (1987) reviewed studies exploring locus of control in children with learning difficulties. The majority of studies have suggested a link between learning disability and externality (e.g. Scott and Moore, 1980; Fincham and Barling, 1978; Snyder, 1982), although in some cases (Bladow, 1982), no clear relationship has been demonstrated.

It is important to note the distinction between learning disabled and educable mentally retarded which is made in the United States. This latter population is generally characterised by lower levels of intellectual functioning (usually in the range 50 - 75 I.Q. points) and adaptive behaviour difficulties which adversely affect educational performance. Learning disabled children, on the other hand, tend to experience language and/or mathematical difficulties unrelated to intellectual and/or environmental disadvantage. In a study comparing locus of control in normal, learning disabled, emotionally disturbed and educable mentally retarded children (Coggins, 1984), it was found that the educable mentally retarded children were significantly more external than the other three groups; emotionally disturbed and learning disabled did not differ from each other but were significantly more external than the normal group.

More recently, increasing attention has focused upon cognitive correlates of giftedness. This has been reflected by researchers of locus of control whose findings suggest a relationship between giftedness and internality (e.g. Collier, Jacobson and Stahl, 1987; Fincham and Barling, 1978; Tidwell, 1980; Boss and Taylor, 1989). Kwan (1992), however, found that although a relationship was true for both sexes, that for girls appeared to be in the opposite direction (i.e. with externality).

Three studies (McClelland, Yewchuk and Mulcahy, 1991; Kanoy, Johnson and Kanoy, 1980; Davis and Connell, 1985) compared locus of control in underachieving and achieving gifted students. Their findings all differed, two studies demonstrated intergroup differences, but in different directions, the third found no difference between groups (see McClelland et al., 1991, for discussion).

Giftedness may be inferred from performance on I.Q. measures and/or achievement tests. Often it is difficult to separate out the interaction of these variables. The available literature appears to suggest, however, that academic achievement is more closely related to locus of control than I.Q. One might expect that higher I.Q. would be related to internality:

> "I suspect intelligence does in fact mediate internal-external development; but
> I also suspect that internality-externality may mediate intellectual development
> too - that there is a reciprocal relation between the two" (Stephens, 1972, p. 6).

Often, however, the relationship between these two variables has been non-significant. Nowicki and Strickland (1973), in developing the CNSIE found, as predicted, that I.Q. was not related to internality-externality. A decade later, Nowicki and Duke's (1983) large-scale review of CNSIE studies similarly indicated that the majority found a non-significant relationship with intelligence. These findings are endorsed in a literature review by Gammage (1982) who points out, however, that verbal intelligence may have an influence, as scales can place requirements upon children's reading comprehension and logical facility. This may, in turn, reduce the reliability of findings in samples employing those with limited verbal ability (Gorsuch, Henighan and Barnard, 1972; Livingston, 1990).

The relationship of locus of control with academic achievement, intelligence and behavioural difficulties is far from clear. The majority of studies of children with emotional and behavioural difficulties report mean I.Q. scores significantly below the normal mean of 100 points and indicate that academic achievement is generally low, even on the part of the more able. The present study will, therefore, attempt to explore the relationship between these

variables.

e) family circumstances

A large number of research studies have attempted to explore those features of the family environment which encourage the development of internality or externality in children. Some have focused upon the influence of child-rearing practices such as the nature of parental control and the degree of parental nurturance and support, while others have looked at structural factors such as birth order, sex of children and the number of parents and siblings in the home.

Rollins and Thomas (1979) reviewed a range of studies exploring the relationship between family processes and internality-externality. On the basis of their review, these authors suggested the following four, rather tentative, generalisations:

- the greater the parental support, the greater the child's level of internality

- as attempts at parental control increase from low to moderate, internality increases, although it begins to decrease as control attempts move from moderate to high

- the greater the parental coercion (implied by punitiveness and unqualified power assertion), the greater the level of externality

- the more that attempts at parental control were supported by explanation and reasoned argument, the greater the level of internality

Rotter (1966) hypothesised that the inconsistent exercise of parental discipline might be an antecedent of external locus of control. The child who is unable to anticipate parental responses is likely to consider reinforcement outcomes as unpredictable and unrelated to

one's own behaviour.

Although a small number of studies have explored children's current perceptions of family relationships (e.g. Epstein and Komorita, 1971; Lau and Leung, 1992), the majority tend to draw upon older respondents' recollections of childhood experiences (e.g. Davis and Phares, 1969; Shore, 1967; Macdonald, 1971). All these studies have supported the hypothesis that poor parental relations and inconsistent discipline are related to externality.

In their wide-ranging review of studies using the CNSIE, Nowicki and Duke (1983) conclude that studies in both Germany and the United States have indicated that internality is:

> "...related to the paternal characteristics of understanding, tolerance, helping and contact seeking and to a family climate characterised by open communication, clear family roles, and democratic structures" (p.20).

Rather than examining family processes, other studies have considered the potential influence of structural aspects such as family constitution and birth order.

The importance of birth order position in the development of personality was stressed in the writings of Adler (see Ansbacher and Ansbacher, 1956, pp.376-383). Adler pointed out that the oldest child may feel dethroned when a rival sibling joins the family; the second child may often be driven to equal or supercede the older sibling; the youngest, often pampered and stimulated, may often prove to be the most talented as a result yet also suffer from extreme inferiority feelings. The only child may be pampered by his or her mother, concerned about the possibility of being supplanted by siblings and is often born into a timid and anxious environment. Adler commented that the greatest proportion of 'problem children' are oldest children although the youngest are close behind.

While these may appear as gross generalisations, Adler's profiles, delineating situations which may lead to neurotic conditions, strike something of a chord in those engaged in

working with families.

Morin (1983) provides a review of studies examining birth order and family size. She notes that there are comparatively few studies involving locus of control and these have produced mixed results. Crandall, Katkovsky and Crandall (1965) and Parrott and Strongman (1984), for example, found firstborns to be more internal while Eisenman and Platt (1968) and Eswara (1978) found them to be more external. Other studies have found no birth order effects (Newhouse, 1974; Morin, 1983).

It is important to recognise, however, that it is not merely the numerical order of successive births but the psychological situation in which the child is born which Adler considers to be influential. Thus, quantitative analyses of birth order positions may not prove sufficiently sensitive to differentiate between the differing experiences of family members.

The relationship between locus of control and family size is similarly unclear with some studies demonstrating no significant relationship (e.g. Roodin, Broughton and Vaught, 1974; Morin, 1983), while others suggest that those who are from single child families tend to be more external (Marks, 1972; Newhouse, 1974). A further complication is the socio-economic factor, as a greater proportion of large families found in less advantaged socio-economic classes.

There has been little examination of family factors and locus of control in behaviourally disordered populations. In one study combining delinquents and non-delinquents, Parrott and Strongman (1984) found that birth order and family size was related to academic locus of control (I.A.R.Q.) but not to the Rotter Scale.

A further important variable concerns the presence of the child's parents and the potential impact of traumatic family experiences such as divorce, bereavement and separation. Once again, however, studies are inconclusive. Duke and Lancaster (1976) and Bain, Boersma and Chapman (1983) found that children in father-absent homes were more external than

where fathers were present.

Although the locus of control literature generally indicates that traumatic, unsettling and adverse experiences tend to be related to externality, an interesting finding by Kalter, Alpern, Spence and Plunkett (1984) was that children in their study who had experienced parental divorce displayed greater internality than did peers from intact families. Kalter et al. suggested that internality might be a defence mechanism resulting from the child's tendency to assume blame/responsibility for the divorce, or alternatively, it might result from the child's need to engage in highly organised, mastery activities as a means of countering feelings of powerlessness in the face of divorce.

The research outlined above suggests that the relationship between locus of control and child-rearing and family structure variables is currently unclear. Furthermore, these variables have rarely been examined in children exhibiting emotional and behavioural difficulties. Interestingly, many of the above features have not only been linked with externality but also problem behaviour (see Rutter and Giller, 1983, for a review).

An interesting issue concerns whether a relationship between one or more family variables and internality-externality will emerge in a population of children who all have a variety of emotional or behavioural difficulties. In order to explore this issue, the present study will examine the relationship between locus of control and several structural family variables - number of siblings, number of parents/step-parents in the home, and birth order.

Two limitations in the present study are the interaction of gender with other family variables and the difficulty in assessing family process variables.

It is likely that in personality research there will be an important interaction between sex of subject, sex of siblings and birth order (Schooler, 1972). Furthermore, the writer recognises that family process (as opposed to structural) variables may offer complementary, if not greater, insights (see Shaw, 1991; Shaw and Scott, 1991). Unfortunately, the research

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design and constraints upon the present study precluded examination of the sibling sex and family process variables (see Chapter 4 for discussion).

<u>f) other variables which may be influential for the present study</u>

The Elton Report (1989) noted that children with more complex emotional and behavioural difficulties tend to present problems earlier in their school careers. It is not clear to what extent early experiences of censure and conflict will have an influence upon children's locus of control although it is likely that such a relationship would be complex and involve the interaction of number of other variables.

The writer has not encountered any work in the locus of control field which has examined differences on the basis of the age when children were first referred for psychological, psychiatric or social work support. The present study will use the <u>age at which the child was first referred to educational psychology services</u> as a crude indicator of onset of severe behaviour difficulties. Although the differing subjective perceptions and tolerances of parents, teachers and other professionals, referral patterns and the reason for initial referral (not necessarily for behaviour difficulties at the initial juncture) all undermine the use of this index, it may still offer valuable insights. It is possible, for example, to hypothesise that the individual whose rejection of parental and/or school authority suddenly becomes acute in adolescence, may be adopting a considered strategy and be more aware of contingencies than the child whose problem behaviour has been both severe and chronic. Alternatively, an acute crisis in an adolescent's life may be marked by a particularly sudden and pervading sense of powerlessness. It is recognised, however, that the analysis of the age of referral variable offered in the present study is limited and can do little more than provide some possible directions for further study.

There has been little exploration of the relationship between locus of control and <u>type of school</u> although there has been some interest in the effects of single-sex as opposed to

coeducational schools (e.g. Foon, 1988a; Cairns, 1990). The majority of researchers examining locus of control in special populations have focused upon categories of educational difficulty (e.g. emotionally disturbed, learning disabled) while apparently treating type of school as a spurious variable. This study argues that such conceptualisations may not always be sufficiently sensitive. It may, therefore, prove valuable to compare children at disruptive units with those in schools for emotional and behavioural difficulties and education units operating in social services community homes, as it can be argued that these tend to cater for children with rather different levels of insight into their lives.

Similarly, one might anticipate that placement in social services' residential and foster care could be an important correlate. The writer, however, is unaware of any British studies which have specifically examined the locus of control beliefs of children in such settings. As with the schools variable, American studies have tended to focus upon broad categories of exceptionality (disturbed, delinquent, mentally retarded) and ignore potentially important institutional effects.

Analysis of the relationship of care placement with locus of control would have to take into consideration the rather different psychological contexts of assessment centres, where children may feel particularly uncertain and anxious about their future, and the longer-term placements of foster care and other residential children's homes.

The potentially negative effects upon children of parental unemployment may be the product of material deprivation, social stigmatisation, a sense of apathy, depression and boredom in the home and a disruption to traditional family roles and relationships (Madge, 1983). Although the likely impact of unemployment upon locus of control beliefs in young adults has been speculated upon (Kabanoff, 1982), there is a dearth of empirical studies with children. Parental unemployment may be a more common experience of children with emotional and behavioural difficulties and one might anticipate that it would be associated with higher levels of externality. The possible effects of parental unemployment upon locus of control is further discussed in chapter 4 and subsequently explored in the present

investigation.

vi) Locus of control and psychological adjustment

Throughout the locus of control literature can be found the explicit or implicit belief that internal control is associated with superior personal adjustment. Rotter's seminal monograph (1966) points out, however, that the relationship is not linear:

> "Theoretically, one would expect some relationship between internality and good adjustment in our culture but such a relationship might not hold for extreme internal scores" (p.16).

In a later paper Rotter (1975) cautions against the tendency for many researchers to automatically assume that internality is 'good' and externality 'bad'. Not only is the relationship between locus of control and adjustment complex but, more fundamentally, the meaning of the term 'adjustment' is not consensual (see appendix 2 for discussion).

> "Adjustment, after all, is only a value concept, and any relationship must depend upon the definition of adjustment" (p.60).

This point, widely accepted by writers focusing upon behavioural problems in schools (e.g. Galloway and Goodwin, 1987; Mongon and Hart, 1989), continues to be generally disregarded in the locus of control literature.

Studies which have examined the relationship between adjustment and locus of control have employed two major designs:

a)   correlational studies examining the relationship between individuals' locus of control scores and various measures of adjustment (e.g. self-report, observer ratings)

b)   comparison of mean scores of samples representing differing populations (e.g.

normal versus emotionally disturbed).

In a wide-ranging review of research studies using the CNSIE, Nowicki and Duke (1983) conclude that for emotionally disturbed and delinquent populations, externality is associated with abnormality and maladjustment. Internality on the scales has been found to correlate positively with what are generally held to be desirable traits and/or behaviours such as deeper self-disclosure (Herman, 1976), greater reflectivity (Ayabe, 1979; Hisama, 1979), more altruism (Dunne, 1977), less distancing from strangers (Duke and Nowicki, 1972, greater persistence (Short, 1976), leadership (Echohawk and Parsons, 1977), leadership and popularity (Nowicki, 1975), and negatively with debilitating anxiety (Ollendick, 1979), authoritarianism (Surlin, 1976), helplessness (Fibel, 1974; Mount, 1975), defensiveness, (Quinn, 1974), feelings of guilt (O'Grady and Janda, 1978) and conformity (Sams, 1975).

Use of the Rotter Scale has demonstrated a positive correlation between externality and hostility and aggression (Williams and Vantress, 1969) and between internality and positive attitudes to authority figures such as teachers and the police (Heaven, 1988).

The great majority of studies focusing upon locus of control beliefs of children who exhibit behavioural problems have elected to study juvenile delinquents and/or children categorised as emotionally disturbed/behaviourally disordered. This literature review will address each of these categories in turn.

a) Delinquency

The link between delinquency and externality, as defined by locus of control scales, has been demonstrated in many studies (Lau and Leung, 1992; Beck and Ollendick, 1976; Cole and Kumchy, 1981; Elenewski, 1974; Gaar, 1981; Glicken, 1978; Hurt, 1985; Kendall Finch, Little, Chirico and Ollendick, 1978; Martin, 1975; Little and Kendall, 1978; Ollendick and Hersen, 1979; Ollendick, Elliott and Matson, 1980; Thatcher, 1983; Duke and Fenhagen, 1975; Keefe, 1976; Sunlight, 1980; and Yarish, 1985). A study by Valliant, Asu and Howitt

(1983), however, failed to find a significant difference, although it was suggested that the use of the adult-oriented Rotter scale with juveniles may have been a confounding feature.

Cole and Kumchy (1981) compared a sample of 32 juvenile delinquents on measures of self-concept, depression and locus of control. Their findings indicated that internality-externality (scored in the external direction) correlated negatively with self-esteem and positively with depression. Compared to the equivalent CNSIE (1973) norms for a school population, the sample's mean score was indicative of greater external orientation.

Duke and Fenhagen (1975) compared 18 adolescent females in a detention unit with non-delinquents at a nearby high school. Delinquent girls scored significantly more externally than non-delinquents. Keefe (1976), using a sample matched for age and socioeconomic status, obtained comparable results, as did Beck and Ollendick (1976) for a male sample.

Many studies of delinquents have involved youngsters who had been apprehended and were awaiting sentencing or, alternatively, were in a receiving institution. It is possible, therefore, that their more external scores reflect their current circumstances rather than any differences prior to their arrest. As such, it is important to recognise that the relationship between locus of control and adjustive behaviour and attitudes is very likely to be moderated by the nature of the setting in which individuals reside (Wolk 1976). The expectancies of a child living in a home where there are few parental controls and inconsistent responses to varying behaviours may change should he be placed in a 'total institution' (Goffman, 1961), where every aspect of his daily life is controlled by others.

Little and Kendall (1978) suggest that:

> "Belief in one's ability to control reinforcers may directly reflect one's current life situation as well as a generalised expectancy. That is, the scale may tap the subject's perception of the situation in which he finds himself (a state variable) in addition to his general expectancy that he can control reinforcers (a trait variable). In the rigidly controlled setting of a correctional institution, the state variable may be especially potent." (p.283).

Such a statement, of course, is fully consistent with Rotter's theory which stresses the importance of the individual's psychological situation in determing both expectancies and reinforcement values.

Although it is likely that removal from home and/or local school to a highly structured institution will have an impact upon locus of control beliefs, the direction of such a shift is unclear. Rothbaum (1980) has argued that incarceration would result in a shift towards externality yet, in contrast, Eitzen's (1975) study of incarcerated delinquents supported the hypothesis that, where such settings employ behaviour modification programmes on a consistent basis, a shift towards internality would result. Reporting these findings Eitzen argues:

> "A clear implication of this is that a person within a consistent behaviour modification milieu where his actions consistently receive appropriate credits or debits, tends to develop a feeling that he is master of his fate" (p. 297).

Behavioural techniques with institutionalised delinquents either as a means of daily management (Elliott, 1987), or as part of a therapeutic social training programme (Phillips, Fixen, Phillips and Wolf, 1979) are widely employed yet their relationship to internality-externality is still unclear. Eitzen's study did not include the subjects' locus of control scores prior to their apprehension and arrest and thus the reported shift in scores from entry to discharge may simply reflect the possibility that, on entry to the institution, the subjects felt particularly powerless and vulnerable. Those who work with incarcerated youth are often made aware of the increase in confidence and sense of personal power of 'gatehappy' youngsters shortly to be discharged.

If, for whatever reason, incarcerated youngsters' locus of control scores shift during the course of their placement, the timing of the scale administration may significantly affect the results. Rarely, however, is such a possibility recognised in this literature.

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Other studies have explored the relationship between locus of control and self-reported delinquency. Lau and Leung (1992) asked high school students to report how many times in the past six months they had engaged in each of fifteen delinquent acts. Those who had committed more offences and those who committed more serious offences both tended to score more externally. Correlations, while significant, were generally low and showed stronger relationships for girls.

b) Emotional and behavioural difficulties (E.B.D.)

Several studies have demonstrated that children with emotional and/or behavioural difficulties (E.B.D.) score significantly more externally than a corresponding normal population (Nunn and Parish, 1992; Ollendick, Finch and Nelson, 1976; Annesley, 1974; Smyntek, Barris and Kielhofner, 1985; Nelson, Finch, Montgomery and Bristow, 1975; Kendall, Finch and Mahoney, 1976; Carlton, 1979; and Coggins, 1984). It should be noted, however, that three further studies (Kendall, Deardorff, Finch and Graham, 1976; Hisama, 1976; and Unruh, Cronin and Gilliam, 1987) failed to find a significant difference.

Nelson et al. (1975) compared 20 emotionally and behaviourally disordered children with 20 normal children enrolled in a local public school matching them on mental age and socioeconomic status. They found the E.B.D. sample to be significantly more external. Smyntek, Barris and Kielhofner (1985) compared two groups of adolescents, one hospitalised with psychosocial problems, the other functional group taken from two suburban high schools. Subjects in both groups represented middle and upper-middle class backgrounds. The dysfunctional group were significantly more external.

Jessor and Jessor (1977) found externality to correlate significantly with deviant behaviour in a high school sample but not in a sample of college students. They argued that this discrepancy might be explained by their use of a locus of control measure which was unstandardised and unvalidated.

Stockdale, Galejs and Wolins (1983) studied the cooperative-competitive preferences of 246, 9-12 year olds. It was found that external locus of control was negatively correlated with cooperative preferences and positively with competitive preferences. Teachers also rated external children higher on behaviourally defiant and dependent-withdrawn items on a behaviour rating scale. Although statistically significant the correlation coefficients were of only modest size. In a study of Nigerian secondary schoolboys, Maqsud (1980) also found that those with more external scores on the CNSIE were considered by their teachers as significantly higher on antisocial behaviour as measured by a rating scale.

In a study of English adolescents, Raine, Roger and Venables (1982) found statistically significant correlations between a number of self-report measures of socialisation for both the CNSIE and teacher ratings of refractory behaviour.

Raine et al. argue that there are several possible explanations for their findings:

> "Antisocial behaviour may develop as a reaction to the perception that reinforcements are independent of self-action. (Reality for many children from disadvantaged homes.) On the other hand it is equally conceivable that an external locus of control develops as a consequence of the debilitating experiences associated with a delinquent way of life. It may even be the case that both statements are true, in which case the picture may be one of externality causing asocial behaviour which in turn fuels increasing externality" (p. 153).

Ferrer and Krantz (1987) found a significant correlation between the CNSIE scores of 3rd and 5th grade children and their teachers' ratings of the subjects' self-control. They argue that these results confirm Kendall and Wilcox's (1982) contention that:

> "... 'internal' children's sense of responsibility with respect to social outcomes would be positively associated with impulse control, delay of gratification and regulation of attention in classroom settings" (Ferrer and Krantz, p.357).

A number of studies have compared children's locus of control scores with self-reported problems of behaviour and adjustment. The findings suggest that externals are more likely to report adjustment problems at home, school and in their wider interpersonal dealings. In

a study of Taiwanese adolescents (Hung, 1977) found that external students reported more adjustment problems on a self-report measure (Chinese Revision of the Mooney Problem Checklist) than a 'moderate' group which, in turn, scored more highly than an internal group. The differences betwen the external and internal groups were significant across all the seven problem areas assessed by the checklist; health and physical development, school, home and family, money-work-the future, boy and girl relations, relations to people in general and self-centred concerns. Nunn (1988) employed the CNSIE and a 60 item self-report instrument, the Behaviour Rating Profile: Student Scales (Brown and Hammill, 1978) which assesses children's perceptions of home, school and peers. Subjects were aged from 10 to 14 years. Nunn found significant correlations for both boys and girls at all ages which led him to conclude:

"The relationships ... suggest that, as perception of external control increases, the level of positive adjustment within the defined psychosocial domain decreases" (p19).

Similar findings were reported by O'Connor (1985) who employed an English sample of third year comprehensive school children. O'Connor found that external CNSIE scores were associated with a greater incidence of self-reported problems on the Lewis Counselling Inventory (Lewis and Pumfrey, 1978). The results were significant not only for total scores on this Inventory but also for five of the six sub-divided problem areas; relationships with peers, family and teachers, health and irritability. The findings were not significant for social confidence, although O'Connor suggests that this finding may merely reflect a weakness in this part of the Inventory.

Although these various research findings strongly suggest an association between externality and adjustment problems, a number of other studies have failed to find significant differences between normal and emotionally disturbed groups. Hisama (1976) using the Bialer scale found no significant differences between normal children and those with behaviour disorders and learning disabilities. Kendall et al. (1976) also found non-significant differences between groups of emotionally disturbed and normal boys. Noting

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that Kendall et al. had failed to control for race, intelligence and socioeconomic status, Unruh, Cronin and Gilliam (1987) compared male and female emotionally disturbed/ behaviour disordered children with a matched normal group. Employing both the CNSIE and the academically focused Intellectual Achievement Responsibility Questionnaire (Crandall et al., 1965) they found no significant difference on either measure. A study by Nelson, Finch, Montgomery and Bristow (1975) produced the confusing finding that their sample of emotionally disturbed children was more external than a normal group on the CNSIE but more internal on another scale, the Reverse Locus of Control scale (Gozali and Bialer, 1968). Nelson et al. found it difficult to account for this discrepancy and suggested that the two scales could not have been measuring the same construct. Comparison of the scale items, however, did not, in the opinion of the writers, offer support for this position.

Some researchers have suggested that differences between normal and emotionally disturbed children may become more evident if comparisons are made not only by total scores but also by derived factors. One such study, (Kendall, Finch and Mahoney, 1976) found no significant differences between their two samples for total CNSIE scores yet when comparison was made by each of five derived factors, a significant difference was found on a factor which they labelled 'helplessness' (see section iv).

It is argued in appendix 2 that terms such as maladjusted and emotionally disturbed have little meaning, tending to be used as umbrella terms to denote a range of disturbing behaviours. This may have the unfortunate effect of masking very real differences between various sub-groups.

In a review entitled, Clinical syndromes and control expectancies, Rothbaum (1980) draws upon the accumulated findings of factor analytic investigations which have suggested that there are two broad behavioural syndromes - internalising and externalising (Achenbach and Edlebrook, 1978). Internalising (or, as termed by Rothbaum, 'inward') behaviours are those which are marked by excessive self-control and over-inhibition in the expression of impulses. These may take the form of uncommunicativeness, depression and somatic

complaints. Externalising (or 'outward') behaviours, by contrast, are manifested in children who are unable to inhibit impulses and may take the form of hyperactivity, aggression and delinquency. Drawing upon the wider control literature (e.g. Seligman's theory of helplessness, 1975, and Brehm's reactance theory, 1966,), Rothbaum endorses what he terms a helplessness-reactance model (Wortman and Brehm, 1975). Despite their differing empirical origins, Rothbaum argues that for locus of control, operationalised by attitudinal measures, and helplessness-reactance theories, operationalised by situational manipulations, there is:

"...nearly total (conceptual) overlap" (p.223).

Rothbaum contends that experimental and naturalistic studies both indicate that slightly to moderately uncontrollable experiences (where there is, perhaps, a feeling that control can be regained) lead to reaction or outward behaviours; in contrast, severely uncontrollable experiences lead to helplessness and inward behaviours. Following Seligman (1975), uncontrollable is defined by Rothbaum as independence between an individual's responses and subsequent outcomes. He argues that while research has consistently indicated a relationship between an external locus of control and inward behaviour (Lefcourt, 1976, 1982; Phares, 1976; Benson and Deeter, 1992; Sorenson, 1989), there is considerably less evidence with respect to outward behaviour. Rothbaum accepts that studies of delinquents have often shown them to be more external than normal samples (e.g. Duke and Fenhagen, 1975), yet explains this by arguing that this difference may simply be the consequence of their present incarceration.

Support for the suggestion that externality is more associated with inward than outward behaviours can be found in a study of 5 year olds (Field, Sandberg, Goldstein, Garcia, Vega-Lahr, Porter and Dowling (1987). Using the Preschool and Primary Form of the Nowicki-Strickland Locus of Control Scale (Nowicki and Duke, 1979), Field et al. (op. cit.) found that depressed (i.e. inward) children were significantly more external than both normal and conduct disordered groups with no significant difference between the latter two groups.

The studies cited in this present review would tend to support the notion that externality is associated with both inward and outward problem behaviour syndromes. One possible explanation for the weaker association with the latter may be that depressive, withdrawn children form a relatively homogenous group while those who 'act out' against others may not. The former population may tend to feel helpless and unable to influence what happens to them, whereas the latter may be differentiated into an 'internal' population who are powerful, controlling and believe their behaviour is instrumental in the achievement of their goals and an 'external' population whose failure to comprehend contingencies leads them to act without due regard for consequences. The overt behaviour of these two outward groups may be very similar although their control orientations and expectancies would be almost diametrically opposed. This possibility has, as yet, not been addressed in the literature.

The writer is aware of only three studies which have examined the relationship of locus of control and different types of behaviours on the part of juvenile delinquents. None of these examined the difference between inward and outward behaviours. Tuft and Dana (1973) considered four behavioural categories of delinquency (psychopathic, neurotic, subcultural and immature-inadequate) and found no significant differences in locus of control scores between these groups. Hollin and Wheeler (1982) considered differences between violent and non-violent offenders in a British borstal. The violent offenders were significantly more external.

Drummond, Barnard and Mehnert (1985) asked incarcerated delinquents to complete the Jesness Behavior Checklist (Jesness, 1977), which involved a self-rating of fourteen positive behavioural characteristics (e.g. sociability, friendliness, anger control). These were then correlated with the subjects' responses to the CNSIE. Internality was found to be significantly related to positive scores on each characteristic. Drummond et al. (op. cit.), however, recognise the possibility that some responses may be influenced by perceived

social desirability and this could lead to an inflation of the variables' relationship.

Any relationship between locus of control beliefs and inward/outward behaviour is more likely to be evident in studies of emotionally disturbed children, although there are no studies known to this writer which have treated emotionally disturbed/behaviourally disordered children as other than a single population. In contrast, studies of locus of control beliefs in adult psychiatric inpatients have demonstrated significant differences in mean scores (Rotter scale) between schizophrenics, manics and depressives (Harrow and Ferrante, 1969), and between schizophrenics, depressives, and those with personality disorders (Pryer and Steinke, 1973). Other studies with adult psychiatric patients (Hersch and Scheibe, 1967; Lottman, Davis and Gustafson, 1973) have shown a relationship between internality-externality and specific subfeatures of the Minnesota Multiphasic Personality Inventory (Hathaway and McKinley, 1951) and the California Psychological Inventory (Gough, 1964).

The absence of studies examining differences within the behaviourally disordered juvenile population is somewhat surprising given the frequent references made to the range of behaviour disorders which exist. Several studies even go so far as to indicate the proportions of various types of problematic behaviours. For example, Kendall et al. (1976) state that the diagnostic classification of their emotionally disturbed group (n=20) was as follows: over-anxious reaction (35%), anxiety neurosis (5%), depressive neurosis (20%), unsocialised aggressive reaction (15%) and one child in each of five other categories. Morris (1976) examined the effect of a treatment programme upon the locus of control orientation of thirty emotionally disturbed boys with varying diagnoses such as, hyperactivity, minimal brain dysfunction, depression, epilepsy, psychosis and phobic reaction. Although the population designated as having emotional and behavioural difficulties in this country would not be labelled in such fashion, to assume that such populations can be treated as an homogenous group would appear to this writer to be a gross error.

It is puzzling that so many writers distinguish between the different behaviour syndromes exhibited by 'disturbed children' yet continue to treat them as a single group. Perna, Dunlap and Dillard (1983), for example, examined the relationship between locus of control, academic achievement and I.Q. in mildly/moderately disturbed boys. They defined this group by stating:

> "The mildly/moderately disturbed child is characterised as always in touch with reality but his perception of reality may be clouded by seriously neurotic interpretations. There are the children who develop phobias or irrational fears, who are either aggressive (i.e. fighting, tantruming, stealing, lying) or withdrawn (extremely shy, introverted) and who cannot function for a full day in a regular classroom" (p.37).

The implicit suggestion that the label 'neurotic' indicates that aggressive and withdrawn children are part of an homogenous group is, in the opinion of this writer, highly misleading.

Other studies have made the distinction between inward and outward behaviours more explicit. One such study examined the normative and structural properties of the CNSIE with reference to children with adjustment problems (Allie, 1979). This author took a sample of children described as school phobic, withdrawn, having adjustment problems and deficient in coping skills yet then continued by pointing out that the sample also included some aggressive, acting out children. There was no reference made, however, to a possible need to examine differences between these groups on CNSIE scores.

The failure to examine differences within the population labelled 'behaviourally disordered' may lead to erroneous conclusions. Morgan (1986), for example, compared emotionally disturbed children in segregated and mainstreamed classes and found that the children in segregated classes were significantly more internal. In ruling out intake differences as an explanatory variable, Morgan argued that in the situation she was studying:

> "...the reason for keeping some children in regular versus special classes has nothing to do with their diagnoses" (p.18).

According to this author, children were placed in the segregated classes as and when places became available. In Morgan's opinion the difference between the two groups' locus of control scores could best be explained by reference to the different climates of segregated and mainstreamed settings.

Morgan fails to provide data on the behavioural characteristics of the two groups and thus the differences in locus of control scores may still be attributable to differing intakes rather than to ecological variables. Despite a stated placement policy in the units of 'first come, first served', it is the experience of this writer, obtained in a wide range of settings, that placement decisions of this nature are often affected by the perceived nature and severity of the child's problems. It is likely that the child whose behaviour is most problematic for others will have priority for a place in a finite and over-stretched resource. Given such a scenario it is extremely likely that aggressive, hostile, acting-out children will be over-represented in the segregated sample and under-represented in the mainstreamed sample. If one accepts the earlier suggestion that externality is more evident in inward than outward groups, it is possible to suggest an entirely different explanation to Morgan's. The point is made not to argue that Morgan's analysis is incorrect but rather to illustrate the importance of looking more closely at subgroups subsumed within an emotionally disturbed population.

Rothbaum (1980) concludes his paper by suggesting that future research should examine the relationship between generalised expectations of control and behavioural syndromes.

> "Achenbach and Edelbrock (1978) have presented substantial evidence regarding the existence of subsyndromes. They have shown also that these subsyndromes depend on the age and sex of the children. **It may be helpful at this juncture to examine the relationship between subsyndromes and generalised expectations of control and to compare findings for children who differ in age and sex. In so doing it should become clearer how specific expectations become linked with specific behaviours**" (p. 240; present writer's emphasis).

A few writers have noted that there appears to be a link between individual differences in locus of control and behaviour although the implications of this are not explored. In their review of studies which have employed the CNSIE Nowicki and Duke (1983) comment:

"While the overall level of locus of control is more external for the delinquents, within the delinquent group itself those who are more internal appear to engage in more positive behaviour than do their external peers" (p.34).

In a study of school-based control beliefs of children in mainstream and special education settings, Smith, Adelman, Nelson, Taylor and Phares (1987) also briefly refer to individual differences:

"Of particular interest with regard to individual differences are special education students who both indicate relatively high levels of perceived control and manifest a negative pattern of attitudes, affect and behaviour" (p.174).

Although these authors found relatively few such individuals in their study:

"... their existence is consistent with a view suggesting that individuals who develop deviant and devious coping styles evolve high levels of perceived control and, because of the way others respond to them, they also evolve negative attitudes and affect" (p.174).

It is important to note that Smith et al.'s conception of perceived control is a broad one and includes notions of competence and self-efficacy.

This review of the literature has pointed to the potential value of examining differences in children's locus of control beliefs not on the basis of crude classifications such as emotionally disturbed or behaviourally disordered, but with regard to potentially important intragroup behaviours. Issues worthy of examination include:

- possible differences between highly internal and highly external children with emotional and behavioural difficulties,
- the relationship between inward and outward behaviours, specific behaviours

(e.g. school truancy) and clusters of behaviours, with locus of control.

The types of behaviour, and the rationale for their selection, are detailed in chapter 3.

vii) Modifying individuals' locus of control

"....the manipulation of children's locus of control beliefs, in the direction of internality, seems a laudable therapeutic strategy to assist at least some children to improve their learning and behavioural competencies. The discovery that outcomes are dependent upon their own behaviour, the acceptance of responsibility for their behavioural outcomes, and the belief that behaviour-change can modify outcomes, should help encourage children to see the need for, and indulge in achievement striving behaviour" (Charlton, 1985b, p29).

"It might be expected that programs designed to instill an internal locus of control orientation in pre-delinquent and delinquent adolescents would reduce pupil behavior problems in the middle schools" (Martin, 1975, p.25).

The great majority of studies which attempted to ascertain whether the internal-external dimension could differentiate between normal and special populations were undertaken during the 1970s and early 1980s. Section vi of this present review has indicated that the great majority of published studies suggest that those with behaviour and/or learning difficulties tend to score more externally than those who are considered to be normal. Given this repeated finding, many researchers in this field turned their attention to exploring ways by which one might foster internality in such populations.

The relevant literature can be divided into those studies employing interventions which do not use scales or other forms of measurement as criteria for success (e.g. Parrfrey, 1990; Connolly, 1980), and those which have systematically set out to explore whether interventions can lead to shifts towards internality on locus of control scales.

Table 2.3 lists all those twenty four studies which the writer could locate which have attempted to change locus of control scale scores of children exhibiting various behavioural difficulties.

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Table 2-3   *Intervention studies attempting to shift locus of control beliefs in children with manifest behavioural difficulties.*

Author (s) and year of publication	Locus of control scale (s) used	Sample characteristics	Nature of intervention	Findings
Bekaouche, 1974*	Rotter I-E	Juvenile delinquents in maximum security detention (n = 45)	Compared transactional analysis, with T.A. + perceptual-motor training and controls (12 weeks)	No significant differences found between the three groups.
Bean, 1988*	CNSIE	Juveniles in community settings (n = 72)	Compared 4 groups - a) reality therapy, b) traditional probation c) community service , d) 'crossroads' work training programme. (period of intervention unspecified)	Reality therapy group was more internal than crossroads on an individual post-test pairwise comparison. Otherwise, no significant differences on post-tests.
Deiker and Matson, 1979	Rotter I-E	Adolescents in residential treatment programme (n = 41)	Token economy (duration unspecified)	Internality increased as subjects progressed through the token economy programme
Denkowski, Denkowski and Omizo, 1983	CNSIE	Hyperactive boys (n = 48)	Experimental group received relaxation therapy and biofeedback (16 weeks)	Significant increase in internality for experimental group but not for controls
Dequine and Pearson-Davis, 1983	CNSIE	Adolescent boys in residential school (n = 7) compared with controls (n = 7)	Improvisational drama (3 sessions per week over 9 weeks)	Significant increase in internality for experimental group only.
DeSantis, 1975*	Rotter I-E	Juveniles suspended from high school (n = 60) split into experimental and control groups)	Experimental group received course of transactional analysis (50 mins per day for 10 weeks)	No significant differences between the two groups on post-test measures (n.b. no pre-test given).
Eitzen, 1974	CNSIE	Juvenile delinquents in community home (n = 21) compared with control group from junior high school (n = 82)	Experimental group received token economy and social skills training (study took place over a 3 year period)	Experimental group started as more external than controls but were more internal by the end of the intervention.
Gensul, 1982*	Rotter I-E & I.A.R.Q.	Juvenile delinquents in residential facility (n = 28)	Experimental group received cognitive behaviour modification and assertion training (15 meetings)	Experimental group significantly more external. (n.b. control group was selected from those who did not wish to take part in the intervention).
Huntsinger, 1977*	CNSIE	Juvenile delinquents in residential facility (n = 27) split into 3 equal groups	Group a) received self-control training; group b) discussion group; c) controls - no input (one month)	All 3 groups showed minor increase in internality but no statistically significance differences found.
Langsner and Anderson, 1987	CNSIE	Boys with behaviour disorders, aged 9 - 13 (n = 31). Experimental group n = 14; controls n = 17	Outdoor pursuits programme for 10 days over several weeks	No significant differences between groups on pre or post-test measures.

(* denotes doctoral dissertation)

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Table 2-3 (contd.)

Author (s) and year of publication	Locus of control scale (s) used	Sample characteristics	Nature of intervention	Findings
Lazerson, Foster, Brown and Hummel, 1988	Bialer Scale	Truants with learning difficulties aged 11-15 years (male). (n = 16.)	Subjects acted as peer tutors to younger children with learning difficulties (3 x 20 min sessions per week for 6 weeks)	Tutors demonstrated significant shifts towards internality
Long and Sherer, 1984	CNSIE	Juvenile delinquents (n = 27) Divided into 2 experimental,and one control group	Group a) received social skills training (2 x 3 hour sessions). Group b) formed a discussion group. Group c) were controls	Both experimental groups were shown to be significantly more internal of post-tests than controls
Mann-Feder, 1988*	Levenson Scale	Conduct disordered adolescents in two different residential facilities. (n = 28)	One facility was a therapeutic community: the other operated a rigorous behaviour modification regime (examined change over a 6 month period)	Neither group demonstrated a significant change in locus of control
McIntosh and Rawson, 1987	CNSIE	Primary aged children with severe behaviour difficulties (n = 130)	Outdoor pursuits camp (10 days) operating a highly structured behaviour modification programme	Older, but not younger, children demonstrated a significant shift towards internality
Morris, 1976*	CNSIE, I.A.R.Q., L. of C. Scale for success / failure	Boys with emotional and behavioural difficulties (n = 30) aged 7 - 13 years. in two residential facilities, split into 3 groups: a) experimental, b) no treatment control, c) attention control	Subjects in experimental group received training aimed at providing them with internal perceptions when undertaking I.Q. related tasks (10 x 25 min sessions over 6 week period)	No significant differences between the groups on CNSIE and I.A.R.Q. post-tests. Small gains for experimental group on locus of control scale for success/failure but this not maintained at follow-up, 4 months later
Oberg, 1988*	CNSIE	Incarcerated juvenile delinquents (n = 64) split into equal size control and experimental groups	Assertiveness training to experimental group (8 x 2 hour sessions)	Experimental group only, showed significant shift towards internality
Ollendick and Hersen, 1979	CNSIE	Incarcerated juvenile delinquents selected on the basis of having more external scores than their peers (n = 27). Split into 2 experimental and one control group	Experimental group a) received social skills training, experimental group b) took part in discussion groups, control group received no intervention. Interventions took the form of 10 weekly sessions of 75 minutes	Social skills group became significantly more internal than the other two groups
Perrotti, 1979*	Rotter I-E	Incarcerated juvenile delinquents (n = 52)	All subjects received direct decision therapy (2 x 1 hour group sessions for 4 weeks)	Significant shift towards internality
Postlewaite, 1974*	Rotter I-E	Female juvenile delinquents in residential facility (n = 40). Subjects split into experimental and control groups (matched pairs)	Experimental group received human relations workshops (twice weekly for 10 weeks)	No significant difference between the groups on post-test
Straub, 1979	CNSIE	Juvenile delinquents in a detention centre (n = 31)	Simulation board game in which the goal was to earn self-esteem points on academic, social and athletic issues (6 week programme)	Increase in internality although not statistically significant

(* denotes doctoral dissertation)

Table 2-3 (contd.) 87

Author (s) and year of publication	Locus of control scale (s) used	Sample characteristics	Nature of intervention	Findings
Thatcher, 1983*	CNSIE	Juvenile delinquents in 3 community homes (n 26)	Reality therapy: home a) staff and children ; home b) children only, home c) controls	home a) children became significantly more internal; home b) moderately more internal; home c) slightly more internal
Timlin, 1982*	CNSIE	Juvenile delinquents (n 40) placed into 3 groups, one experimental, one control (with attention), one control (no intervention)	Experimental group received 6 guided imagery sessions (one per week). Control group a) met with experimenter but no guided imagery input. Control group b) received no input at all	Experimental group only became significantly more internal
Yarish, 1985*	CNSIE	Juvenile delinquents in a residential facility (n = 60) matched with high school students	Reality therapy (4 months)	Experimental group more external on pre-test; became more internal than controls after therapy
Zwart, 1988*	CNSIE	Juvenile delinquents Experimental group (n=43) Control group (n=45)	Experimental group participated in a therapeutic wilderness programme (26 day period). Controls received traditional detention treatment.	No significant differences were found between the groups on either the pre-test or post-test measures

(* denotes doctoral dissertation)

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It is difficult to arrive at any general conclusions about the efficacy of these interventions. Although many studies demonstrate that significant differences result from therapeutic interventions, it is enlightening to note that studies presented as doctoral theses (asterisked in Table 2.3) appear to have been less successful than those published in academic journals. It is unclear whether this reflects a difficulty in having non-significant findings published (which would, therefore, lead to an overrepresentation of studies obtaining statistically significant findings), constraints of time and the limited therapeutic skills of many doctoral students, or other unknown influences.

It has been argued (e.g. Gutkin, 1978; McIntosh and Rawson, 1987) that the disparity in these and other findings results from weaknesses in many of the experimental designs, such as a lack of a control group, a lack of experimental control in natural settings, a failure to gather pretest data, interventions too short to make change in personality variables and limited care over the selection of subjects. In the opinion of this writer, intervention studies in which the desirability of internality is openly and clearly communicated by the therapist/ researcher, are highly susceptible to the confound of social desirability.

It is important to note that statistically significant differences can be obtained by very small increases in mean scale scores. Changes of one or two points on a forty item scale, such as the CNSIE, may have little real clinical value in work with behaviourally disordered youngsters.

Charlton (1985b) points out that there are, as yet, few studies which have explored whether changes towards internality have actually resulted in concomitant increases in those desirable behaviours which are considered to be related to internality. Although there are some studies where a consequent increase in both internality and behaviour improvement were observed (e.g. Lazerson, Foster, Brown and Hummel, 1988), it is difficult to determine whether these have a causal relationship.

viii) The relevance of the literature to the present study

"For every complex issue there is a simple answer and it is wrong" (H.L.Mencken, quoted in Zigler and Hodapp, 1986, p.27).

This review of the literature has indicated that research into the locus of control of children with emotional and/or behavioural difficulties has been hindered by successive oversimplifications. These are represented overleaf (Figure 2-1).

This writer has endeavoured to argue that the tendency of researchers to treat such children as an homogenous group may prove misleading and the association of adjustment difficulties with externality has led to sweeping claims, for example:

> "It is suggested that to develop a program for children with learning disabilities and behavior disorders, the teacher should first know what kind of locus of control the child has. In the case of the externally-oriented child in particular, it is very likely that he is regarded as a "lazy" child since he is easily "turned off" under failure conditions. Unless the teacher understands basic concepts and mechanisms of loci of control, there is little hope that the child's achievement motivation will improve" (Hisama, 1976, p.62).

One of the most grandiose claims is that from the study of Kumchy and Sayer (1980) who found a relationship between externality on an academic locus of control scale (I.A.R.Q.) and both delinquency and learning difficulties. This led to the claim that:

> "....a potential delinquent can be identified by these indices and prevention can occur. It appears that behavior in the academic learning situation is a very good indicator of possible delinquency or at least is consistent with measures on the Intellectual Achievement Responsibility Questionnaire. An adolescent who is unable to learn in school or who shows difficulty learning in school also shows difficulty in learning the norms of society, and he may therefore become involved in criminal acts" (Kumchy and Sayer, 1980, pp.1309-1310).

The present study is a response to the writer's perception that the literature is replete with over-simplifications and generalisations. In his opinion, it is necessary to examine differences within the amorphous population of children who have been defined as having emotional

Figure 2.1   Issues arising from the literature

Most studies suggest that children with emotional and behavioural difficulties score more externally on locus of control measures than 'normal' populations

It is generally believed that relative internality is a desired outcome

The majority of intervention studies suggest that therapeutic and or behavioural techniques can increase levels of internality in E.B.D. populations

Ergo, psychologists and educationalists should introduce such techniques into intervention programmes, in order than children with emotional and behavioural difficulties might function more effectively

Problems?

1. Can this population be considered as an homogenous group? Are there significant differences within this population?

2. Does a score on a locus of control scale relate to what an individual says in an exploratory interview? If not, which approach is the more valuable?

and behavioural difficulties. Chapter 3 examines this and related conceptualisations and argues that it may be more profitable to examine how locus of control relates to specific behaviours.

Although the literature has tended to suggest a relationship between locus of control and such variables as age, sex, academic achievement and familial antecedents in heterogeneous child populations, it is not clear how these operate in in the case of special populations. Variables which relate to internality-externality, for example, family circumstances and academic ability, may also differentiate children with emotional and behavioural difficulties from their peers. For this reason the present study will examine the relationship between locus of control and the following variables:

- age
- sex
- number of siblings
- birth order
- family structure
- parental employment/unemployment
- age at referral to Educational Psychology Service
- academic ability
- I.Q.
- school attended
- problem behaviours
- nature of social services care placement (if any)
- the administrator of the locus of control scale

The operationalisation and scoring of these variables are outlined in appendix 3.

Research, outlined in this review, has generally demonstrated that children with behavioural difficulties tend to score more externally than normal populations. This has led some

researchers to recommend blanket interventions to increase internality. This somewhat Manichean view of internality-externality is, however, oversimplistic and fails to appreciate the potentially maladaptive nature of high levels of internality:

> "One must be cautious, however, in assuming that internal beliefs are always facilitative... When individuals persist in efforts that bring no relief, then they may find themselves to be actually exacerbating the undesirable characteristics of the situation in which they find themselves. Perhaps the wisest course is that people learn to specify the reality of their life situations, their possible responses, and the potentiality of forthcoming reinforcement"
> (Strickland, 1978, p.1205).

The present writer questions the assertion that blanket programmes aimed at increasing internality in children with emotional and behavioural difficulties are necessarily apposite. Within this population there will be a number of children who already score highly internally on locus of control. Attempts to increase internality may prove misguided; it is possible that with highly manipulative children such interventions may increase rather than reduce the incidence of problematic behaviour. It has been argued, for example (Smith and Boulton, 1990; Dunn and McGuire, 1992), that disruptive and aggressive behaviour can be employed in a socially manipulative fashion as instrumental means to a desired end. In order to explore differences between highly internal and highly external children this study will compare these two groups on a range of behavioural and demographic variables.

In addition, this study will examine the responses of highly internal and external scorers to related issues explored in semi-structured interviews.

In its examination of the locus of control beliefs of children with emotional and behavioural difficulties, this study will consider the value and potential use of the CNSIE (Nowicki and Strickland, 1973), the most widely used generalised locus of control scale for children. It will also utilise data from semi-structured interviews to complement scale-assessed data. As a result of this analysis it is hoped that it will be possible to determine whether the locus of control construct has any meaning or utility for those who work with behaviourally disordered children.

It has been argued that subscores on locus of control scales, generally derived from factor analysis, may prove more valuable than total scores. Rotter (1975) has argued that the factor analysis of locus of control scales would only prove valuable if it could be shown that particular subscale scores produce a significantly higher relationship than that of the total test score. There is some evidence (Kendall, Finch and Mahoney, 1976) that such analyses may increase predictive power. This literature review, however, has demonstrated that factor analysis is problematic, for although labels are often similar across studies, there is a subjective element in their derivation and analyses often produce very different factor structures. Furthermore, it has been suggested (Comrey, 1973, Comrey and Lee, 1992; Watters, Thomas and Streiner, 1990) that factor analysis may not be appropriate for scales containing dichotomous items (as is the case with many locus of control measures).

This study will examine the extent to which factor analysis and the related techniques of cluster analysis and non-metric multidimensional scaling can assist in the exploration of the relationship of locus of control beliefs with a number of behavioural and demographic variables.

It has been demonstrated that the vast majority of studies have used self-report scales to assess locus of control beliefs. Such scales are easy to administer and may have sound psychometric properties. Many have suggested, however, that externality as measured by these scales should be addressed by therapeutic interventions. This suggestion must lead one to ask whether the subject's responses to the scale are likely to be replicated in a research/ clinical interview? If not, what deductions can the therapist make? Should the therapist try to change a client's external position (as derived from a scale) if this is not apparent from the interview? The present study will endeavour to explore the relationship between extreme scores on the internal-external continuum and locus of control expectancies assessed by means of a semi-structured interview. It will, for example, explore whether extreme positions can be identified by blind raters on the basis of the semi-structured interviews.

This review has demonstrated the considerable conceptual confusion which abounds in the locus of control literature. Although at a theoretical level, locus of control can be differentiated from other constructs, conceptual overlap may prove more difficult to unpick when one explores an individual's phenomenological world. The present study will endeavour to explore this difficulty through the analysis of relatively detailed semi-structured interviews.

The lament of Phares and Lamiell (1977) that many personality researchers have little real experience of and contact with the subjects of their studies is as apposite in the 1990s as it was two decades before:

> "Researchers seem to have lost touch with their subjects. Along with their students, many researchers seem sophisticated in statistics and methodology. But their lack of **sustained** contact with subject populations...limits their capacity to draw on the variegated and dynamic quality of human behaviour...
>
> ....Somehow we have to get back to research that involves something other than fleeting contacts with subjects, deductions from super-ANOVA tables to the exclusion of experience with people, and the unrealities of the laboratory that may engage hierarchies of needs and cognitions wholly different from what we are trying to capture" (p.115; emphasis as in original).

In its use of quantitative methods, the present study is, perhaps, guilty of the failings described above. It does, however, represent an attempt to go beyond the mere search for statistical associations and differences, in order to ascertain whether the construct has value for those who seek to help children. The use of interviews and case studies, it is hoped, will support and extend the quantitative analysis and enable a richer and more meaningful exploration of the locus of control construct.

It is argued that quantitative and qualitative techniques may each have a unique contribution to offer, singly and in combination. The present study will consider both their respective strengths and limitations. In addition, a detailed case study will be presented (see appendix 9) which, it is hoped, will offer additional rich and valuable data.

This study aims to treat a complex issue in a complex fashion. Much of the research outlined in this review provides little useful information for those who work with children with behavioural difficulties for it:
₉₅

- fails to consider adequately, different assessment methodologies
- rarely examines individual differences within the emotionally disturbed/ behaviourally disordered population and the resultant implications for differentiated intervention.

The present study will attempt to explore these issues and offer a tentative response to the question, "To what extent is the consideration of locus of control beliefs a valuable exercise for those who wish to assist children with emotional and behavioural difficulties?"

Chapter 3   The nature of problem behaviour: its operationalisation and measurement in the present study.

Introduction

The present writer considers that a major weakness in much of the literature examining locus of control in special populations is the lack of recognition of the inherent subjectivity and inconsistencies involved in the labelling processes. As part of this study, this researcher considered in some detail the difficulties inherent in categorical classification and explored alternative modes of conceptualisation.

Although not central to the present study, it was considered necessary to raise these issues briefly in the main body of the text and provide a more detailed discussion in Appendix 2.

Children with emotional and behavioural difficulties: do they represent a discrete population?

The difficulties of defining, classifying, identifying and diagnosing problem behaviour are widely acknowledged. Not only do theorists and clinicians accept differing conceptions and theoretical positions, but also, even if a common frame of reference were agreed, judgements about specific individuals would still tend to differ. It is, therefore, necessary to recognise that, as with beauty, deviance is in the eye of the beholder.

Kauffman (1985) points out that most behaviours are judged by sociocultural, rather than absolute, norms and, thus, behaviour which is acceptable in one setting, subculture or community (e.g. talking, swearing, hitting others, stealing), may be considered abnormal in another. What is of great significance in the formulation of an act's deviant status is the relative power and authority of those who are making the judgements. It is necessary to recognise, therefore, that the relative influence of differing perceptions in official accounts

is often a reflection of status and power rather than veridicality:

> "Perhaps there is a science of behaviour, but the objective methods of natural science do not play an extremely important part in assigning the status of deviant to someone. Disordered behaviour is whatever behaviour the chosen authority figures in a culture designate as intolerable. Typically, it is behaviour that is perceived as threatening the stability, security, or values of that society" (Kauffman, 1985, p.16).

It has been frequently argued (e.g. Galloway and Goodwin, 1987; Turkington, 1986) that labels placed upon children such as disturbed, disruptive and maladjusted bear little relationship to specific behaviours. They are attractive to many, however, because they suggest within-child explanations of problem behaviour which may help to exculpate those who are required to prevent or manage undesirable behaviours. Furthermore, such labels may also be used to support any suggestion that a specific child would be better placed in a special, rather than a mainstream, school setting.

This study represents an attempt to examine locus of control in children who are described as having emotional and behavioural difficulties. Such a term is generally ill-defined and unclear for it bears no relationship to any explicit set of inferred emotions or observed behaviours. In practice, it may often mean little more than that a child's behaviour is perceived to be problematic by others (parents, teachers, social workers) in authority over them.

For a variety of reasons (legislative, administrative and professional) the majority of children whose behaviour is perceived to be particularly 'troubled or troublesome' (Hoghughi, 1978) are referred to L.E.A. psychological services. Thus, to select for study those who have been referred to a psychological service on the grounds that their behaviour is problematic for others, is to obtain a population on the basis of an <u>administrative</u> rather than a diagnostic procedure. The children have one common uniting feature; their behaviour is seen by powerful adults to be a cause of considerable concern. It is important to note, therefore, that acceptance of a referral by a psychological service (and the inclusion of all the children in

the present study) makes no assumptions about the child's emotional state, mental health or general psychological well-being.

In his study of disruptive pupils (Sanders, 1990) also used an administrative criterion, that of formal exclusion from school. While noting the objection that this may neglect schools' varying tolerance levels (Galloway, 1982), Sanders adopted a stance similar to that of the present study by arguing that it was the subjective perception of the teachers which was considered to be a meaningful criterion.

The children in the present study, by virtue of the criteria for their selection, do represent a special population - their behaviour, in each case, has been perceived as highly problematic by powerful others. The major consideration for this study, however, is not whether this group differs from a spurious normal population in clinical terms but, rather, the extent to which locus of control can be held to be a valuable construct in work with children who have been labelled in such fashion.

Generic labels often provide little information about specific behaviours and it has been argued in Chapter 2 that the many differences in the behaviours of those who have been variously classified as behaviourally disordered or emotionally disturbed have often been neglected in locus of control studies. This, in turn, may mask significant and important relationships between these variables.

From social actions to numbers on a page: an account of how behaviours were quantified.

An important aspect of the study was to explore the relationship between locus of control and specific problem behaviours. Every individual is likely to exhibit such behaviours to a greater or lesser extent and thus differences along a number of specific behavioural continua can be examined. This study identified nine problem behaviours and, for each individual, a series of scores was produced which indicated the extent to which these

behaviours were perceived by others as problematic.

Comprehensive reviews of the nature of behaviour disorders support two major dimensions, generally referred to as internalising and externalising disorders (Achenbach and Edelbrock, 1978; Quay, 1979). Internalising disorders are those behaviours which imply mechanisms of overcontrol. This includes anxiety, withdrawal, depressive states, and avoidance behaviours. In contrast, externalising behaviours are characterised by a lack of internal controls. These include defiant, disruptive, oppositional, and aggressive behaviours.

Externalising behaviours, by their confrontational nature, generally tend to present greater problems to others in contact with the child and, for this reason, they usually figure far more prominently in Educational Psychology Service case files. In selecting behaviours for analysis, this researcher was constrained by the data which were available to him and, given the lack of detail about specific internalising behaviours, it was decided to place all these, with the exception of truancy, into one category, labelled inward behaviours.

Consideration of externalising behaviours, in the light of information likely to be available in case files, led to the formulation of a further seven behaviours which, in the opinion of this researcher, were likely to prove relatively discrete.

A total of nine behaviours was generated for subsequent investigation. These were:

1. Disruptiveness in school

2. Negativism to teachers

3. Delinquency

4. Physical aggression

5. Verbal aggression

6. Vandalism

7. Truancy

8. Inward behaviours

9. Negativism to parents.

A description of the nature of these behaviours and associated scoring procedures is provided later in this chapter.

As the scoring process could only take into consideration behaviour data which were included in case files, the researcher was restricted to those behaviours which were likely to be most salient. As he had worked with such records for some years, it proved relatively easy to compile a list of behaviours which would enable judgements to be made for each individual. The items selected, it was considered, could incorporate most features of problem behaviour which were likely to be found in such records.

The ratings were based upon sources which included:

1. Formal written advice submitted under the regulations of the 1981 Education Act. This may be for the purpose of formal assessment under Section 5 of the Act or may comprise reports to Annual Review meetings of the child's Statement of Special Educational Needs. Advice is routinely provided by a range of education, health, and social welfare agencies as well as representations from parents.

2. School reports including:
   - end of year reports to parents,
   - reports leading to referral to outside agencies,
   - reports to a range of agencies about the child's progress following intervention
   - reports to the school's Governors, to the Local Authority's Suspension Sub-Committee or Disruptive Pupils' Panel,
   - reports to multiprofessional residential and community assessment meetings chaired by the Social Services department,

3. Correspondence between agencies and between agencies and parents

4. Educational Psychology Service Reports including reports to the:

- Court

- school

- Local Education Authority

- other agencies such as social services, probation, speech therapy, child psychiatry and paediatrics

5. Educational Psychology Service internal notes reporting upon visits, interviews, discussions etc. Such notes would not normally be available for outside scrutiny by other professionals.

6. Probation Service - reports, correspondence

7. Police records (cited by other agencies rather than directly accessed)

8. Child psychiatry - reports, correspondence, case discussions

9. Social Services - fieldworker reports, social profiles, case discussions

10. Reports and observations provided by residential child care staff at observation and assessment centres, community homes (with or without education on the premises), family group homes

11. Reports from a range of professional agencies to the Local Authority Liaison Panel. This body meets to consider action following a prolonged period of non-school attendance

12. Reports provided by the Education Welfare Service

13. Parents' views - including those outlined in internal notes, minutes of case conferences,

written representations as part of the 1981 Education Act procedures. In a minority of cases parents complete their written representations with the collaboration of a professional already engaged in the assessment.

14. Minutes of multi-professional case conferences

15. Data obtained from tests and assessments administered by a range of professionals primarily from education and health services

16. Medical records and correspondence with general practitioners

17. The child's views. These are occasionally written by the child although are more frequently included in the psychologist's internal notes

This list is not exhaustive although it contains the great majority of sources upon which the ratings were based.

The data available in each case varied greatly depending upon the child's age and the length and nature of professional intervention. The contents of case files ranged from a few sheets of data to several hundred pages.

In addition to marked discrepancies in the quantity of information, there were also issues of quality with respect to the information provided. What often differentiates professionals is the capacity to go beyond the observed behaviour to offer insights and understanding into the child's difficulties. As the data for analysis are observed behaviours rather than the meaning of these behaviours, the differences in the professionals' ability to make informed inferences may be less important for the present study than might be the case for clinical work. Such differences, of course, may not simply reflect diverse competencies but also differing theoretical perspectives (e.g. orthodox behaviourism as opposed to psychodynamics) both within and between professional groupings.

Quality lies not merely in the insightfulness of the professional but also in the accuracy, comprehensiveness and rigour of the data gathering. The information which is provided by third parties and the way in which this is systematically recorded is, in part, a quality issue. As with most human endeavours, case files showed a considerable variation in performance.

Each case file was read several times in a search for patterns of behaviour with account being taken of differing perceptions held by the various actors concerned. This process proved to be taxing and immensely time-consuming.

In examining differing accounts and producing numerical scores, it was recognised that tolerance levels vary greatly and that particular actors might induce atypical behaviour from a child. Unfortunately, the sophistication required to undertake an analysis in which interactional elements could be taken into consideration was unattainable and ratings were based primarily upon the child's observed/reported behaviour largely irrespective of contextual influences.

A difficulty which quickly arose was the tendency of special schools to produce reports containing less references to problem behaviour than those of mainstream schools. This may be the result of a number of factors including one or more of the following:

- a genuine change in behaviour

- different expectations as to what is a problem

- different tolerance levels

- a greater or lesser tendency for the school to deal with problems itself

- a desire on the part of mainstream schools to stress the severity of the child's behaviour
  in the hope that this may have an impact upon the decision taken (e.g. the removal of the
  child).

- an unwillingness on the part of special school staff to acknowledge difficulties, perhaps
  because of a need to appear able to cope with all problems

It was in such cases that the Educational Psychology Service's detailed internal notes, containing records of casual conversations together with comparatively impartial observations, often yielded particularly valuable information.

It is recognised that there is substantial cross-situational variation in children's behaviour (Barkley, 1988) and, as a result, clinicians generally recognise the importance of deriving information from multiple sources across multiple settings (Breen and Altepeter, 1990). Although the behavioural data utilised in the present study are drawn from such a very wide range of sources and settings, the nature of Educational Psychology Services is such that behaviour in school settings may sometimes receive greater emphasis and be subject to more investigation than that at home or in the wider community.

A further issue involved temporal factors. How should one rate behavioural dimensions in cases where significant change had been witnessed? Some dimensions such as delinquency presented less difficulty as the criteria involved police and judicial responses - one had, for example, either received a police caution or one hadn't. Other dimensions, such as negativism presented greater difficulties. In certain cases, negativism was a sudden, acute phenomenon which appeared to relate to a critical incident in the child's life - this dimension appeared particularly prone to contextual influences. In calculating a rating the researcher tried to examine contemporary behaviour (i.e. over recent months) yet also build into the analysis recognition of established patterns of behaviour over a period of years.

Numerical rating

Each of the above nine behaviour features, for each individual, was scored on a four point scale (0, 1, 2, or 3), higher scores reflecting an ascending degree of perceived frequency, intensity and severity. A similar system was devised by Sanders (1990) who drew up a matrix with two main parameters: the level and frequency of the misbehaviour, each of which was subdivided into four sections. Whereas Sanders utilised the generic term 'disruptive' and employed his level system to differentiate aggressive/violent behaviour

from, irritating and annoying disruption (e.g. calling out and distracting others) the present study has attempted to consider aggression and other problem behaviours independently of disruption, while recognising that there may be substantial overlap. Detailed descriptions of the behaviours and the derived scoring system used in the present study are provided below.

In addition, the nine scores were aggregated to produce a total score of problem behaviours for each child (labelled in the study as 'Behtot'- a shortened form of 'behaviour total'). The total for each individual, could be located in the range 0 to 27.

Although some researchers might object to the aggregation of what are essentially ordinal data, this researcher would argue that higher aggregated totals should, in the main, reflect a greater degree and frequency of behaviour problems. It is necessary, however, to recognise that numerical information of this sort can suggest a false precision, and the crudity of such approaches is recognised. Such procedures, however, are widely employed in clinical work. The Rutter B2 scale (Rutter, 1967), for example, has been widely employed (e.g. Cochrane, 1979; Kolvin et al., 1981; Place and Kolvin, 1986) and requires teachers to consider a specific child and indicate the extent to which 26 itemised behaviours apply. Teachers must choose one of three alternatives, 'certainly applies' (2 points), 'applies somewhat' (1 point) and 'doesn't apply' (0 points). Scores can then be added together to produce a total score providing a measure of overall (teacher perceived) disturbance. Subscores of neurotic and antisocial behaviour can also be obtained. The items on the Rutter B2 are highly disparate and include, unpopularity with peers, truancy, nailbiting, disobedience, and apathy. A complementary instrument for parental responses, the Rutter A2 Scale (Rutter, Tizard and Whitmore, 1970), adopts a similar format.

Taylor, Asher and Williams (1987), followed a similar procedure to that of the present study in their analysis of social adaptation in mildy retarded children. Selecting four descriptors of social behaviour, friendly/cooperative, avoidant/withdrawn, bossy/domineering and aggressive/disruptive, they asked teachers to rate each item on a seven point scale from 'very

uncharacteristic' to 'very characteristic'. Their subsequent analysis involved the calculation of mean scores for the behaviours and the application of parametric tests.

Although locating a behaviour along a continuum permits finer grain analysis, it is not easy to ascertain how many interval points should be provided. As with Likert attitudinal scaling there is no clear answer. Too many points may result in invalid, meaningless differentiation, falsely suggesting a greater capacity to obtain accurate ratings than is valid. Too few, and one would virtually return to the original dichotomous, categorical position. For the purpose of this study it was decided to have four interval points in the hope that this middle range would enable valid differentiation. Unlike the analysis undertaken by Taylor, Asher and Williams (op. cit.), the researcher was eager to provide a more detailed account of the differences between each of the points on his scale for each behaviour.

It should be recognised that a system of numerical ratings may suggest a level of precision which, in reality, does not exist. An endeavour of this nature is unavoidably subjective and impressionistic, relying as it does upon observations and opinions gathered from a range of third parties. As it is impossible to obtain data from first hand observation of a large number of children in a wide range of settings, this researcher has tried to draw upon the extensive information available to produce, in each case, his own interpretation, synthesis and evaluation of the data.

The use of a four point scale not only militates against simple categorical classification but also can reflect the fact that all actors engage in socially undesirable behaviours to a greater or lesser extent. The child who has never been perceived as engaging in problem behaviours, if he/she were to exist, might, paradoxically, also be a cause for concern, such behaviours being seen as part of the human condition and, perhaps, having an evolutionary function. Aggression, for example, conjures up Darwinian notions of the survival of the fittest and reminds us of the need for self-assertion both in the jungle and the school playground.

The criteria for the ratings varied according to the sphere of behaviour concerned. Some,

such as delinquency and truancy, reflected legal or quasi-legal outcomes, others were based upon an aggregation of written and oral comments and observations. This procedure may be seen as methodologically inconsistent, yet appeared to this researcher to be the best means of obtaining appropriate data. In the case of each of the nine behaviour features, decisions as to how to analyse the data were necessarily informed by a degree of pragmatism.

It is also recognised and acknowledged that descriptors such as severe, intense, persistent and serious are fuzzy terms which are unclear, imprecise and ambiguous (Mager, 1972). In its emphasis upon observed behaviours, this study has endeavoured to go beyond the use of imprecise terms such as disturbed or maladjusted as a means of conceptualisation, yet differentiation of the behaviours themselves also proves problematic. It is unfortunate that the rigour which can be adopted in clinical work with individual children, in which behaviour and the context in which it occurs is closely examined (cf. Westmacott and Cameron, 1981), is not appropriate or possible in a study of this nature.

Each of the behavioural features and the rationale for its rating is outlined below.

a) Disruptive

The genesis of the disruptive pupil is described in some detail in Appendix 2. As is pointed out, the frequent use of this term to categorise pupils is exceeded only by its tendency to be used as a generic descriptor of a multitude of problem behaviours.

In analysing case files it was clear that attendance at a disruptive unit did not, in itself, suggest that a ranking of 3 was appropriate. Disruptive units often cater for children whose problem behaviours take other forms, for example, a child whose behaviour is generally acceptable in school yet who unexpectedly engages in an isolated yet serious assault upon a teacher leading to permanent exclusion from school; or a child who, after a period of incarceration in youth custody, is deemed to be unlikely to make a successful return to school.

A ranking of zero does not imply that the child never engages in disruptive behaviour. Rather, it suggests that this is not perceived by the actors concerned as a particular problem..

A ranking of one indicates that concerns have been expressed about the child's active involvement in disruptive incidents. Such incidents would tend to be more intense or frequent than those normally encountered in the day to day experience of schools.

A ranking of two indicates that the child's behaviour is perceived by most, if not all, parties as markedly disruptive yet of lesser degree than that receiving a score of three. There will possibly be some classes and teachers where problems are rarely encountered although this will be seen as an atypical situation.

A ranking of three reflects a level of perceived disruptiveness which is persistent and intense and generally agreed by all observers. This behaviour is not an acute, sudden or temporary phenomenon but one which has become established over time. Neither is it only witnessed in one particular setting or in a specific teacher/child interaction. The child's disruptive behaviour, for whatever reason, has become so problematic that it has become almost impossible for classes in which he/she is a member to proceed.

b) Negativism towards teachers

Negativism is defined by Wenar (1982) as intentional non-compliance to adult requests, directives and prohibitions. It can take both physical and verbal forms and be active or passive. Some children, for example, may seek confrontation by becoming embroiled in very public arguments and openly refusing to respond as desired. Others may not overtly challenge their teachers yet may be equally determined not to acquiesce. Strategies which the latter may employ include: lateness to or absence from class, work not undertaken, and rules and routines ignored.

Rankings were made purely on the basis of how responsive the child appeared to be to teacher direction. As there may be atypical responses to individual teachers for a number of reasons, the scores were based upon an aggregation of reported behaviours in all dealings with teachers. It is recognised that in primary or special school settings the child has a limited number of teachers, yet rankings necessarily had to reflect the situation which pertained. A high score in this category reflects a comparatively high frequency of observations that the child does not do as asked by all or the great majority of his or her teachers. Such behaviour is particularly difficult to assess as even the most intransigent individual is likely to respond more often than not to reasonable requests. Although negativism may be particularly affected by the interpersonal skills of others, the aetiology of the behaviour (e.g. whether it is a reflection of poor teacher management, a clash of personalities or to difficulties at home) was not (indeed, could not be) taken into consideration.

c) Delinquent

Rutter and Giller (1983) provide a detailed discussion of the difficulties associated with the concept of delinquency. The delinquent is created not only by the commission of an action by an individual but also by the response to that action by agents of social control. The likelihood of detection and subsequent police decisions to caution or prosecute depend not only upon the child's age and seriousness of the offence but also upon his or her social (Farrington and Bennett, 1981) or racial circumstances (Landau, 1981), the part of the country in which s/he lives (Tutt and Giller, 1983; Parker, Casburn and Turnbull, 1981) and the sociopolitical climate (Smith, 1985).

Despite cognisance of the discretion at the disposal of the police, it was decided that the rankings should reflect official reactions to the youngster concerned. Unlike records of specific delinquent acts the above data are readily available and enable relatively precise differentiation between the children.

The data were taken from documentation held by education, health and social services departments together with internal notes of discussions with parents, teachers and the child. Police records were not accessed directly (although data from the police were available in certain cases) and this may have led to minor errors regarding cautions. As schools are asked to provide a report to the Courts, records of Court appearances tend to be accurately maintained within school.

A score of zero was entered where there was no record of a formal response to the commission of delinquency (i.e. a formal police caution or a finding of guilt in a juvenile court)

A score of one was entered when the child had received one or more formal police cautions.

A score of two reflected a finding of guilt in Court resulting in a low-tariff disposal (a discharge or fine).

A score of three reflected a finding of guilt in Court resulting in a high-tariff disposal (attendance centre, supervision order, care order, custody).

d and e) Aggressive - verbal and physical

As with many behaviours, aggressiveness is not easy to define. Bandura (1973) suggests that it is:

> "...behaviour that results in personal injury or in the destruction of property. The injury may be psychological (in the form of devaluation or degradation) as well as physical. Although this formulation delimits the phenomenon in a meaningful way, it should be made clear that aversive effects cannot serve as the sole defining characteristics of aggression. Individuals who hurt others while performing a socially sanctioned function (for example, dentists repairing teeth or surgeons making painful incisions) would not be considered as acting in an aggressive manner..... Conversely, some forms of conduct would be judged aggressive even though no personal injury or property damage occurred. A person who attempted to hurt another individual by firing a gun at him or by striking him with a lethal object, but who happened to miss the unsuspecting

victim, would be judged as behaving violently" (p.5).

This heading might be better entitled 'aggressiveness of children which concerns adults'. Aggression is part of the human condition and:

"...is so common among normative groups of children that even a fairly large amount of it is not statistically deviant" (Achenbach, 1985, p.130).

Achenbach states that this universality applies equally to girls and boys although it is important to note that studies generally confirm that boys are more aggressive in their interactions, particularly with peers (Maccoby and Jacklin, 1974; Rutter and Giller, 1983) and are more likely to report having been involved in playground fights (Boulton, 1993).

The degree to which a child is perceived by adults as aggressive is affected by issues of frequency, intensity and location. It is often aggression witnessed in public settings overlooked by adults in positions of authority (or in rare instances where it leads to serious injury) which results in oral citation, or formal written observations in various reports or case files. Aggression in the home and local community often lacks salience and tends to be noted in official accounts only when injury results.

Consider, for example, two children. One has established dominance over peers by means of physical prowess and fighting skills. He is careful to select the time and place of conflict, often a remote corner of a local park or an alleyway on the way home from school. When disagreements arise he is able to keep his temper in check and knows that it is inadvisable to engage in fisticuffs in public settings which may be overseen by powerful adults such as teachers or police. The second child, however, has a fierce temper and will readily respond to perceived threat by attacking its perceived source. This child's response is automatic and rarely inhibited by the presence of adults. Given these two scenarios it would be hardly surprising if there were many more references to aggressive incidents in the case file of the second child. This is not to suggest that the adults concerned are ignorant or naive but rather

that:

- certain areas of young people's lives are more prone to adult attempts to influence behaviour. The teacher who instructs the child that, "If you want to fight, do it in your back garden not in the playground!" is far from apocryphal.

- accounts and records of children's behaviour are subject to public scrutiny. There is an increasing unwillingness to record alleged incidents which have not been witnessed and fully substantiated.

The problematic nature of aggressiveness is also highly affected by differing subcultural values. In certain settings aggressiveness is an adaptive response essential to ensuring one's personal security and a positive self-image. In his autobiography, John McVicar, formerly a criminal renowned for his violent behaviour, writes that his only fear upon entering primary school was that he might not be tough enough to win fights:

> "I believed not only that fighting was the best method of settling any dispute but that courage and success in showing aggression provided the only true basis for self esteem" (1979, p.145).

The importance of aggressiveness as a means of deriving status is a feature of studies of working-class youth in both American and British studies. Miller (1958) in his study of Bostonian gangs makes reference to the importance of 'toughness', a feature also noted in Patrick's (1973) study in Glasgow.

Aggression can also be seen as a necessary means of self-defence, particularly within socially disadvantaged communities:

> "The working-class child in the inner city has to encounter the 'jungle of might-is-right' and self-defence is a necessary method of existence" (Wilson and Herbert, 1978, p. 141).

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It is necessary, therefore, to point out that this category makes no assumptions as the pathological nature of the behaviour concerned. It is, however, the reactions and interpretations of the professionals (teachers, psychologists, social workers etc.) and to a lesser extent the parents and others in the child's wider community which define whether such behaviours are perceived as a problem and, therefore, taken note of.

A ranking of 3, therefore, does not mean that the child concerned is more aggressive in absolute terms than a child scoring 2 or less. Rather, s/he is perceived by powerful adults as having been engaged in more aggressive incidents in those spheres where observation and/or verification is possible. Similarly, a score of zero does not imply that the child is never aggressive.

It has been argued by some that aggressive children tend to behave in similar fashion across a wide range of settings (Hoghughi, 1978). Research examining the situation specificity of aggressive behaviour has produced a number of interesting findings. Olweus (1979), for example, concluded from a review of research that the evidence suggested that male aggressive behaviour is relatively consistent across settings and over time. Harris (1979), in an observational study of both sexes, found a curvilinear relationship in which children at the two extremes of the aggressiveness continuum displayed behaviour consistent across both classroom and playground while those who were aggressive, but not extremely so, tended to be more aggressive in the playground.

Where there were indications of high levels of aggressive behaviour in case files it was almost exclusively related to situations in school or where serious physical injury had resulted. There were virtually no accounts of aggressive acts undertaken in unsupervised, peer settings.

In this study a distinction has been made between physical and verbal aggression. Verbal aggression, in this context refers to oral remarks of a threatening, deliberately offensive, or persecutory nature. This stands in contrast to the use of the term by researchers such as West

and Farrington (1973). In their study, verbal aggression was measured by the content of subjects' responses in a projective test situation (Picture Frustration Test). Here, 'verbal' refers to the means of accessing aggressive feelings rather than to the specific nature of the aggressive act. It is conceivable that an individual may respond by reporting aggressive feelings when confronted by the test materials yet not actually be verbally aggressive in his or her social interactions. West and Farrington, however, found a significant correlation between scores on this measure and acts of aggression as obtained from self-reports.

Leibowitz (1968) has argued that there is evidence to suggest that verbal and physical aggression are independent modes with separate situational reinforcers and separate predisposing personality characteristics. Case files tended to support this position and and it was found that a distinction could be made between some children whose aggression took either a predominantly verbal or physical form. Verbal aggression, however, did prove rather more difficult to quantify.

f) Destroys/damages property

The difficulties of defining the term vandalism are recognised by the present author (see Coffield, 1991, for a full discussion). In operationalising this group of behaviours, the researcher drew upon those acts of property damage or destruction which were noted as problematic in case files.

The damage or destruction of property is a common and widespread phenomenon yet there is a relative dearth of worthwhile research in this field (Baker and Waddon, 1989). In the majority of cases it may involve relatively trivial acts such as writing on the cover of an exercise book or breaking a milk bottle yet in the latter case even such a trivial act may lead to serious, even tragic, consequences, if, for example, a child were to fall on broken glass in a playground.

Vandalism is widely seen as a group phenomenon (Hindelang, 1976) which frequently takes

place in settings and contexts where identification of the originator of destructive acts is difficult. It has been argued, however, (Hindelang, op. cit.) that reliance upon officially recorded delinquent events may result in an underestimation of the proportion of those who operate in isolation. This argument rests on the assertion that apprehension of the solitary vandal is even more difficult than that of groups.

In many of the case files studied there were comparatively few references to such behaviours. This does not suggest that the children were not involved in such acts but rather that these were not of sufficient frequency or perceived seriousness to be formally recorded, or that they were rarely apprehended in the commission of such acts. Sturman's (1978) study of vandalism on a large council estate, for example, estimated that only 7% of incidents of vandalism were reported to the police.

When ascribing ratings it was necessary to ensure that decisions were based solely on information provided relating to specific acts of property destruction. In a situation where data may appear to be missing it is tempting to go beyond the information given and offer an estimate of what the researcher considers, in the light of the child's overall profile, to be the likely degree to which the child engages in such behaviour. This was actively resisted.

A score of zero, therefore, reflects a total or near total absence of data indicating that the child has engaged in acts of property destruction. This does not imply that the child does not behave in such fashion as it may be argued that all, or most, children are engaged in property destruction to a certain degree. West and Farrington (1973), for example, found that 82 percent of their sample of boys in one part of inner London admitted breaking the windows of empty houses. Gladstone (1978) in a self-report survey of adolescents in an northern city, found that 65 per cent claimed to have written on walls in the street; 48 per cent to have broken the glass in a street lamp and 28 per cent to have broken a car radio aerial.

Given that few case files made reference to such behaviours a rating of zero is commonplace in this study.

A score of one reflects a suggestion in case files that the child has been involved in such behaviour to the point that it has been formally recorded and commented upon. This would involve more than one incident unless it were of particular severity.

A score of two reflects an expression of concern about the child's engagement in a number of acts of property destruction. The concern may originate from home, school or other agencies. It may include those cases where the child had been prosecuted in Court on a charge of Criminal Damage, although such behaviour was not perceived as a major concern.

A score of three reflects expressions of extreme concern about the child's engagement in frequent and comparatively serious attacks upon property. Several children who scored three in this study had been involved in a series of arson attacks; others had been engaged in systematic destructive attacks upon public buildings and/or private residences, the latter usually being unoccupied. Vandalistic attacks on privates homes are rare and tend to be racist in origin.

g) Truancy

There are several forms of truancy which lead to differing detection rates and to differing official responses. Absence from school without just cause can take the form of:

- non arrival at school without explanation by child or parents
- non arrival condoned by parents who may provide false information about illness or essential engagements
- attendance at registration followed by absence from some or all classes (sometimes described as internal truancy)

It is often the first, and to a lesser extent, the second of these categories which will trigger an official response by school and the Education Welfare Service. The third category, being

less visible, is less likely to involve outside agencies and, in some cases, particularly when the child is perceived as poorly behaved, the teacher may feel less disposed to bring the child's absence to the attention of the school's management.

A distinction is often made between the truant and the school phobic (e.g. Tyerman, 1968). Whereas the former group avoids school because of competing attractions, alienation, boredom or group pressure to absent, the latter finds school a highly anxiety provoking and threatening environment which cannot be faced. Unlike the truant, the school phobic is more likely to have extended periods of absence from school and make little effort to conceal his or her non-attendance (Broadwin, 1932; Weiner, 1992).

In reality, the majority of children do not fit neatly into the above categories and examination of case files led to a decision that all cases of unsanctioned absence from school would be subsumed under the heading of truancy. Where there was evidence that the child was unduly anxious about attending school, this observation was also used to inform the behavioural dimension labelled 'inward behaviours'.

The most effective means of measuring absence would have been to draw upon data available in school attendance registers. Unfortunately, the wide number of schools the children attended and the difficulty in gaining access to the data ruled this option out. In addition, not only would it have been necessary for registers for past academic years to have been consulted it would also have been necessary to access other sources of data in order to make an estimate of likely internal truancy.

While recognising the measurement errors which would accrue, it was decided that, as with the dimension of delinquency, scores would largely reflect official responses to truancy.

A score of zero reflected an absence of evidence that the child was engaged in truancy.

A score of one reflected an expression of concern about the child's attendance at school. At

this level the parents may have been involved in informal discussions with school staff about the child's attendance.

A score of two resulted when more formal intervention had taken place. This generally had taken the form of involvement by the education welfare or psychological services.

A score of three reflected the instigation of formal procedures to deal with chronic non-attendance. This might involve one or more of the following:

- referral to the local authority liaison panel consisting of staff from education and social services. This panel considers the appropriateness of legal action when support to the child and family has failed to ensure a return to school.

- placement in the school refusers' unit which is managed by the Educational Psychology Service

- placement in the psychiatric day unit at the local hospital where school refusal is seen as an important element

- a summons to appear in Court for non-attendance at school

- a care order to the local authority in which non-school attendance is seen as a central element

h) Inward behaviours

Following Achenbach and Edelbrock (1983) (see appendix 2 for discussion), this term includes behaviours marked by anxiety, depression, uncommunicativeness, social withdrawal, obsessions and compulsions. These behaviours are often subsumed under the heading, neurotic disorders, and may be contrasted with others described as conduct disorders

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(Rutter, 1965; Kolvin et al., 1981).

In addition, inward behaviour is taken to include aggressive behaviours in which anger is turned inwards rather than directed outwards. This may be manifested in self-injurious (e.g. headbanging) or attempted suicidal behaviour (usually cutting one's wrists or overdosing).

It is important to note, however, that many children who score highly on inward behaviours may score similarly on those of an outward nature. Rothbaum and Weisz (1989), for example, cite the case of a child who:

> "...in therapy was anxious and withdrawn (internalising) but also loud and hyperactive (externalising) in school. At home, he was both depressed (internalising) and disobedient (externalising)" (p.27).

This example is supported by empirical studies which reveal strong correlations betwen internalising and externalising scores for most groups of children (Achenbach and Edelbrock, 1983). These authors demonstrate that for junior aged boys there is a significant sized group who share a behavioural profile characterised by depression, social withdrawal and aggressiveness. Similarly, Fergusson and Horwood (1993) found that children prone to disruptive, aggressive or distractible behaviour, also tended to show anxiety, withdrawal and fearfulness:

> "What our findings...(and the extant literature)...clearly suggest is that externalising and internalising symptoms are not different ends of a general spectrum reflecting the child's tendency to 'fight or flight' but rather are distinct but positively correlated dimensions of behavioural variability" (Fergusson and Horwood, op.cit., p.763).

Inward behaviours are particularly difficult to rate as they often do not directly affect a third party (although they may cause concern to friends and relatives) and are, therefore, less likely to come to prominence in official accounts. As with all problem behaviours they are typically found to a greater or lesser extent in children and unless particularly severe it is often difficult to assess to what extent they should be perceived as problematic.

Depression and anxiety are particularly common in adolescents. In their Isle of Wight study, Rutter, Tizard and Whitmore (1970) found the prevalence of depressed feelings to be 40% at ages 14-15. Furthermore, there is likely to be a significant difference between the incidence of diagnosed depression and the substantial role it may play in children's adjustment problems (Weiner, 1980).

A score of zero indicates that there are no expressed concerns that the child displays inward behaviours which would normally be considered to be atypical given the child's age.

A score of one indicates that some concerns have been expressed although the child's behaviours do not appear to be incapacitating or, by themselves, warrant intervention from outside agencies. A score of one might include minor depressive states, behaviour evidencing low level anxiety relating to school, minor phobias, brief experimentation with solvents, or a noticeable, and arguably maladaptive, inclination to avoid social situations.

A score of two would reflect greater concern about the child's behaviour. This would be likely to be causing distress to the child and/or the family. A score of two might reflect one or more of the following: a high level of anxiety about attending school (although attendance is still possible), low level self-injurious behaviour, an established pattern of alcohol or solvent abuse, a degree of depression significantly affecting the child's well-being, or evidence of anorexia.

A score of three would reflect inward behaviour considered to be grossly maladaptive and harmful to the child's physical and/or psychological wellbeing. Such a score might reflect one or more of the following: life threatening abuse of drugs or alcohol, suicidal or grossly self-injurious behaviour, fears or phobias of a severity which precluded attendance at school or engagement in other mainstream social activities, behaviour indicating a pronounced depressive state, anorexic or bulimic behaviour requiring a period of hospitalisation.

i) Negativism towards parents

This dimension has similar difficulties to those preceding yet it is possible to argue that norms, expectations, demands, tolerance levels and the airing of complaints will be even more varied between families than between schools or teachers.

Analysis of case files suggested that the great majority of the children found themselves in familial situations marked by disharmony, disorder and conflict. If it is fair to argue that what is perceived as problem behaviour by teachers may be partly generated by sources external to the child, this is even more the case when breakdowns within the home are analysed. In some cases the children have been the victims of emotional, physical and/or sexual abuse. They may have witnessed physical violence towards others and have seen family members struggle with debilitating conditions such as psychosis, alcoholism and drug dependence. In certain cases an unwillingness to comply with adult directions is all too understandable.

It was decided that, as with the other dimensions, the scoring could not be affected by issues of culpability or aetiology. Thus a child who actively resisted a family regime which made unfair or unreasonable demands, who repeatedly ran away from home, would be scored highly on this dimension. This should not be necessarily taken, therefore, as an indicator of maladaption. One would only have to consider the score which would be given on this dimension to Snow White or Cinderella to recognise the inherent difficulty.

To a significant extent the scoring had to rely upon parental accounts which may often be influenced by a hidden agenda, i.e. wanting the child's reception into care, seeking to avoid the unwelcome attentions of professional agencies (often fuelled by fears that allegations of abuse may be levelled) or hoping to obtain financial or material benefits provided by national or local bodies.

While recognising the above caveats, it was considered that estimates would have to be made on the information that was available.

A score of zero would indicate that there had been little expression of concern that the child's noncompliance was other than that normally witnessed in children of a similar age.

A score of one indicated that the child's unwillingness to comply with parental requests or directions was perceived as problematic by professionas although not a major cause for concern.

A score of two would indicate that noncompliance was a salient difficulty. It is likely that considerable tensions in the home had built up. At this level, however, the problems could still be addressed and hopefully resolved in situ.

A score of three would suggest that family breakdown had taken place or was imminent. The child may be absent from home for long periods, perhaps received into care at parental request. The child's relationship with parents would be marked by open conflict or passive resistance.

In his study of delinquency, West (1969) employed a number of raters (psychiatric social workers) to examine features of children's domestic life and family circumstances. In attempting to ascertain the reliability of the the ratings obtained West classified the data into four groups:

A. All measures which were completely independent of interviewer judgement (test scores, teacher's ratings, criminal records)

B. Data which may well be objective (e.g. mother has had psychiatric treatment in hospital) but which depend considerably upon interviewer skill for its elicitation

C. Data relating to variables such as health which involved the personal judgement of the interviewer and the use of objective information (e.g. medical records/treatment)

D. Data which are derived almost entirely from the interviewers' own judgement (e.g. personality characteristics of parents)

As all the ratings for the present study have been produced by this researcher, the issue of inter-rater reliability is less pertinent. Of course, they are based upon the opinions and observations of other commentators and are, in many ways, no less subjective. For the purposes of this study, therefore, the classifications have been changed to:

1. Data independent of this researcher's judgement
2. Data dependent on the judgement of other professionals
3. Data dependent on this researcher's judgement, but guided by outside sources of information
4. Data entirely dependent upon this researcher's judgement

Using the above criteria, the most appropriate category for each behavioural dimension is as follows:

- disruptive: 3
- negativism towards teachers: 3
- delinquent: 1
- aggressive (physical and verbal): 3
- destroys/damages property: 3
- truancy: 1
- inward behaviours: 3
- negativism towards parents: 3

The majority of the data employed could be classified under category 3. Rarely, in practice, was this so clear-cut. In many cases, the opinions of other professionals (category 2) played a part in determining behavioural ratings. Furthermore, in those cases where this researcher also had a clinical involvement (i.e. as the subject's educational psychologist), his personal judgement will have played a more significant role (moving towards category 4?)

It should not be assumed that the four categories are in descending order of value or academic respectability. The richest and most valuable data may often take a form where the requirement for subjective judgement is greatest. Furthermore, those data which are included in category 1 (e.g. juvenile court dispositions, referral to education welfare service for non-school attendance) may suggest a spurious and misleading objectivity in a realm where personal judgement and predisposition are highly influential. The key issue is in determining when and where the subjectivity operates and to what extent it is possible to make valid comparisons between subjects.

Unlike West's (1969) study (which demonstrated decreasing inter-rater reliability from category A to D), the ratings in the present study were all compiled by one researcher; thus the subjectivity principally resides in his understanding of each case rather than in the differing understanding of a number of researchers.

The strengths and weaknesses of the procedures undertaken.

The procedures adopted were considered to be those most appropriate for the purposes of the present study. They have several strengths yet also many weaknesses. Both are summarised below:

Strengths:

1. Examining a range of problem behaviours allows for a more detailed analysis than is possible in studies which adopt a simple behaviourally disordered/normal differentiation. This study recognises that some children may exhibit very specific problem behaviours while others present difficulties in a wide range of areas. In this study, comparisons between groups of children with similar profiles can be undertaken and analysed.

2. The adoption of a four point scale for each behavioural dimension allows for relatively sophisticated differentiation.

3. The use of case files allows access to an extremely rich and detailed source of information which is rarely available to researchers. The wide range of sources of information enable greater cross-referencing and offer a more comprehensive overview than many studies which rely upon behavioural ratings supplied by a restricted number of actors (e.g. the child's present classteacher and/or parents).

Weaknesses:

1. The data used in this study are largely drawn from information which is contained in individual case files. It is unclear to what extent these files actually reflect an external reality.

2. The use of a four point scale can suggest greater precision than is actually possible in a study of this nature.

3. The choice of behaviours under examination was, in part, limited by the data contained in case files. Solvent abuse, for example, tended to be cited only in those cases where the problem was highly salient. Although solvent abuse may be a highly important variable the lack of information in case files rendered it impossible to include it as a separate behavioural dimension and where data did exist, it was subsumed within the inward dimension. A similar difficulty was also noted with respect to the 'destroys/damages property' dimension, although it was considered that there was sufficient scope for differentiation.

4. The quantification of the data may give a misleading impression of objectivity. The data are highly subjective and reflect:

a) the perceptions and beliefs of those who witness and comment upon the subjects' behaviours

b) the perceptions and beliefs of those whose observations are included in the case files

c) the interpretation offered by this researcher whose task it was to translate such data into numerical form

5. In such analyses it is difficult to reflect the context-dependency of behaviour. Wherever possible, this factor has been taken into consideration in the scoring (see scoring rationale for each of the behaviours, above)

6. There is a danger that those children who present the most challenging behaviours are more likely to be perceived as problematic in other areas. This negative halo effect (cf. West, 1969; West and Farrington, 1973) could reduce the effectiveness of an analytical framework which seeks to differentiate between behaviours. It is also possible that variables other than behaviour may influence perceptions of children although Wilson and Herbert (1978) did not find teacher halo effects operating across the three variables of social conduct, academic ability and social status.

The conceptual and methodological weaknesses in the procedures outlined in this chapter are fully recognised and acknowledged. Given the many constraints and limitations placed upon the study, the procedures adopted were considered by this researcher to be the most appropriate means of converting rich and complex data into a numerical system. Such weaknesses are, to a greater or lesser extent, inherent in all work of this kind. It is considered, however, that, for the purposes of this study, the strengths outweigh the weaknesses.

Chapter 4 Methods

This chapter is divided into four major sections - A, B, C and D.

Section A explores the context of the children's local community, Sunderland. It addresses important regional social and economic influences which may operate upon the children and their families and which may induce feelings of powerlessness and apathy.

Section B explores the characteristics of the children in the sample. This includes how the sample was selected. It provides such demographic information as the children's ages, schools, family characteristics, academic and intellectual abilities and behavioural difficulties.

Section C outlines the locus of control measures employed and the difficulties which were encountered in their administration. It also details the rather different procedures which the researcher negotiated with each of the various establishments.

Section D describes the procedure by which a small number of transcripts were selected and presented for rating on an internal-external continuum to a number of educational specialists.

Section A   Sunderland in context

'Nil desperandum auspice deo'

This, the motto of the City of Sunderland's coat of arms, with its exhortation to trust in the benign influence of a greater power, is perhaps, a perfect illustration of an external locus of control. For many of the families included in this study, however, despair was a common feature of case files, not merely because of the tensions and repercussions of intra and extra-

familial conflict but also because of the marked socio-economic disadvantage which so frequently blighted their lives.

It is surely naive to study an individual's attitudes and personality without taking cognisance of the wider social and economic structures in which he functions. A child's view of the world, and how he operates within it, will derive not only from his immediate personal experiences but also from the wider social context and its history (Mills, 1970). For this reason, it was considered important to devote a section of the text to locating the sample within the wider economic and social context.

One hundred and fifty years ago, Sunderland was one of the major shipbuilding ports in the world. The decline in heavy engineering and the gradual disappearance of the coalfields in the region during the past twenty years, has contributed to much economic hardship. Walking through Sunderland Town Centre, one cannot help but notice common features in many of the passers-by; their clothing and personal effects, suggestive of economic deprivation, their facial expressions and personal demeanour, suggestive of hard, oppressive, lifestyles. The expensive training shoes, worn by many of the young people, only partly divert the eye from the shabby, tattered clothing which is generally a reflection of economic disadvantage rather than current fashion.

The elevation of Sunderland to City status in 1992 was heralded as an indicator of significant economic and social renewal. For many, it was a source of pride, yet there are few indications that City status has had a significant impact upon the self-perceptions of those whose personal, social and economic circumstances are adverse. Despite a proliferation of glossy brochures heralding the 'renaissance' of the 'Great North' (Robinson, 1990) in which are described a range of initiatives geared to encourage industrial and economic regeneration, the reality for many in Sunderland, and the North-East generally, is a future without employment or adequate income. The official male unemployment rate, for example, on some North-East housing estates has been as high as fifty per cent (Wearside T.E.C., 1990).

The arrival of South-East Asian industries such as Nissan has attracted much media attention which has been further stoked up by Far Eastern cultural festivals and V.I.P. exchanges. Yet, for the great majority of the City's workforce, and that of the North-East generally, the new initiatives have had little real impact upon their economic and vocational prospects (Robinson, op.cit.). While some in the region may be improving their economic prospects, there is a sizeable group which has benefited little from urban regeneration. This is particularly true of the youngsters living in the most disadvantaged communities from which the majority of the present study's sample originate.

Perhaps the image of the adolescent with the expensive training shoes and the substandard shellsuit serves as a valid metaphor for the current economic structure in the North-East. Hylton Riverside's new enterprise zone may be perceived by some as an elegant and expensive facade behind which is a real sense of poverty.

Promises for the future often sit uncomfortably with current reality. In a study of 117 major European towns and cities (Cheshire, 1990) Sunderland was ranked 5th from bottom on a measure of prosperity, outranking only one British urban area, Liverpool. In his survey, Cheshire notes that between 1971 and 1988, Sunderland was one of a group of cities which started in the bottom 30% and yet still experienced some of the worst net deterioration overall.

In 1990, Sunderland's population totalled 296,100, a figure which has changed little during the past two decades. Of these, 46,500 are currently of statutory school age.

The City's social structure is weighted towards the less advantaged social classes (see Table 4.1)

Table 4.1 Social Class of economically active males (National and Sunderland)

Occupation	Sunderland %	Great Britain %
Professional	2.8	5.5
Intermediate	13.5	21.4
Skilled non-manual	8.9	11.3
Skilled manual	44.0	34.9
Partly skilled	15.9	16.2
Unskilled	8.2	6.1
Unknown	6.7	4.6
TOTAL	100.0	100.0

(Source: 1981 Census)*

(* n.b. At the time of writing, 1991 Census data were not available for all categories of information. Where this is the case, data from the 1981 Census are presented)

In Sunderland, coping with long-term unemployment has become a major task for a high proportion of families for several decades. Table 4.2 shows the local and national unemployment rate for May 1991 (a time when the data gathering exercise for this study was nearing completion).

Table 4.2   Unemployment rates - May 1991 (%)

	Sunderland	Northern Region	Great Britain
Men	16.4	13.7	10.1
Women	6.0	5.3	4.3
Total	12.0	10.1	7.6

(Source: Dept. of Employment / Tyne and Wear County-Wide Research and Intelligence Unit)

Figure 4-1 shows the change in unemployment levels for Sunderland, the Northern region

and Great Britain during the past eight years. While Sunderland's recorded level of unemployment has followed national and regional trends, it can be seen that it has always exceeded these.

Although such figures enable regional comparisons of levels of unemployment, they do not reflect the true nature and impact of unemployment upon communities. It has been contended (e.g. Robinson, 1990; The Labour Party, 1990; MacDonald and Coffield, 1991) that present unemployment statistics substantially underestimate the numbers of unemployed, largely because of changes in the accounting system and the instigation of various training initiatives. It is important to recognise that unemployment figures do not include a significant number of individuals who have been unsuccessful in their attempts to find work. Many women, for example, who have been or are seeking part-time employment, are not entitled to state benefits and are, therefore, excluded from the statistics. In addition, those who are on government schemes (Employment Training, Youth Training Scheme etc.) are included within the labour force total and are not considered to be unemployed. As a large group of young people of Sunderland are destined to join a scheme upon leaving school (approximately 40%), they will avoid classification as unemployed. In reality, the vocational future for many is bleak. Table 4.3 provides data as to the destination of eligible school leavers in 1989 and 90.

Table 4.3   Eligible school leaver destinations (Sunderland)

YEAR	Full-time education	Youth training	Employed	Unemployed / unavailable	Not known	Total
1989	1533 (36.3%)	1760 (41.7%)	385 (9.1%)	434 (10.3%)	111 (2.6%)	4223 (100%)
1990	1518 (39.8%)	1404 (36.8%)	345 (9.1%)	445 (11.7%)	99 (2.6%)	3811 (100%)

(Source: Sunderland Careers Office)

These figures can be compared to those for the Northern Region and for England and Wales

Figure 4-1 School leaver destinations: Sunderland, Northern Region and National (1990)
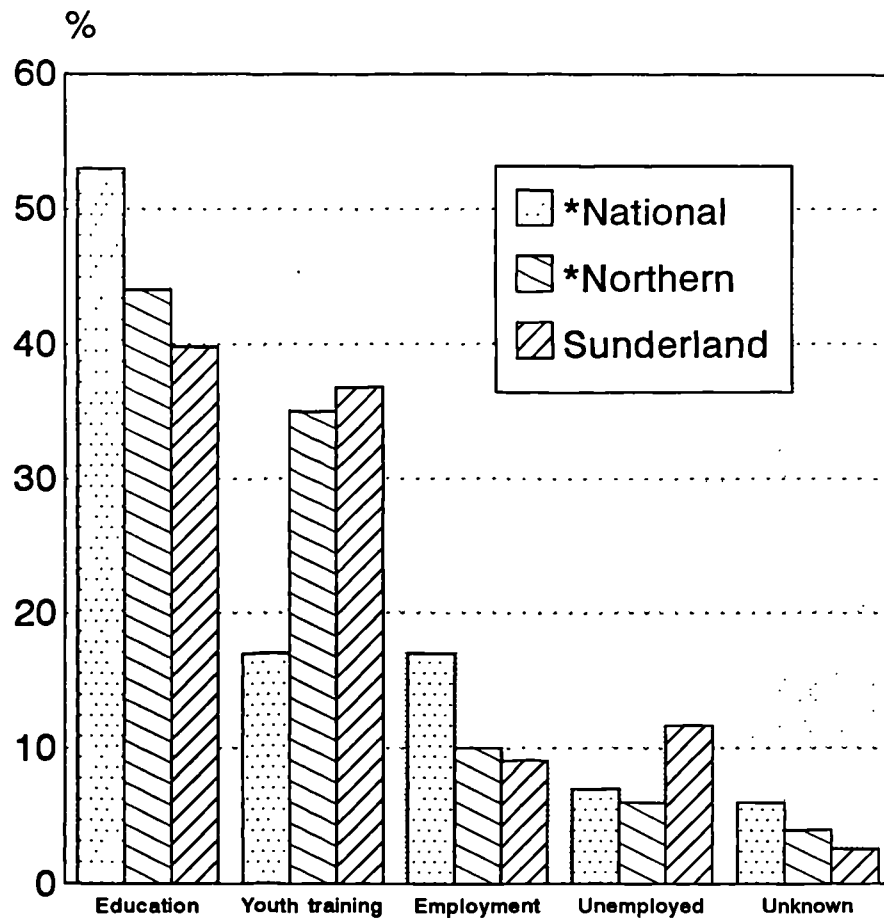
(*Source of regional and national data: Slade, 1991)

The data presented in Table 4-3 indicate that, for the majority of Sunderland school leavers, even the option to choose a 'shit job' in preference to a 'govvy scheme' (Coffield, Borrill and Marshall, 1986) is denied.

In addition to the 16,939 unemployed claimants in May 1991, 3,088 young people were currently enrolled upon youth training courses and a further 2,350 adults were participating in Employment Training (April 1991 data supplied by Careers Service and Training Agency).

As would be the case in most geographical districts, such global rates mask significant variations within the City. Unemployment rates in May 1991 in different political wards in Sunderland ranged from 7.0% to 28.8% for men and 3.5% to 9.3% for women (Dept. of Employment / Tyne and Wear County-wide Research and Intelligence Unit) It has already been noted that some housing estates have official male unemployment figures of 50%. When one takes into consideration the high proportion of individuals in the economically disadvantaged wards and estates who are involved in employment schemes and the relatively high incidence of part-time work for women, it can be deduced that, in certain communities, the absence of full-time, permanent employment is virtually the norm.

In addition to high rates of unemployment, Sunderland displays many other features of economic disadvantage. A relatively high proportion of housing is rented, primarily from the Local Authority (see Table 4.4). Although not a universal indicator of economic disadvantage (German cities, for example, consist substantially of rented accommodation) the relationship in Great Britain between local authority housing and socio-economic deprivation is strong.

Table 4.4 Number of dwellings in Sunderland*: May 1990

Type of housing	Number	%	Great Britain %**
Privately owned	61,861	52.0	64
Local authority	49,260	41.4	26
Housing association	4,462	3.7	6
Privately rented	2,811	2.4	2
Other	412	0.5	2
TOTAL	118,806	100.0	100

(Source: *Sunderland Official Guide 1991; ** General Household Survey, 1988)

Although case files of the children in the present study did not permit analysis of the nature of their housing, it is exceedingly rare to find children in Sunderland's special schools and

units for the behaviourally disordered living in privately owned accommodation. Of those children in the sample who were clients of this researcher (when he was engaged as an educational psychologist) there was not one, of approximately sixty children, who was currently living in privately owned accommodation.

A further guide to economic circumstances is the average number of cars per household. Table 4.5 illustrates that Sunderland compares unfavourably with national figures.

Table 4.5   Car ownership in Sunderland compared to U.K.(%)

Cars per household	Sunderland (%)	United Kingdom (%)
Households with no car	48.8	33.4
Households with one or more cars	51.2	66.6
Households with two or more cars	12.2	23.1

(Source: 1991 Census)

Given the foregoing circumstances, it could be anticipated that young people's attitudes might reflect feelings of powerlessness, hopelessness and apathy which are manifested in an external locus of control. Some individuals, however, may consider that the only means of escape from adverse socio-economic circumstances is by their own efforts. An internal perspective may be essential if one is overcome a non-facilitative environment. As Stephen Nowicki, the designer of the CNSIE remarked:

> "In the back of my mind I always wondered why some people
> make it out of an inner-city background and some people don't.
> Locus of control, to me, just rang bells all over the place."
> (personal communication)

Although young children may consider achievement in sport or popular music as offering

an attractive route to a secure adult future, the traditional communities of the North-East have tended to see educational success as the more realistic vehicle. Academic achievement, however, has tended to be below national norms. In the first nationally published tables of public examination results (November 1992), 28.2% of Sunderland's children examined in the 1991 G.C.S.E., obtained grades A to C compared with a national average of 38.1%. Although this is a somewhat depressed result, it should be noted that this was higher than several other major conurbations such as Liverpool (21.4%), Birmingham (25.1%), Manchester (18.6%) and a number of London boroughs such as Lambeth (18.2% and Hackney (19.3%). Results of national tests at age seven (reported in December 1992) saw Sunderland obtaining joint 84th place (along with nine other L.E.A.s) out of 107 local authorities for the percentage of children reaching Level 2 or above on National Curriculum core subjects, science, maths and English. In addition, only seven L.E.A.s had a smaller percentage of children scoring at Level 3 or above (11% for Sunderland).

Ashton and Maguire (1986) contrasted young adults in the Sunderland labour market with those in Leicester, Stafford and St. Albans. The four areas were chosen because they represented different labour market conditions, Sunderland being regarded as typical of some communities in the industrialised North which had experienced high levels of unemployment. Striking differences in occupational opportunities were found, for example, in St. Albans, the chances of sons from lower working class families (semi-skilled and unskilled workers) entering white collar work were as high, if not slightly higher than those from middle class families in Sunderland.

The growth of unemployment may be reducing the traditional view of many North-East communities that educational success can be a means of escaping vocational drudgery or unemployment. Ashton and Maguire found that, unlike the other three geographical areas, the young people in the survey from Sunderland were not overly critical of their schools' attempts to prepare them for the world of work, this:

"... reflecting a certain fatalism that there was little the schools could have done

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about their situation" (p.30).

The low educational aspirations of young people in Sunderland is reflected by the proportion continuing into further education. Figures from the 1981 Census indicate that whereas 37.7% of the national sample of seventeen year olds progress into further education, the figure is reduced to 23.7% for Sunderland. This statistic is made more powerful when one considers the paucity of other options for the sixteen year old. Although data produced by Slade (1991) indicate that the uptake of further education has increased during the past decade, perhaps because of fewer employment opportunities, it is notable that the national average continues to be substantially higher than that for the Northern region (53% versus 44%).

It is conceivable that the belief that one can rise above disadvantageous circumstances is reduced when one feels that all one's peers are in a similar predicament. Ashton and Maguire (op.cit.) state that:

> "A striking feature of the responses from the Sunderland sample was the difference in the attitude towards unemployment. Rather than being depressed by the experience, many respondents appeared to face the prospect of long-term unemployment with resignation, acknowledging the fact that all young people in the area were susceptible, due to the shortage of jobs. By comparing their situation with that of their peers in Sunderland, they had much lower aspirations than respondents in other areas" (p.5).

As if to confirm the passivity of many respondents, when asked if they had to start their working life over again would they choose the first job they had previously taken, nearly one in five of the Sunderland respondents reported that they had no choice - on average, nearly five times as many as in the other groups.

The relationship between unemployment and locus of control (and similar psychological constructs) has been examined in several studies (see Feather, 1990 for discussion). Feather (op.cit.) suggests, however, that not only may unemployment reduce one's sense of control over outcomes but also, where one is in employment, a key influence may be the nature of

the work. Indeed, one study (O'Brien and Feather, 1990) suggests that the key difference may reside in the quality of the employment rather than in a simplistic employed/ unemployed dichotomy. In outlining this position, Feather draws upon a study from the Great Depression (Bakke, 1933) and offers a quotation about the perspective of the unskilled worker which appears to encapsulate the locus of control construct which emerged some three decades later:

> "The experience of having his destiny controlled from another world has left him, naturally enough, with a reduced sense of responsibility for his fortunes, and more expecially for his misfortunes which....he is prone to lay at the door of his "masters"....The lack of choice which characterises his life has produced little training in alternative planning....The belief that luck occupies a large place in the determination of his fortunes is a further check to planning" (Bakke, op. cit., pp. 32-33).

Thus, Sunderland's relatively high levels of unemployment and tradition of unskilled and semi-skilled labour may serve to induce a sense of externality which may be reflected in the views of the City's children.

For many young people in Sunderland feelings of despair and hopelessness about their economic futures are understandable and, perhaps, reflect a realistic appraisal of the future. It is conceivable that such a reality would help to engender an external locus of control, a feeling that future outcomes are unlikely to be the product of one's actions. This raises the question as to whether poor life chances and externality, as measured in this study, are related. The questions in the CNSIE and the issues explored in most of the vignettes are primarily concerned with everday relationships with important others rather than with future work-related issues. Some researchers (e.g. Paulhus and Christie, 1981) have endeavoured to consider interpersonal beliefs as separate from those of nonsocial and sociopolitical context. The children's social world is the major focus of the present study.

A supplementary issue concerns the impact upon the individual of an accurate, yet bleak appreciation of his or her circumstances. This researcher has often been asked to work with

depressed children whose personal circumstances, upon investigation, have proven highly adverse. Childhood depression was often an understandable reaction in such cases. What can the clinician do in such circumstances? Should he employ a degree of sophistry to convince the child that things aren't as bad as they appear? Should he suggest that the child can alter things when he is very unlikely to be able to? Although cognitive therapy would suggest that the therapist focus upon those aspects of the client's life where control can be exercised, such areas may sometimes appear minor and trivial. This raises the question as to what extent one should seek to change an individual's realistic perception of a situation to one which is less accurate but suggests greater feelings of personal control

If a sense of powerlessness, feelings of futility, a lack of control over aspects of one's life, are realistic, then attempts to engender an internal locus of control may be no better than a misleading form of psychological indoctrination or irrelevance. Alternatively, it may prove to be one way in which an individual can be helped to seize those opportunities which are available and 'escape from disadvantage' (Pilling, 1990; Nowicki, personal communication). Firstly, however, one must ascertain whether such a construct can be adequately operationalised and measured.

Section B   The Sample

The sample consisted of 259 children aged between nine and sixteen years. From this group, forty one children were interviewed using the vignettes.

In order to be selected for the study the child had to:

1. be on the active caseload of the Sunderland Educational Psychology Service and

2. have concern regarding his/her behaviour currently being expressed by parents or professionals (primarily teachers).

In some cases, referral may have initially been made because of learning difficulties and only more recently may the child's behaviour have given cause for concern.

The children in this study included those in the City of Sunderland whose behaviour was likely to be most problematic.

The sample was drawn from the following settings:

a) mainstream schools (primary and secondary)

b) two special schools for children with emotional and behavioural difficulties (primary, and secondary)

c) two special schools for children with moderate learning difficulties (primary and secondary)

d) two disruptive units (one for children aged 11-15; the other for children aged 15-16)

e) an observation and assessment centre

f) three community homes with education on the premises

<u>Age</u>

The ages of the children are given in Table 4.6. A high proportion of the sample (45.9%) are aged fourteen or fifteen. This reflects the fact that at this age, children are more likely to be perceived as difficult to manage by their teachers (Elton Report, 1989, p. 142), removed from school or placed into care by their parents. Children aged sixteen are less likely to receive an initial referral to educational psychology services (as they are shortly to leave school) and, of course, many children leave during, rather than at the end of, their sixteenth year.

Table 4.6   Age of children in sample

Years	Frequency	%
9	13	5.3
10	13	5.3
11	21	8.5
12	25	10.2
13	31	12.6
14	46	18.7
15	67	27.2
16	30	12.2
Total	246	100.0

(Missing cases = 13)

<u>Sex</u>

Table. 4.7 provides a breakdown of the sample by sex. Boys outnumber girls by a ratio of 3:1, reflecting survey data obtained by Gray and Sime for the Elton Committee. In the Gray and Sime study, secondary school teachers reported that three out of four children who were

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'difficult to deal with' were boys (Elton Report, 1989, p.235).

Table 4.7   Sex of children

	Frequency	%
Boys	194	74.9
Girls	65	25.1
Total	259	100.0

Table 4.8 provides a breakdown of sex by school.

Table 4.8   Sex by school

	Boys		Girls	
Type of school	Number	%	Number	%
Mainstream primary	13	6.7	0	0
Mainstream secondary	54	27.8	39	60.0
Primary E.B.D.	33	17.0	2	3.1
Secondary E.B.D.	23	11.9	8	12.3
Prim/Sec M.L.D.	15	7.7	5	7.7
Disruptive unit	30	15.5	6	9.2
Community home	26	13.4	5	7.7
TOTAL	194	100.0	65	100.0

As Table 4.8 illustrates, a high proportion of girls in this sample (60%) were attending mainstream secondary schools. This reflects the relative lack of expression of teacher concern about girls' misbehaviour before the onset of adolescence and the greater likelihood of girls with behavioural difficulties to be placed in Social Services', rather than in special educational, provision. The low incidence of girls in E.B.D provision has been commented upon in a recent H.M.I. survey (D.E.S. 1989) in which three quarters of the schools visited

contained less than twenty percent of girls.

Study of individual case files suggested that, for many girls, the locus of conflict centred on the home and the family rather than the school. Although there was no statistically significant difference between boys' and girls' scores on the negativism to parents dimension, the reactions of parents and professionals to female non-compliance appeared to result in a greater willingness to undertake care proceedings. Whereas boys appeared to be experiencing difficulties at home and at school, girls' conflicts tended to be intra-familial.

Of the girls in this sample, 50.8% (n = 33) completed the Nowicki-Strickland scale while undergoing residential assessment at the Social Services Observation and Assessment Centre (n.b. each subject was coded on the basis of the school attended prior to transfer to the Observation and Assessment Centre). Interestingly, the proportion of girls in the sample who were in other forms of Social Services care placements, (which will have followed a period of residential assessment), (12.3%, n = 8) was considerably less than boys (21.8%, n = 42). This reflects the observation, made above, that, unlike boys, who are often in care for offending, girls' placements are more likely to reflect family breakdown and/or truancy. It is arguably more likely that a child in care will subsequently be reconciliated with parents or another adult member of the family and/or will promise to attend school on a regular basis, than a chronic offender will change his/her behaviour. For this reason (and, perhaps, because the perceived threat to society is less) a return home is a more likely case conference recommendation in the case of non-delinquents than delinquents in Sunderland.

Age at time of initial referral

The ages of the children when originally referred to educational psychology services are displayed in Table 4.9. (Children referred prior to their third birthday are included under the category of 3 years).

Table 4.9   *Age at time of initial referral to E.P.S.*

Age (years)	Frequency	%
3	6	2.5
4	17	7.1
5	22	9.1
6	26	10.8
7	30	12.4
8	17	7.1
9	11	4.6
10	14	5.8
11	23	9.5
12	15	6.2
13	19	7.9
14	22	9.1
15	17	7.1
16	2	0.8
TOTAL	241	100.0

(missing cases = 18)

This table indicates a relatively even spread across the age range. The low incidence of referral at ages three and sixteen reflects the fact that children of these ages are just commencing (if in nursery school at all) or completing their statutory school careeers.

A relatively high proportion of the children (32.3%) were referred between the ages of five and seven. Given the period of time which usually elapses between the expression of teacher concern over a child's behaviour and formal referral to educational psychology services, it would appear likely that considerable problems were evident from the outset of these children's school careers.

Family

Table 4.10 lists the types of family structure for the sample.

Table 4.10   Family structure

Type of family	Frequency	%
Both parents	98	41.4
Single mother	92	38.8
Single father	11	4.6
Natural mother/stepfather	27	11.4
Natural father/stepmother	2	0.8
Other	7	3.0
TOTAL	237	100.0

(missing cases = 22)

Of the 237 children in this sample, where family structure could be identified, less than half were living with both natural parents. This contrasts greatly with figures from the 1981 Census (see Table 4.11). Unfortunately, case records were not sufficiently detailed to indicate whether this was the result of marital separation, birth to an unmarried mother, the death of a parent or other factors.

Table 4.11   Percentage of households with children aged 0-15 with a lone parent:

Great Britain, Sunderland and present sample

Great Britain	3.8%
Sunderland	5.3%
Present sample	43.4%

(Source: 1991 Census)

As the children in the sample are aged between 9 and 16 years, it can be argued that the three groups above are not directly comparable. It is possible, for example, that families in which all children are of preschool age, may be less likely to be split by premature bereavement or by divorce, as less time may have elapsed for such eventualities to occur. Nevertheless, the striking difference noted above does suggest that such explanations are unlikely to account fully for this.

Siblings

Table 4.12 presents information regarding the number of cases of different sibling sizes in the sample's families.

Table 4.12   Number of siblings in each family

Number of Siblings	Number of cases	% of cases
0	17	7.5
1	51	22.6
2	71	31.4
3	57	25.2
4	11	4.9
5	9	4.0
6	5	2.2
7	4	1.8
8	1	0.4
TOTAL	226	100.0

(missing cases = 33)

The number of children in each family appears to be significantly greater than for Great Britain or for Sunderland (see Table 4.13)

Table 4.13 Households with three or more children as a percentage of all households with dependent children.

Great Britain	18.8%*
Sunderland	18.0%*
Present sample	69.9%**

Source: * *1981 Census (1991 data for Sunderland unavailable)*
       ** *This figure is obtained by aggregating the percentages of subjects with two*
          or more siblings - see Table 4.12.

It can be seen from Table 4.13 that, in comparison with local and national figures, 69.9% of the present sample were members of families with three or more children. This difference, however, is likely to be reduced by the fact that the sample statistics include older siblings who might not be classified as dependent children (n.b. dependent children are defined by Government statisticians as persons under sixteen, or aged 16-18 and in full-time education, in the family unit and living in the household).

The available data did not permit calculation of the numbers of dependent children in each of the households in the study. If the figures had been adjusted to compare like with like, it is still highly probable that the average number of siblings of the families in this study would be substantially greater both locally and nationally.

Family position

Table 4.14 displays the frequencies of birth order position of the subjects.

Table 4.14   Birth order position

Position	Number	%
1	90	39.8
2	79	35.0
3	32	14.2
4	19	8.4
5	2	0.9
6	0	0
7	3	1.3
8	0	0
9	1	0.4
TOTAL	226	100.0

(missing cases = 33)

There is little to comment upon here for there are no comparative studies to relate these figures to, neither does the distribution appear surprising.

Parental employment

Table 4.15 presents the frequencies of the employment status of the parents of the children in the study.

Table 4.15 Frequency of employment status

Status	Number	%
Both unemployed	134	71.3
Mother only employed	9	4.8
Father only employed	21	11.1
Both employed	24	12.8
TOTAL	188	100.0

(missing cases = 71)

Parental unemployment in the sample (nearly three quarters of those cases where data are available) is very high in comparison with Sunderland and Great Britain figures of 12.0% and 7.6% respectively. It should be noted that, in the sample, there are seventy one cases where employment status could not be ascertained from case files. In the Sunderland Educational Psychology Service, case files are more likely to note the nature and location of parental occupation than unemployed status as the former are useful if it proves necessary to contact parents at short notice. It is reasonable to surmise, therefore, that the true incidence of unemployment is greater than that presented in Table 4.15.

The extent to which families were involved in the 'informal economy', i.e. claiming unemployment benefit but engaging in paid labour, was not possible to ascertain. It is possible that some families in this study were engaging in such activities and these could have been categorised as unemployed or employed depending upon what they chose to disclose.

School

Table 4.16 provides details of the numbers of children on the roll of different types of

schooling (see also Table 4.1 for breakdown by sex).

Table 4.16   School at time of assessment

Type of school	Number	%
Mainstream primary	13	5.0
Mainstream secondary	93	35.9
Primary E.B.D.	35	13.5
Secondary E.B.D.	31	12.0
Primary M.L.D.	1	0.4
Secondary M.L.D.	19	7.3
Disruptive unit	36	13.9
Community home	31	12.0
TOTAL	259	100.0

(n.b. Of the above 259 children, 70 were placed at the time of the study at the Observation and Assessment Centre. In these cases, however, the school most recently attended was recorded)

Social Services care

Table 4.17 displays the number of children who were placed in different types of Social Services care settings as well as the number of those who were not in care.

Table 4.17   Nature of care placements

Category	Number	%
Not in care	139	53.7
Assessment Centre	70	27.0
Community Home	46	17.8
Other	4	1.5
TOTAL	259	100.0

I.Q.

Unfortunately, a significant proportion of the children had not completed an I.Q. assessment. Of the 259 children in the sample, 158 had completed the visual items of the Wechsler Scales or the British Ability Scales and 164 had completed the verbal items. A full I.Q. was obtained for 157 children (60.6%). This discrepancy results from the tendency of some educational psychologists to administer only one half of the Scales when pressed for time.

Tables 4.18 and 4.19 provide mean and standard deviation scores and frequency distributions of the I.Q. data.

Table 4.18   I.Q. scores for full, verbal and visual items

Type of score	Number of cases	Mean score	S.D.
Full I.Q.	157	88.2	15.3
Verbal I.Q.	164	85.4	14.6
Visual I.Q.	158	92.3	17.1

Table 4.19   Frequencies of Full I.Q. scores

Score	Number of cases	%
70 or less	21	13.4
71-85	41	26.1
86-100	63	40.1
101-115	26	16.6
116 or greater	6	3.8
TOTAL	157	100.0

(missing cases = 102)

The data illustrate that the sample's I.Q. scores are significantly lower (i.e. almost one standard deviation) than the population upon which both Scales were standardised which has a mean of 100 and a standard deviation of 15.

Behaviour ratings

The ratings for each child on the nine behaviours were summated and the total score was then entered into the analysis with the variable title, BEHTOT. As each behaviour was given a score between zero and three, the possible range of scores was between 1 and 27 (a score of zero would suggest that the child was not exhibiting problem behaviour and was not, therefore, appropriate for this study).

Figure 4-2 illustrates the frequency of total scores (BEHTOT). It is interesting to note that these approximate to a normal distribution.

Figure 4-2   Frequency of total behaviour scores (behtot)

frequency

total score

(n = 237)
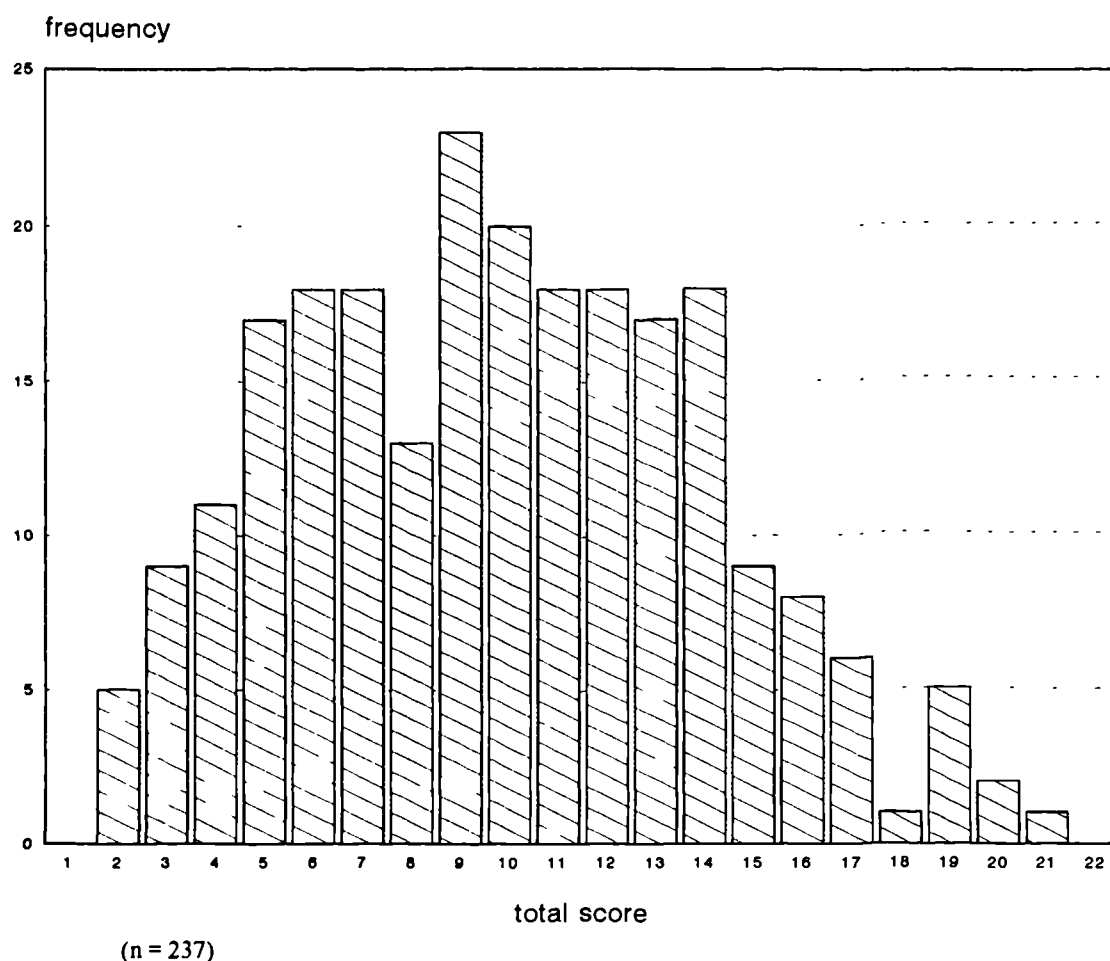
Figure 4-3 displays scores on the nine behaviours. The table presents the number of cases falling into each of the four rankings for each behaviour. These figures are then converted into percentages and are presented above as a 100% stacked bar chart.

Figure 4-4 represents the data with separate scores for boys (n = 175) and girls (n = 62). This indicates a number of sex differences on these measures. Girls tend to have a greater proportion of zero scores on all measures except inward and truancy. With the exception of the refpar (negativism towards parents) category, this trend remains when scores of zero and one are summated and it is reversed in the case of maximum scores of three.

The above findings are generally consistent with the fact that many of the girls in the sample were in the care of the Social Services Department as a result of family disputes and/or a failure to attend school. It is not clear why they tend to score more zeros on refpar. Whether

Figure 4-3 Behaviour scores (no. and % in each category)

	disrup	reftea	delinq	phyagg	veragg	prop	truant	inward	refpar
Score = 3	60	23	21	29	48	6	44	23	48
Score = 2	64	64	28	50	83	23	43	45	77
Score = 1	60	79	36	68	52	39	36	38	69
Score = 0	53	71	152	90	54	169	114	131	43

(n = 237)
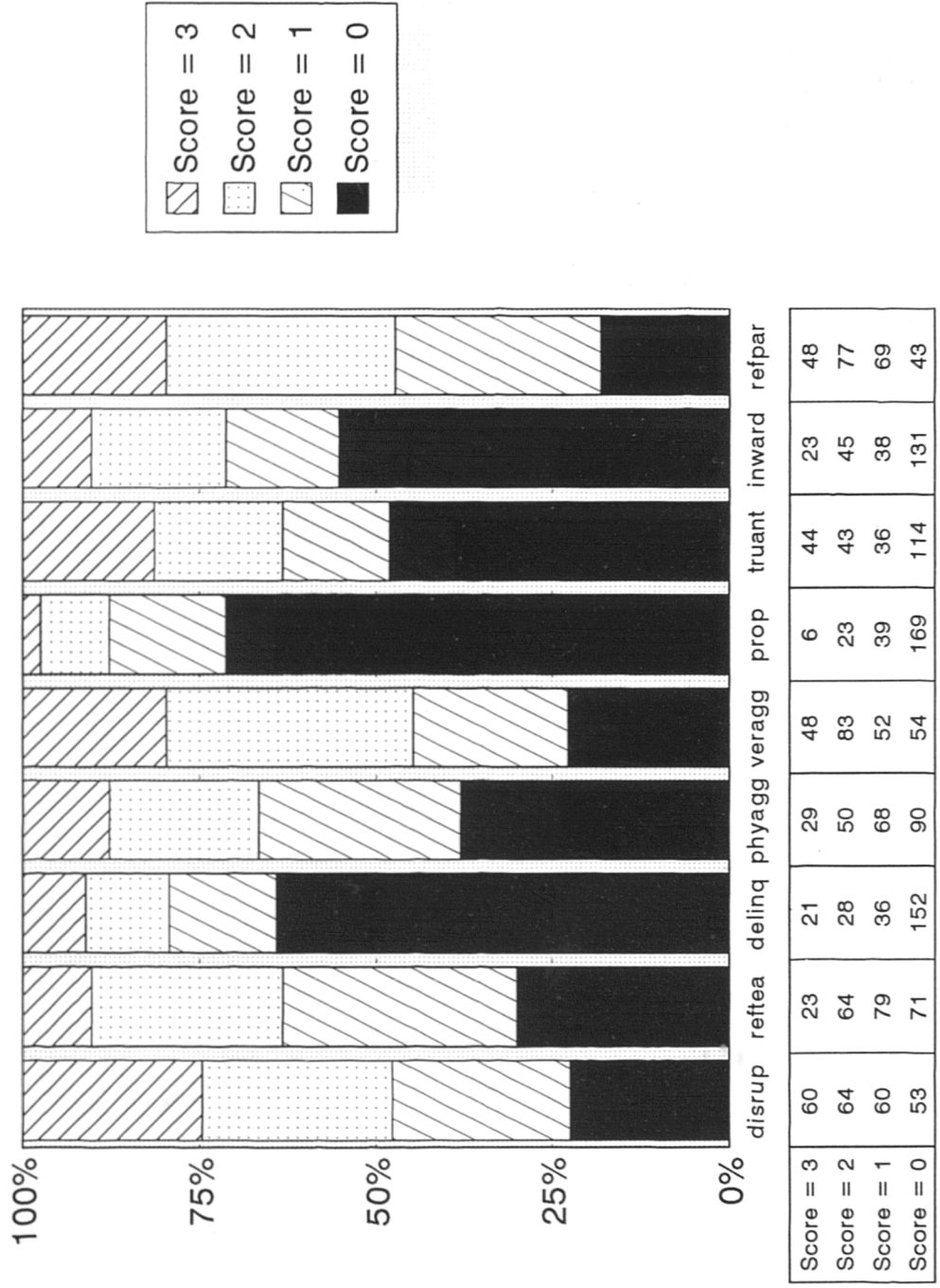
Figure 4-4 Behaviour scores (no. and % of boys 'B' and girls 'G')

	disrup B	disrup G	reftee B	reftee G	delinq B	delinq G	phyagg B	phyagg G	veragg B	veragg G	prop B	prop G	truant B	truant G	inward B	inward G	refpar B	refpar G
Score = 3	53	7	19	4	20	1	25	4	40	8	6	0	28	16	12	11	29	19
Score = 2	54	10	53	11	26	2	45	5	70	13	21	2	34	9	30	15	60	17
Score = 1	45	15	64	15	30	6	57	11	38	14	36	3	25	11	27	11	56	13
Score = 0	23	30	39	32	99	53	48	42	27	27	112	57	88	26	106	25	30	13
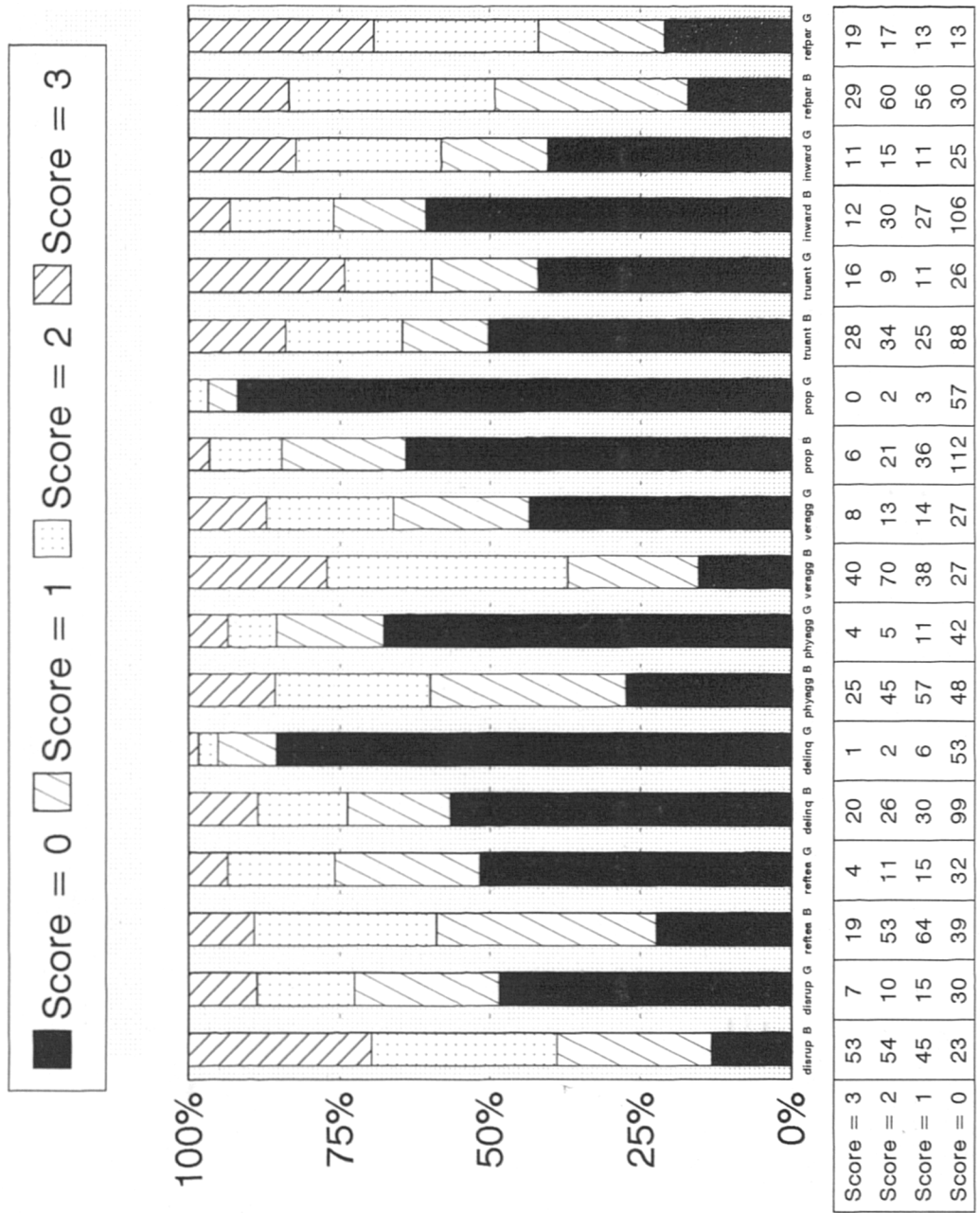
(boys (n = 175) / girls (n = 62))

this difference is an artefact of case file reports is unclear.

It should be noted that the scores only reflect behaviours reported by authority figures and, in some cases, by parents. The difficulty of detecting acts of vandalism may explain the high proportion of the sample who obtained zero on this ('prop' i.e. damage to property) measure. It is also likely that the tendency of teachers to report externalising rather than internalising behaviours may also have resulted in a disproportionate number of the sample receiving a zero for inward behaviour. This may help to explain the differences noted in the previous paragraph.

Academic ability

Table 4.20 provides frequencies of children falling into the three ability categories.

Table 4.20 Academic ability

Category	Number	%
Above average	9	3.8
Average	105	44.1
Below average	124	52.1
TOTAL	238	100.0

(missing cases = 21)

Although there are no local or national data with which to compare these figures, it should be noted that the Warnock Report (1978) suggested that approximately 20% of children would have special educational needs at some point in their school career. It can be argued that all the children in this sample have special educational needs by virtue of their behavioural difficulties. Warnock's all-embracing term, however, does not provide an estimate of the proportion of children who are likely to experience academic difficulties although it is clear that, if such a figure were available it would be substantially lower than that of the present sample.

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Administration

This category indicates which adult administered the CNSIE in each case. The data are shown in Table 4.21.

Table 4.21   Administration of the CNSIE

Administrator	Number	%
The present researcher	35	13.6
Another educational psychologist	33	12.7
Teacher	191	73.7
TOTAL	259	100.0

Race

The literature abounds with studies examining racial and cultural differences in locus of control (e.g. Battle and Rotter, 1963; Nowicki and Duke, 1983). Studies which have compared locus of control of adolescents from ethnic minorities in England include Louden (1978), (West Indian with English white and Asian) and Remy, (1983) (West Indian with English white).

The sample in the present study, however, consisted wholly of British-born children. Of these, only two children were of non-Caucasian origin (Afro-Carribean). The sample reflects the racial characteristics of Sunderland which has a very high proportion of white children in comparison with U.K. figures. Data from the 1991 Census, for example, indicate that the percentage of non-white people throughout Great Britain was 5.5%, five times the figure for Sunderland (1.1%). For this reason, race was not a variable examined further in this study.

Summary of the characteristics of the sample in the present study

The above data present a picture of a group of children who differ significantly from a representative local or national group. The sample tends to:

- include a disproportionate number of boys

- be more likely to live in a single parent family

- have more siblings

- have a very much higher rate of unemployment affecting both parents

- be more likely to be in the residential care of the Social Services Department

- have lower I.Q. scores

- be more likely to receive special schooling

- experience learning difficulties

The present sample represents a very particular subset of children in Sunderland which, in turn, is hardly representative of a national average. The theoretical conception of an underclass, marginalised from wider society, has recently been challenged by right-wing commentators, yet this notion seems to encapsulate the circumstances of the families in this study. It is recognised that the findings of this study cannot be generalised to the general population - which, of course, was never one of its intentions.

The extent to which the above circumstances relate to the sample's behavioural difficulties is unclear. Nevertheless, these are features of other studies which have examined children with similar behavioural difficulties.

The sample used for the semi-structured interview

The semi-structured interviews were largely undertaken with children in E.B.D. schools and disruptive units (see Table 4.22). This reflected the researcher's desire to focus greater

attention upon those children whose behaviour was perceived to be most problematic and, for more practical reasons, because of the relative ease of access.

Table 4.22 Semi-structured interview: type of school attended

School type	Boys	Girls	%
Mainstream	3	2*	12.2
Primary E.B.D.	10	0	24.2
Secondary E.B.D.	13	4	41.5
Disruptive unit	7	2	21.9
TOTAL	33	8	100.0

(* These two girls were temporarily resident at the Observation and Assessment Centre.)

The ratio of boys to girls reflects the considerable sex disproportion in units and schools for the behaviourally disordered throughout the U.K. Only one girl in the primary E.B.D. school was eligible by age although she appeared unable to understand certain questions in the Nowicki-Strickland Scale and, as a result, was not included in the study.

Having transferred from the post of educational psychologist to education lecturer, the author's opportunities to undertake structured interviews in mainstream settings and Social Services Departments were considerably reduced. In addition, the researcher thought it inappropriate to introduce a further set of probing questions from 'an outsider' to children who were currently undergoing multi-professional assessment.

Section C   Measures and Procedures

Section C is divided into two main subsections C1 and C2.

Subsection   C1:   the measures employed

Subsection   C2:   the procedures employed. This is further divided into three areas

C2(i)   how the procedures operated in different schools and settings

C2(ii)   administering the C.N.S.I.E.

C2(iii)   administering the semi-structured interviews

C1) Measures employed

As indicated in Chapter 2, it was decided that assessment and exploration of locus on control would involve a quantitative approach employing a self-report questionnaire (CNSIE) issued to the whole sample. A smaller subgroup (n = 41) would also engage in a more qualitative semi-structured interview. Judgements could then be made as to the contribution each technique could make separately and in combination with the other.

Chapter 2 outlines certain pyschometric properties of the CNSIE and indicates that these, together with its broad focus upon school, home, peers and belief in luck/fate, suggests that this measure would be appropriate for the present study. Although the Scale has been used in a number of British studies (e.g. Charlton, 1977, 1980, 1985a, 1986; Bascombe, 1984; Lindal and Venables, 1983; James, Charlton, Leo, and Indoe, 1991) the present researcher was concerned that some children may experience difficulties of comprehension. Accordingly, he piloted the measure by employing it in his ongoing casework with children with a range of special needs. In addition, he asked colleagues from the Educational Psychology Service to use the Scale and discuss with him their impressions of its suitability.

It was discovered that the length and grammatical complexity of some of the questions confused some of the children and could result in responses which did not convey their true perceptions. Such difficulties could be picked up relatively easily when the Scale was administered in a one-to-one interview but would be likely to be missed in a group administration setting, even if the items were presented orally. The researcher was satisfied, however, that the items were appropriate for the target population if opportunities were provided for questions to be repeated and/or clarified.

It was, therefore, decided that, in all cases, the Scale would be administered in an individual interview (see Section C2(ii) in this chapter "Administering the CNSIE" for further discussion of this and related issues). It was accepted that the price of ensuring the meaningfulness of the questions was a reduction in the standardisation of the administration. In the researcher's opinion, however, this was an acceptable price to pay.

The issues to explore in the semi-structured interview were selected, not solely from an appraisal of the locus of control literature, but also from consideration of the lives of the young persons who would be included in the study.

The researcher wished to explore locus of control beliefs in children whose lives were marked by interpersonal (and intrapersonal) conflict. Battles were fought in the home, at school and on the streets of their local communities. It seemed appropriate, therefore, that issues for exploration should focus upon such areas.

After deliberation and discussion with colleagues, it was decided that the following issues would be explored:

- avoiding, resolving and engaging in physical conflict with others (most likely same age peers)
- interaction/conflict with teachers
- social rejection by the peer group
- interaction/conflict with parents

- interaction/conflict with police officers

In addition, it was decided that an open question about an unidentified individual who was furious with the subject would allow exploration of interaction/conflict with significant others (e.g. sibling, grandparent, social worker, neighbour).

Each of these six areas was introduced by presenting the child with an incident and requesting a response, for example, being stopped by a police officer, ejected from the classroom, returning home with torn clothes and a black eye (see appendix 6 for outline questions). It was hoped that, for many of the children, these hypothetical vignettes would closely resemble past experiences and thus open up wider discussion of these and related issues. The use of specific incidents (either hypothetical or actual) to illuminate more general behavioural dispositions had long been an approach which this researcher had employed in his clinical work with children. This shift from the particular to the general appeared to facilitate the child's exploration of both his/her attitudes and patterns of behaviour.

Chapter 2 has suggested a theoretical difference between analysing past experiences (primarily the preserve of attribution theories) and considering future outcomes (the focus of locus of control). In order to assist children to engage with the issues, it was considered appropriate to examine past experiences first. Had the child been ejected from the class before and, if so, why? The child could then draw upon past experiences and recount what had happened and his/her understanding of the precipitating factors. Gradually, the researcher endeavoured to change the focus to the future. To what extent could the child influence future outcomes? Could he, for example, change his usual pattern of maladaptive behaviour and if so, would this be likely to result in a more favourable outcome. Although the first part of this question concerns other control-related constructs of self-control and personal causation, the second issue clearly concerns locus of control. The two, however, are interdependent and any attempt to explore locus of control in isolation from other similar constructs would be artificial and potentially uninformative.

After undertaking the first two interviews, the researcher decided to introduce a further question relating to more general beliefs about the future. This involved exploration with the children about what was desired for the future and the extent to which outcomes would be dependent upon their own behaviours, i.e. to what extent were they the agents of their own destiny? As with the other areas, it was decided that the initial exploration would focus upon past experiences (e.g. to what extent did the child consider that it was his/her own actions which had resulted in transfer to special education?) and subsequently shift to consideration of the future.

It proved impossible to generate on paper a question which would be suitable for all the children and, in many cases, the researcher struggled to find a way of presenting the question in such a way that it was understood by the child. It was decided, however, that it was worth persisting with this issue (see chapter 6, part 7, for discussion of findings derived from this item).

It was recognised that the children were not likely to engage with all the questions to the same degree and that some issues would be covered in much greater depth than others. Where a child was reluctant to respond to a specific issue (e.g. relationships in the home), the researcher may have deemed it appropriate to move on to another area. Thus, unlike, the CNSIE which required responses to all items, the interview topics were seen as possibilities for exploration which may, or may not, yield relevant information.

It is interesting to note that although the topics in the interview were drawn from consideration of important aspects of the children's lives, they also related quite closely to items contained in the CNSIE. The only real exception concerned interactions with police officers. Although it is widely recognised that delinquent acts are common activities for the majority of children, the experience of engaging with police officers may be rather more limited. The majority of the children in this study, however, tended to have little difficulty in relating this vignette to their own experiences. Of 237 children, where data were available

concerning the presence or absence of formal processing for delinquent behaviour, 85 (35%) had received a police caution or had been prosecuted for offending.

Wherever possible, the researcher endeavoured to use the vignettes to explore more decontextualised locus of control beliefs (e.g. belief in luck, fate, the value of effort), which are found in the CNSIE as separate questions.

As the vignettes were merely vehicles to open up discussion of what were deemed to be important aspects of the children's lives, there was no piloting stage. As indicated above, the topics were derived from clinical rather than from psychometric/empirical sources and it was recognised that no two interviews would follow exactly the same format. Furthermore, the researcher already had extensive experience of working in this fashion. It was recognised, however, that, as the interviews progressed, lines of questioning might be taken up or discarded on the basis of the children's responses. Indeed, it was noted that the early interviews tended to be rather shorter and more focussed upon the vignettes than those conducted subsequently.

It is possible to argue that the interviews could have been conducted more skilfully if twenty or thirty pilot interviews using the study vignettes had been undertaken. In practice, however, this was not feasible, for not only were there constraints of time and resources but, most importantly, access to children for relatively extensive interviews was limited. One alternative would have been to have removed an arbitrary number of the initial subjects from the subsequent analysis with consequent loss of data. Such a response, however, was deemed inappropriate for it was not clear what would be gained from this other than adherence to an 'ideal' of research methodology.

One of the research questions in this study involves consideration of the relationship between responses to the CNSIE and those obtained in the interviews. It was considered that the issues explored by these two methods were broadly (although not wholly) similar and thus, the major differences were related more to process than to content.

C2. Procedures employed

As the researcher was already an employee of the education department and had access to detailed records it was considered appropriate, by senior officers in the local education authority, for him to engage in the proposed research. It was agreed, however, that the normal rules of professional confidentiality would pertain.

The questionnaires were administered by the researcher, by psychologists in the Educational Psychology Service and by Headteachers/teachers in education/social services establishments. Undertaking the questionnaires was considered by senior management in these institutions to be part of the normal process of collecting data to inform the work undertaken with children.

All semi-structured interviews were undertaken by this researcher. Parents were informed in writing of the proposed interview and offered the opportunity to request further information, meet with the researcher, or express an unwillingness for their child to be involved. It was not possible to gauge to what extent the near total lack of parental response reflected a readiness to allow the interviews to proceed, a lack of interest/indifference or a sense of powerlessness to avail themselves of the options outlined. It is possible that some parents were uncomfortable about challenging seemingly powerful, middle-class professionals.

The headteachers/teachers in charge agreed to send a letter to parents detailing these points. Two letters were drafted by this researcher, the second made necessary by his transfer to another post (see appendix 5).

No parent asked for further details. One (single) parent refused to grant permission for her son to be interviewed. Because of a wrangle over a transfer to another unit, this parent was currently refusing to grant access to the Educational Psychology Service and was distrustful

of the purpose of the interview. This researcher was informed by the boy's teachers that she had said that she didn't want any more psychologists near her son because they'd been no help in sorting out his behavioural difficulties.

It was also made clear to all the children involved that this was a voluntary exercise which they could refuse to undertake should they so wish. (In the researcher's practice as an educational psychologist, this was an important element of all interviews). In practice, no child refused to assist in the study although, as would be normal practice, the teachers were careful not to approach the child should s/he be temporarily hostile or uncommunicative. Again, it was uncertain to what extent perceived power differentials resulted in the children's compliance.

In all cases where questionnaires were administered by others (teachers = 73.7% and psychologists = 12.7%) the researcher met with the administrator, the scale was discussed, the need for minimising social desirability or cueing was stressed and possible difficulties considered (e.g. the difficulty some children might have in understanding certain questions). In addition, written guidelines were also provided (see appendix 4).

C2 (i) How the procedures operated in different schools and settings

This section describes how access to the children and the means of administration of the Nowicki-Strickland scale and semi-structured interview were agreed upon with school staff. The way in which the researcher dealt with this is outlined below. Each type of school is dealt with individually and the administration of the Nowicki-Strickland Scale and the interview are each addressed in turn.

a) mainstream schools

i. Nowicki-Strickland Scale

Colleagues in the Educational Psychology Service were asked to use the Nowicki-Strickland questionnaire with any appropriate children with whom they were currently working. Although colleagues expressed a willingness to assist in the administration of questionnaires, the number of actual cases assessed in this way was comparatively low (12.7%). It was apparent that competing demands upon educational psychologists' time, during a period when many are feeling pressurised to complete an increasing number of assessments (D.E.S. 1990), placed a considerable constraint upon their perceived ability to adminster the questionnaire, particularly in mainstream settings. The use of self-report, personality questionnaires is not a feature of this Service although some educational psychologists use open-ended problem checklists (e.g The Lewis Counselling Inventory (Lewis and Pumfrey, 1978); the Mooney Problem Check List (Mooney and Gordon, 1950)) when clients are not responding to unstructured interview techniques. Several educational psychologists who used the Nowicki-Strickland scale, however, drew upon the data in their subsequent reports.

It was interesting to note that the Scale was more readily employed by educational psychologists when working with children in special facilities (special schools and the observation and assessment centre). This would seem to reflect the different task demands of each setting - mainstream school assessments requiring the use of a narrow range of measures such as academic attainment and I.Q.

ii. Semi-structured interviews

All such interviews in mainstream schools were undertaken by this researcher as part of his ongoing casework.

b) special schools for children with emotional and behavioural difficulties

Within the City there are two such schools, one primary, catering for children between the ages of five to thirteen, and one secondary, catering for children aged between thirteen and sixteen. Children in these schools are subject to a statement of special educational needs.

i. Nowicki-Strickland Scale

In both schools the headteachers were approached and asked to administer the scale to those children who had not already completed the questionnaire. Both headteachers offered their full support. All children in these schools aged nine years and above received the scale with the exception of four who were truanting on a semi-permanent basis.

In the case of the secondary school the task of administering some of the scales fell to the children's group teachers.

In the primary school the majority of the questionnaires were administered by the headteacher. In a small number of cases the task was undertaken by a classteacher.

ii. Semi-structured interviews

Prior to granting permission to conduct the interviews the headteacher of the secondary school obtained the approval of the school governors. The primary E.B.D. school did not seek governor agreement as this had already been considered in the case of other researchers and it had been agreed that responsibility for such decisions should be left in the hands of the headteacher.

A letter was drafted by the researcher and copies sent to all relevant parents by the Headteachers (see appendix 5)

c) special schools for children with moderate learning difficulties

- the primary M.L.D. school

Although a number of children in primary special schools for children with moderate learning difficulties were manifesting behavioural problems, except in one case, the severity of their intellectual difficulties was such as to render the administration of the CNSIE invalid.

- the secondary M.L.D. school

i. Nowicki-Strickland Scale

The researcher spoke initially with the headteacher and deputy headteacher. They agreed to administer the scale to those children experiencing particularly severe behavioural difficulties who, in their opinion, would be able to understand the questions asked of them. The scale was administered by the deputy headteacher and a senior colleague.

ii. Semi-structured interview

Given the emphasis of the interviews upon interpersonal conflict it was decided that interviews would be targetted upon children attending E.B.D. schools and disruptive units. As a result, children in M.L.D. schools were not included in the semi-structured interviews

d) disruptive units

There are two disruptive units in the City, one for children in the first four years of secondary education, the other for children in their final year of statutory education.

i. Nowicki-Strickland Scale

In the unit for younger children the assessment was undertaken by the teacher-in charge. In the unit for senior pupils, one of the teachers with particular responsibility for personal and social education administered the Scales.

It was hoped that all children in the units would receive the scale although, because of frequent pupil absences, this was not possible. Furthermore, the researcher was reliant upon the assistance of unit staff for whom this task was, understandably, a lesser priority. As a result, some children entered and left the units without receiving the Scale. It was considered by this researcher to be undiplomatic to press for details about these children although, on the basis of casual discussions, it is thought that their number did not reach double figures.

ii. Semi-structured interviews

As in the E.B.D. schools a letter seeking consent was drafted by the researcher and sent to all parents (see appendix 5) As indicated above, one parent witheld her consent.

e) observation and assessment centre

This facility is managed by the City's Social Services Department. It caters for children from 9 to 19 years and offers remand and assessment facilities. With rare exceptions, the children present with a range of behavioural difficulties which require a relatively high level of staff support and surveillance.

i. Nowicki-Strickland scale

The Officer in charge of the establishment agreed to permit the Centre's senior teacher to administer the scale as long as this did not impede him in the course of his normal duties. As the turnover in this establishment is considerable, it was understood that the scales would

be administered whenever suitable opportunities arose. As the key variable was staff opportunity (and there were no reported instances of refusal to complete the scale), it is possible to conclude that those tested were representative of the population passing through the Centre.

ii. Semi-structured interviews

Two interviews were conducted by this researcher as part of his ongoing casework. Although it would have been helpful to have carried out further interviews, permission to undertake these was not sought. Given the extent to which the children in this Centre were the subjects of continuing interrogation, assessment and observation, it was not considered by this researcher to be in the children's interests to subject them to a further clinical interview.

f) community homes with education on the premises (C.H.E.s)

The City's Social Services Department maintains three C.H.E.s which tend to cater for children of secondary school age. Two of the institutions cater for both sexes, the third for boys only. Given a philosophy within the Social Services of deinstitutionalisation, C.H.E. placements are avoided wherever possible. Children who are perceived to have fewer difficulties (or whose difficulties are not manifested in school) are more likely to be placed in foster care or community homes (without education on the premises) and attend local schools. As a result, children placed in C.H.E.s are usually considered to have substantial emotional and behavioural difficulties which require considerable professional support and guidance.

i. Nowicki-Strickland scale

This researcher approached each of the three Officers-in-charge and permission was agreed for the senior teacher to administer the scale to the children. In the case of the single sex

establishment, the officer in charge ruled that the scales should be completed anonymously (although this was an afterthought and was not made known to the researcher until the questionnnaires were returned). In some cases, however, the age of the child was provided. Despite the researcher's efforts it was impossible to obtain further details, for to press more strongly for details could have strained goodwill and affected future working relationships between the education and social services departments. Although the absence of valuable data necessarily reduced the use to which the scale information could subsequently be put, the completed scales were still considered worthy of inclusion.

As it was apparent that, in each case, agreement was given rather reluctantly by the officers in charge (perhaps only in order to preserve interdepartmental goodwill) the data were gathered on a once only basis.

ii. Semi-structured interviews

Given difficulties of access, interviews were not undertaken with children in these settings.

As children moved from one resource to another, there were a small number of instances when a child was readministered the CNSIE in another setting. In such cases only the data from the first administration were utilised. Although analysis of subsequent responses might have provided an interesting measure of test-retest reliability, the confounds of maturation and institutional effects would have rendered such analysis problematic, and such activity was deemed to be outside the scope of the present study.

C2 (ii) Administering the C.N.S.I.E.

In some cases the scale was administered as part of this researcher's casework with individual children. For the majority of cases, however, it was undertaken as a separate and discrete activity. In all cases the child was informed that the administration of the scale

formed part of a research project examining young people's views about their lives. Each child was informed that responding to the scale was a voluntary activity (indeed, this was the researcher's standard practice when operating as an educational psychologist) and, in the event, only two children refused to participate. These were sixteen year old boys who had recently been admitted to a disruptive unit and were not previously known to this researcher. One of these boys was busily engaged in fieldwork activities (as part of the Unit's enterprise week) and appeared reluctant to have his energies diverted. The other's low-key refusal seemed more motivated by a desire to avoid sensitive issues.

It is recognised that a major weakness in the design was the administration of the scale to children who were currently undergoing psychological assessment (and who were, in some cases, aware that placement decisions might hinge upon their performance in a variety of settings) and those for whom the scale might seem of less relevance to their future lives. Drawing upon the theory of locus of control, one might hypothesise that externals would not see their responses as having a bearing upon placement decisions while internals, believing that their actions influence outcomes, would be more likely to endeavour to present their answers in a fashion that they would consider to be socially desirable.

In practice, however, this may be according the great majority of the sample too great a level of sophistication. In this researcher's experience many of the children, of whom this sample is representative, have little grasp of the subtleties and nuances which pertain to clinical interviews and confine their attempts to influence outcomes to promises that they will stop (or continue!) truanting, sniffing solvents, running away from home and the like.

Nowicki and Strickland (1973) found nonsignificant correlations between scores on the CNSIE and social desirability (as measured by an abbreviated form of the Children's Social Desirability Scale (Crandall, Crandall and Katkovsky, 1965) for children aged between 9 and 18 years. Similarly, nonsignificant findings were found by Wyner and Blanchard (1976) with children aged from 9 to 13 years. Indeed it seems likely that many children would find it difficult to ascertain which responses to the Nowicki-Strickland would be socially

desirable. This is an issue, however, where further exploration would seem desirable. Furthermore, in the experience of this researcher in conducting hundreds of interviews with children with emotional and behavioural difficulties, it is rarely the case that their responses are simply geared to please. In many cases, however, more instrumental concerns may operate with answers tailored in the hope that certain outcomes may follow (e.g. that they be readmitted to their original school).

During this project only questions 4 and 18 from the scale appeared to this researcher to be problematic regarding social desirability (as opposed to conceptually). Question 4 asks:

> "Most of the time do you feel that getting good marks in school means a great deal to you?"

Of the sample, 76.8% replied affirmatively, a statistic which appears relatively plausible. Of course, a positive response does not indicate that a sustained attempt is made to obtain good marks.

Question 18 asks:

> "Are most other kids your age stronger than you are?"

The conceptual difficulties relating to such questions are dealt with in chapters 2, 6 and 8. The issue here is that for many adolescent males an affirmative response may prove embarrassing. This may be particularly the case with the population being studied. In practice, however, there was no clear split by gender. Of the sample, 58.7% provided a negative response to question 18 with no statistically significant difference between boys and girls.

Many of the children puzzled over how to respond to this question and some would clearly have welcomed a neutral category. Such a question may have proven easier to answer in the more anonymous group administration.

Although the scales were administered by several teachers and psychologists, attempts were made to ensure that the children's responses were not influenced by experimenter effects. Fortunately, the personnel concerned were all experienced professionals with expertise in the field of assessment and testing. After discussing the questionnaires with the individuals concerned, this researcher was satisfied that there was sufficient understanding of the subtleties involved.

A more difficult dilemma was that the children often needed to have the questions repeated and occasionally elucidated. In resolving this difficulty, this researcher suggested to his colleagues that they should follow the same principles as he, that is that a certain degree of elaboration was acceptable as long as it served to clarify the issue under consideration and did not, in itself, materially affect the child's response. The key issue was that the child had a full understanding of the relevant question. In practice, colleagues did not report any significant difficulties in this respect.

A particular difficulty lay in the wording of the scale. Although some British researchers have made no amendments to the scale to reflect the vocabularies of U.K. samples (e.g. Raine et al., 1981; Lindal and Venables, 1983), this researcher followed the procedure of others in making minor adjustments to the Nowicki-Strickland Scale (Louden, 1977; Remy, 1983; Bascombe,1984; Charlton, 1977, 1985a; James, Charlton, Leo and Indoe, 1991).

Prior to the start of the study, the original scale (and its redrafted version in which a small number of American words were substituted for English - see appendix 11) was piloted by the researcher as part of his casework sessions. It was immediately clear that inherent difficulties lay less in the use of certain single words (e.g. the use of smarter or cleverer, kids or children) than in the complex and, sometimes confusing, grammatical constructions employed (kids, for example, is a perfectly acceptable expression in the North-East of England and was retained in this study). Certain constructions proved difficult for some of the children to comprehend fully, for example, question 8 asks:

"Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?"

The length and complexity of the question proved demanding for some children and it proved necessary to break it into manageable chunks to assist comprehension.

Other questions resulted in affirmative or negative responses which contradicted the child's true response. For example, a frequent response to question 36:

"Do you feel that when someone doesn't like you there's little you can do about it?"

was a shake of the head and a 'no' response. The child, in fact, was indicating that s/he felt s/he couldn't do anything in these circumstances - 'No, there's nothing I can do about it' - yet the answer which should be given in such a case is the affirmative. A similar difficulty was reflected in question 33:

"Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?"

Here, as before, a number of children were confused as to which answer reflected their position.

The use of a variety of negative forms is recognised as a problematic aspect of the CNSIE by its author (Nowicki, personal communication). Helfrich (1986) in a consideration of methodological artifacts in personality questionnaires, argues that particularly confusing features of negative items in such measures are those where negation refers only to a word group or a single word, rather than a whole sentence (Wason and Johnson-Laird, 1972), and where certain words are negatively evaluated and therefore psychologically equivalent to negatives. When psychological negatives are added to a syntactic negation they have an effect comparable to a double negative sentence (Sherman, 1976). Both difficulties are

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evidenced in the CNSIE, coming together, for example, in question 19:

"Do you feel that one of the best ways to handle most problems is just not to think about them,?"

Here, one finds a negative form which refers only to the final part of the sentence, together with a psychological negative (problems) coming shortly beforehand. The effect of these is to increase the processing demands upon the respondent.

These difficulties were not insuperable within an interview situation as it was, to some extent, possible to ascertain when the child was confused and/or to check that the child's response matched the message that was intended. Of course, it was essential that an intervention did not suggest to the child that the first answer was 'wrong' (Mehan, 1973), but rather that clarification was being sought. This point was made clear to all the administrators of the scale before the project began. Subsequent feedback indicated that it was not felt that children changed their answers as a result of the process of exploration, although, despite the request for candid feedback, this could be influenced by the perception that this is what the researcher wanted to hear.

Given the care and precision necessary on the part of the experimenters to ensure that children's responses reflected their true positions, one must seriously question the administration of this scale to large groups of British (and possibly American) children unless great caution is taken. In the search for a highly standardised procedure it seems very possible that some answers will be misleading and inaccurate and, therefore, validity will be reduced.

In their quest for standardisation of administration some writers (e.g. Charlton, 1985a) have tape recorded the questions, yet others, in trials, (e.g. Bascombe, 1984) have found that this could not take account of the differences between groups of children in responding.

Scoring was facilitated by the creation of a stencil which could be overlaid upon the response

sheets. Gaps in the stencil indicated the external response for each item and, as a result, the sheets could be scored quickly and accurately. Results were then transferred onto special sheets provided by the University Computer Centre. Recognising the ease with which large sets of data can be incorrectly coded (Smith and Dechter, 1991), each entry was doublechecked in order to ensure that errors had not been made.

C2 (iii) Administering the semi-structured interview

Although it had been intended to conduct the interviews immediately after the questionnaire, it was soon apparent that the ability of the children to focus their attention for such a long period was generally lacking. It was usually necessary, therefore, to have a follow-up interview which, in the majority of cases, was undertaken several weeks after the scale administration.

a) Interviews as part of casework

In the small number of cases where interviews were part of casework (n = 7) these took place after a number of preliminary interviews had been undertaken and, it was hoped, rapport had been established. The voluntary nature of work with an educational psychologist was already known to the child and his family.

The normal procedure adopted in the clinical work of this researcher was for academic and intellectual assessment to be undertaken at the earlier stages with the focus gradually shifting to the potentially more problematic interpersonal sphere as the child-adult relationship strengthened.

Of these seven cases, two were tape recorded. In one of these cases it was subsequently considered that the presence of the tape recorder may have proven inhibiting despite consent being granted by the child beforehand. As a precaution the researcher thought it more appropriate to record the other five children's answers by hand. A further aid was the use

of a dictaphone into which the researcher spoke immediately after the cessation of each interview.

b) Interviews with children outside of casework

Given that children may have had misconceptions about the nature or purpose of the interview based upon what they have heard from children who have already been interviewed (Breakwell, 1990), it was important to ensure that this was not the case. The format was explained and each child was informed that undertaking the interview would be a great help to the researcher and that participation was voluntary. Of those approached, two children (who had earlier completed the CNSIE) declined to be interviewed.

It was explained to each child that the use of the tape recorder would be helpful in the data gathering exercise as it was difficult to record or remember their answers. Only one child refused to allow the recording. (Interestingly, her subsequent interview, which she allowed the researcher to record by hand, was full of rich detail with replies resembling a fast and torrential outpouring of consciousness.) Given an assurance that all replies would be treated in confidence, the other children appeared quite content (and in many cases, flattered) to allow the tape recording to be made.

It was striking to note how tiring many children (and this researcher) found the exercise. Unlike intellectual/academic assessment, with its emphasis upon short, focused tasks, switching from a concrete to abstract format, many children found the interview questions particularly demanding. The focus upon hypothetical issues and the searching questions (unlike those with which the children were usually familiar) often proved taxing. In many cases it is possible that the format of the interview was a novel and bewildering experience. Ravenette (1977) describes how his attempts to employ personal construct theory with children often resulted in a lack of engagement:

"Gradually it dawned on me that when I was asking my clients to produce

constructs I was inviting them to **do something they had never done before.**
That being the case, they were committed to finding expressions for abstractions
which they had never before verbalised, or they had to generate abstractions
where previously their experience, their thoughts and feelings had been
relatively fluid. Under these circumstances it is not surprising that they found
the task very difficult and exhausting" (p.261; emphasis as in original).

It was often comparatively easy to spot when the children were becoming weary, bored or

discomforted by the line of questioning, as their length of utterance and frequency of eye

contact decreased. Answers tended to become shorter (often 'yes', 'no' or 'don't know'),

the children became less animated and their body posture slumped. The most effective way

to respond proved to be a change of tack in which less demanding topics such as television

programmes, favourite cars, leisure pursuits were introduced into the dialogue. One child,

Stephen, for example, had proven very communicative from the outset and a friendly and

good-natured relationship had been quickly established. When presented with the vignettes,

he had been happy to discuss conflicts with police, peers and teachers yet as questions began

to probe his relationship with his mother, he became discomforted, started to supply short

answers and increasingly employed non-verbal responses (shaking his head, shrugging his

shoulders) as if to indicate that he didn't know the answers to the questions proferred. The

researcher was immediately aware that rapport needed to be re-established although the

subsequent line of questioning was not proving helpful. When asked what he planned to do

upon leaving school, Stephen replied, 'Don't know'. When asked if he had given any

thought to his future, he replied, 'No'. By this time, it was clear to the researcher that the

subject matter needed to become more concrete and more neutral even though this meant

deviating from the topic being researched. By asking about motorbikes the researcher was

able to regain Stephen's interest and establish rapport once more. A subsequent attempt to

discuss future expectancies was not fruitful, however. It was clear that, by this time, Stephen

had had enough.

It has been noted (Harter, 1988; 1990) that children may often have little interest in, or

capacity for, analysis of their own attributes. Preadolescent children, in particular, are often

more interested in directing their energies to analysis of the external, concrete world rather

than exploring internal aspects such as characteristics of the self and its impact upon affective and motivational processes. Harter (1990) suggests that the capacity to introspect about one's attributes or personality is not fully developed until adolescence. It is possible, therefore, that exploration of complex issues relating to self-perception, as opposed to dialogue about who did what to whom, proved difficult for many of the children..

Furthermore, children with emotional and behavioural difficulties may often present with poor communicative skills and be reluctant to engage in dialogue with adults. Although the majority of the subjects in this study were approachable and responsive, their general lack of verbal facility was evident. Table 4.18 shows that 164 children (of the total sample of 259) had earlier received an intellectual assessment (verbal) using the British Ability Scales or the Wechsler Intelligence Scales for Children (Revised). These children scored a mean verbal I.Q. score of 85.4 (S.D. 14.6). Assuming that the interviewees were a representative subsample of the 164 receiving intellectual assessment, the data would suggest significant verbal deficits in comparison with those upon whom the test was standardised . A very real difficulty for the researcher was finding appropriate grammatical constructions and vocabulary to ask questions, which were difficult and complex, in a fashion which did not signal a desired answer. Conner (1991) emphasises this point by quoting advice offered by the Ford Teaching Project (undated):

> "Children often need help to express themselves. The interviewer should, however, be very careful when in this situation. If too little help is given, the child may simply respond with monosyllabic answers or 'I don't know'. If too much help is given, the child may believe that you want him or her to give a specific answer. You will end up by putting the words into the child's mouth and having the child agree with what you have to say" (p.89).

Many of the children interviewed did not relish detailed examination of issues, particularly if this involved going over their answers more than once. This was frequently necessary as their answers often lacked consistency. Often children contradicted earlier statements and it was necessary to explore these with them. Such explorations, however, were not conducive to maintaining the child's engagement. It was also clear that the children were very open to suggestibility and, once again, the researcher's efforts to ensure that experimenter

effects were minimised by exploring answers had the frequent effect of reducing the children's motivation.

The difficulties of interviewing children are discussed by Piaget (1929) whose espousal of the clinical interview is tempered by a number of caveats. In his text, Piaget points out the difficulty of systematically following a line of enquiry while simultaneously allowing the child to speak unfettered by adult suggestion or expectation:

> "It is so hard not to talk too much when questioning a child, especially for a pedagogue. It is so hard not to be suggestive. And, above all, it is so hard to find the middle course between systematization due to preconceived ideas and incoherence due to the absence of any directing hypothesis" (p.20).

As an experienced clinician (and pedagogue), this researcher was aware of the practical difficulties of interviewing children. Cognisance, however, does not necessarily imply competence and, on many occasions during the interviews, mistakes were made. Hopefully, the majority of these were recognised, either at the time of commission or subsequently. The guiding principle for the researcher was to endeavour to reduce the effects of experimenter bias to as great an extent as possible.

Chapter 6 outlines these difficulties in greater detail and an attempt is made to demonstrate the extent to which they confound the researcher's attempts to assess individuals' locus of control beliefs.

Section D   Blind rating of transcripts

An important element of the present study concerned the exploration of the relationship between an individual's total score on the C.N.S.I.E. and his/her response to the vignettes. Would a highly external score on the scale be reflected by a tendency towards external responses in the semi-structured interviews? Did the two measures complement each other or did they provide opposing findings? If the latter were the case, what was their validity?

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To what extent could one accept the observation of Steven Nowicki (personal communication), the author of the C.N.S.I.E., uttered only half in jest that:

> "If they measure the same thing you have convergent validity. If they don't, you have discriminant validity."

The researcher considered it necessary to offer each transcript to more than one rater. This would enable examination of differences of perception for the same child. The number of cases and ratings of each, was necessarily limited by the availability of colleagues who were prepared to assist.

Although the complete sample of forty one cases would have proven ideal, it was recognised that this would render it impossible to have several ratings of each case. Instead, it was decided that the researcher would select a small number of children scoring at the extremes of the C.N.S.I.E. It was hypothesised that not only might these children's responses be of particular clinical interest, but also that this would increase the likelihood of finding significant differences in responses to the vignettes. The key issue was whether blind raters of the transcripts would be able to identify those whose scores on the C.N.S.I.E. were indicative of high internality or externality.

From the forty one transcripts, twelve were selected for blind rating. These consisted, with one exception, of the six most internal and six most external scores. The transcript of one child, with a highly internal score, was not used as he had proven relatively uncommunicative in the interview and there did not appear to be sufficient data upon which to base a judgement.

It was decided that each transcript would be rated by four different individuals. With a total of twelve children, this would require forty eight separate ratings. It was anticipated that colleagues would each be willing to read as many as four transcripts and, therefore, the researcher needed to obtain the support of twelve suitable colleagues. It was considered that

educational psychologists and heads of special educational establishments would have the necessary expertise to undertake this task.

Those approached proved most willing to offer assistance and only one individual declined, through pressure of work, to undertake the rating task. The final twelve raters consisted of four maingrade educational psychologists, one principal and five senior educational psychologists, one senior lecturer in education (and a former educational psychologist) and a headteacher of a school for children with emotional and behavioural difficulties. None of the children were known to their raters and, in addition, all names were fictitious.

Each rater was presented with transcripts from four children, two scoring highly internally and two, highly externally. In order to avoid influencing the ratings, in particular, possibly biasing ratings towards the polar extremes, the researcher made no reference to the fact that the sample consisted of extreme scorers. As far as possible, combinations were changed and no two raters received the same group of four cases.

At the outset of this activity, the researcher spoke individually with each of the raters. He explained the nature of the task and offered a brief outline of the locus of control construct. In addition, he provided a letter outlining the task, a page of text describing the construct and a pro forma upon which to enter the four ratings (see appendix 8). Finally, he requested each rater to telephone him if perusal of the transcripts threw up any issues which required clarification or elaboration.

Further details about the C.N.S.I.E. scores of the twelve children selected and the findings from this part of the study are included in Chapter 7.

Chapter 5 Quantitative analysis: results and discussion

Outline of the chapter

"One of the most severe diseases in psychological research is the misuse of tests of statistical significance. Most often, only results of studies which yield statistically significant results are presented. Access to computers which enable a researcher to search for the existence of significant relations in any set of data has increased the presentation of randomly appearing statistically significant results. Measures of probability are often presented without analysing whether or not the necessary conditions have been met at least approximately. Moreover....we accept correlation coefficients which are significant at the 5 per cent level of significance though they may explain only a small portion of the total variance. As a result of these three circumstances, we pile up empirical results of which only a small part has the necessary scientific quality to form the basis for real scientific progress. In combination with the tendency to study single aspects of individual functioning, isolated from their context of the total functioning of the individual, the effect is that much empirical research in personality leads to the accumulation of meaningless data" (Magnusson, 1992, p.9).

In accumulating a huge database of statistical information and with access to powerful mainframe and microcomputers, this researcher recognised the seductive urge to undertake an ever increasing number of numerical calculations in the search for the Holy Grail of the naive researcher, statistical significance. Magnusson's words served as a continual reminder that the goal of the present study was to obtain psychologically meaningful, rather than merely statistically significant, relationships between the variables under study. It is often easy to forget that there is a considerable difference between a significant and a statistically significant finding (Tyler, 1931; Morrison and Henkel, 1969; Carver, 1978).

A secondary goal of the analysis, however, was to explore the utility of different quantitative techniques in gaining greater understanding of complex data.

This chapter presents the findings from the quantitative aspects of the study. It is divided into four sections:

Section 1 presents the distribution of CNSIE scores for the 259 subjects and explores the relationship between these and each of the variables (e.g. parental unemployment, academic ability, behaviours) outlined in Chapter 4.

Section 2 examines alternative ways of exploring the relationship between the CNSIE data and the above variables. It considers the value of clustering groups of CNSIE items together and exploring the relationship between each of these groups and the study variables. The methods of grouping employed are, factor analysis, cluster analysis and non-metric multidimensional scaling (NMMS).

Section 3 details how the nine behaviours were clustered into two groups. The relationship of each of these groups to the CNSIE scores is then explored. Subsequently, each of the CNSIE's 40 items is examined to ascertain whether an internal as opposed to an external response demonstrates a significant difference on either of the two behaviour clusters.

Section 4 explores whether extreme scorers (internal versus external) demonstrate clear differences on any of the study variables.

Section 5 contains a summary and brief discussion of the findings. These are examined in greater detail in chapter 8.

Section 1   Locus of control

Total scores from each of the 259 children in the sample were analysed using SPSS-PC (Norusis, 1991) and SPSS-X (SPSS, 1988).

The distribution of subjects' total scores on the CNSIE (n = 259) is presented in Figure 5-1. The mean score was 17.92 (SD = 4.59). Other than for the youngest children, this mean is several points higher (i.e. more external) than those, for each age group, presented by Nowicki and Strickland (1973).

Figure 5-1 Distribution of CNSIE scores (n = 259)

(n = 259)
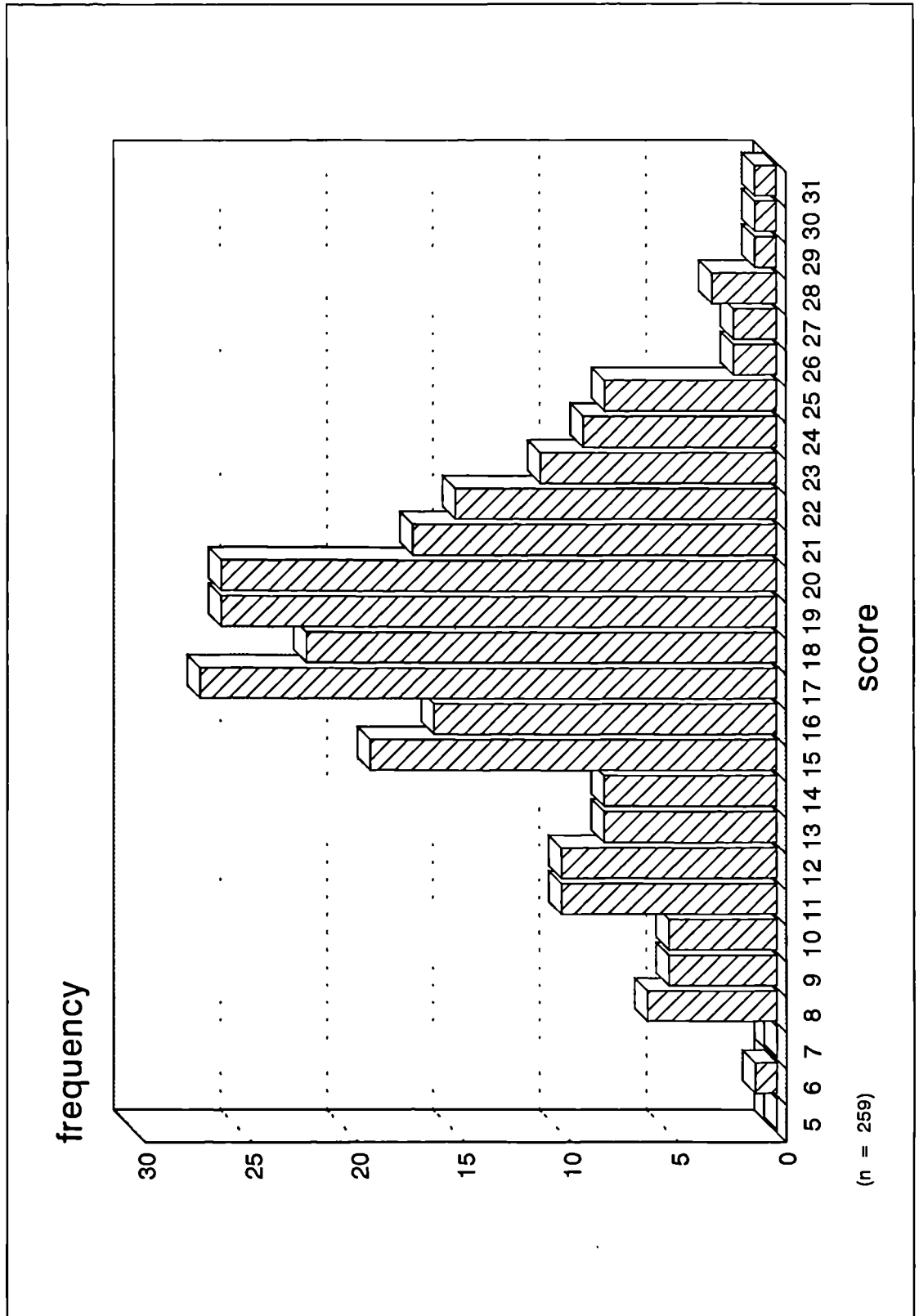
Although comparisons with other British samples is difficult, given the scarcity with which sample means are provided, it is enlightening to compare the responses of the present sample with those of approximately 13,000 British children (aged 10-11 years) to the CARALOC scale (Osborn, personal communication) undertaken as part of a major longitudinal study (Osborn, Butler and Morris, 1984; Osborn and Milbank, 1987).

Table 5-1 presents the percentage of children providing an **internal** response to each of the five CNSIE items which are also included in the CARALOC.

Table 5-1 Percentage of children providing internal responses to parallel questions in the CNSIE (items 5,7,10,37 and 38) and the Caraloc.

Question number	Sunderland total sample (n=259)	Sunderland sample (aged 10/11 years only (n = 34)	Caraloc sample (n = 9,000 - 11,000)*
5	20.1	26.5	41.4
7	62.2	55.9	77.2
10	74.5	67.6	56.4
37	65.6	55.9	87.4
38	54.1	41.2	48.8

(*n.b. Caraloc percentages were computed only after those who responded 'don't know' were withdrawn from the analysis)

It is interesting to note that the Sunderland 10-11 year olds only responded more internally to question 10, "Do you think that wishing can make good things happen?" Perhaps their response to this item reflects the harsh lives of a sample for whom wishing has been frequently found to fail.

It seems appropriate to conclude, albeit tentatively, that the present sample reflects the suggestion in the literature that emotional and behavioural difficulties are related to higher levels of externality.

The apparently normal distribution of the present sample's CNSIE responses (see Fig 5-1) was reflected by appropriate levels of skewness and kurtosis. The distribution of these data was, therefore, deemed appropriate for parametric analysis. (N.b. Normal distributions are tested by two measures, skewness and kurtosis. Skewness measures whether the data are symmetric about the mean and kurtosis measures the degree of steepness in the middle part of the distribution. Parametric analyses were only conducted in the present study where both skewness and kurtosis indicated a normal distribution.)

The relationship of each of the study variables with CNSIE scores was then computed. This permitted a series of comparisons to be made. Were males, for example, more internal than females? Was I.Q. correlated with internality-externality? Was family size linked to CNSIE scores? The results of this analysis are provided in Table 5-3 (overleaf). In addition, each of these variables are considered in turn, below.

Sex

Table 5-2 provides further details of total CNSIE scores by sex.

Table 5-2   Mean scores on the CNSIE by sex

Sex	Number	Mean	S.D.
Boys	194	17.45	4.56
Girls	65	19.32	4.34
TOTAL	259	17.92	4.59

As indicated in Table 5-3, the difference between the means was statistically significant. The tendency for girls to be more external has been found in a number of studies (see chapter 2 for discussion) and is borne out in the present study. It should be noted, however, that Dyal (1984) argues that this 'fragile effect' (p.268) varies according to sample characteristics.

Table 5-3   Relationship between CNSIE scores and study variables

Variable	Test employed		Significance
Sex	T-test	t = -2.89, df = 257	*
Age	Pearson's r	r = -.1678, n = 246	*
Age of referral	Pearson's r	r = .004, n = 241	N.S.
Family	Oneway Anova	F = .6034, df = 3,224	N.S.
Siblings	Pearson's r	r = -0.0390, n = 226	N.S.
Family Position	Pearson's r	r = -0.0596, n = 226	N.S.
Employment	Oneway Anova	F = 1.6238, df = 3,184	N.S.
Care	Oneway Anova	F = 2.5726, df = 3,255	N.S.
Fulliq	Pearson's r	r = -0.0997, n = 157	N.S.
Verbiq	Pearson's r	r = -0.1075, n = 158	N.S.
Visiq	Pearson's r	r = -0.0386, n = 164	N.S.
School	Oneway Anova	F = 1.7731, df = 6,251	N.S.
Disrup	Spearman's r	r = -.0221, n = 237	N.S.
Reftea	Spearman's r	r = -.0060, n = 237	N.S.
Delinq	Spearman's r	r = -.1179, n = 237	*
Phyagg	Spearman's r	r = .0518, n = 237	N.S.
Veragg	Spearman's r	r = .0042, n = 237	N.S.
Prop	Spearman's r	r = .0794, n = 237	N.S.
Truant	Spearman's r	r = -.1202, n = 237	*
Inward	Spearman's r	r = -.0419, n = 237	N.S.
Refpar	Spearman's r	r = .0798, n = 237	N.S.
Acad	T-test	t = -2.15, df = 227	*
Admin	Oneway Anova	F = 0.9090, df = 2,256	N.S.

(* indicates significance at .05 level)

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Age

Table 5-3 indicates a significant negative correlation between age and total CNSIE score indicating a trend towards internality for older children. Although significant, the correlation coefficient is extremely small.

A correlation between variables may not reflect sudden age-related shifts in locus of control scores and may, therefore, conceal important relationships. Beauvois and Dubois (1988), for example, have argued that researchers should recognise that environmental factors, which operate at certain ages, may have a bearing upon children's locus of control.

For this reason, mean scores for each year group were computed. These are presented in Table 5-4 and, in graphic form, in Figure 5-2.

Table 5-4   Mean scores on CNSIE by age of respondent

Age (years)	Number	Mean	S.D.
9	13	19.62	5.39
10	13	19.08	4.41
11	21	19.14	2.71
12	25	19.16	3.41
13	31	16.58	5.20
14	46	18.46	4.77
15	67	17.06	4.72
16	30	17.10	4.78
TOTAL	246	17.90	4.62

missing cases = 13

A relationship between age and increasing internality has been suggested in the literature although, as chapter 2 demonstrates, this is far from a conclusive finding. The younger children in the present study appear to have slightly higher (i.e. external) scores although

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the pattern is not linear (see Figure 5.2).

Figure 5-2 indicates a relatively abrupt shift towards the internal pole between the ages of twelve and thirteen although scores for fourteen year olds climb in the opposite direction. Interestingly, the standard deviation is comparatively large. It is hard to explain these findings. One obvious factor could be transfer from primary to secondary school although, in the case of the special school children, this takes place at age thirteen rather than eleven.

Figure 5-2   Mean score on CNSIE by age (years)
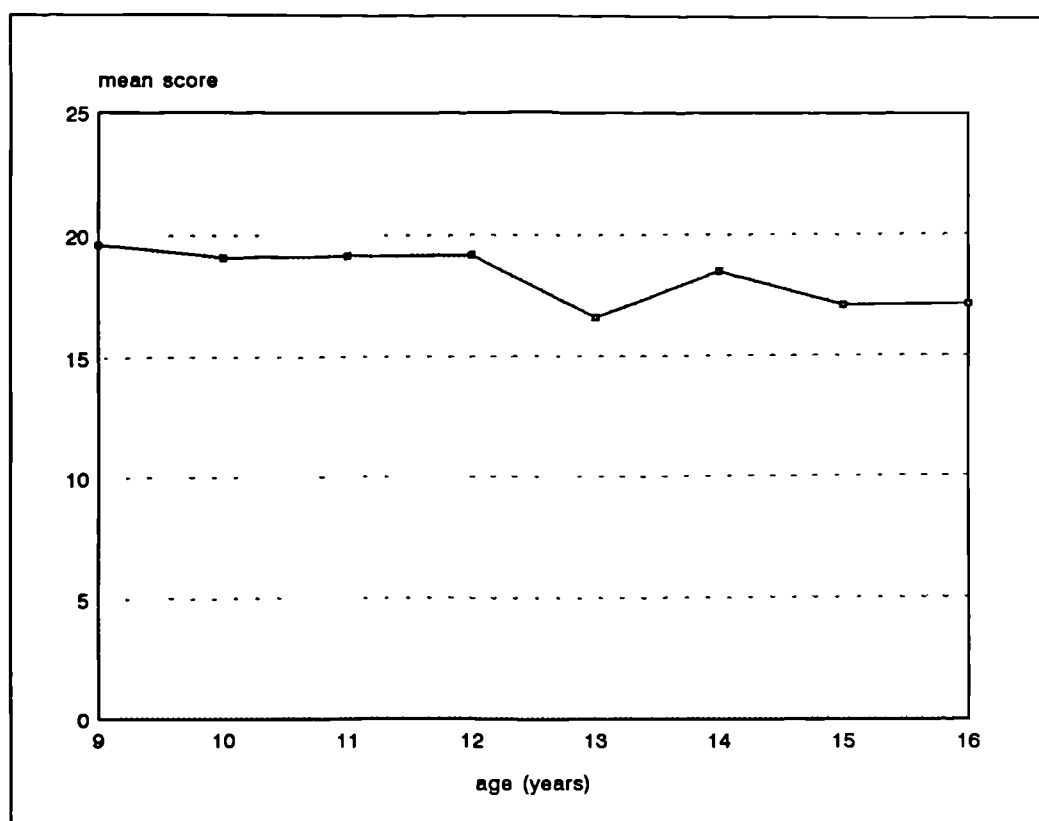
(n = 246)

As this study exploys a cross-sectional design, it is not possible to assess the development of the subjects' locus of control beliefs over time. Such a study of children with emotional and behavioural difficulties, throughout middle childhood and adolescence, would be likely to prove valuable.

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Age at initial referral

Table 5-3 indicates that the correlation between the age at which children were initially referred to Educational Psychology Services and scores on the CNSIE was virtuallly nil. As in the case of the age variable, considered previously, it was suggested that there may be age-related shifts in scores which are not reflected by a correlation coefficient. For this reason, mean scores for children referred at different ages were computed. These are presented in Table 5-5. Perusal of this table illustrates a highly mixed profile of scores.

Table 5-5   Mean scores on CNSIE by age at initial referral to Educational Psychology Services

Age (years)	Number	Mean	S.D.
4	23	19.17	5.14
5	22	17.27	4.71
6	26	18.38	4.14
7	30	16.77	4.76
8	17	18.00	4.76
9	11	19.00	4.29
10	14	16.21	4.34
11	23	18.91	3.96
12	15	17.13	4.56
13	19	17.32	5.07
14	22	18.14	4.60
15	19	18.74	5.08
TOTAL	241	17.93	4.62

(missing cases = 18)

The Elton Report (1989) suggests that children who are more 'disturbed' tend to present behaviour problems earlier in their school career. One might hypothesise, therefore, that if there is a positive relationship between emotional and behavioural difficulties and external locus of control, children who are referred to psychological services at a young age might prove to be more external than those who are referred as adolescents.

It should be noted, however, that the initial referral of some of the children in the sample was primarily because of their learning difficulties. This tended to be the case with children who were referred when in nursery or infant school. In some cases, problematic behaviour was noted at the time of referral, in others, this was not commented upon until later. The relationship between academic success and internal locus of control has, however, been discussed in Chapter 2 and is demonstrated in this study. Given that children with learning difficulties tend to score more externally, the grounds for the referral of the children may not be unduly problematic.

This table does not reflect the age of the children when the CNSIE was completed neither does it show how much time has elapsed between referral and the administration of the scale. Consider, for example, two children referred at age four. One might have reached the age of nine, the other sixteen, when the scale was administered. Given their different histories, therefore, such factors as age and schooling could confound the data. Given the results outlined in Table 5-2, however, the influence of these variables would not appear to be significant although one should recognise the possibility of interaction effects.

Family structure

Table 4- 10 lists the numbers of children falling into each category. Given the small numbers of cases in the 'natural father/stepmother' (n=2) and 'others' (n=7) categories, these were excluded from the analysis.

Table 5-6 provides mean scores and standard deviations for the remaining four categories:

Table 5-6 Mean scores on CNSIE by family structure

Family structure	Number	Mean	S.D.
Both parents	98	17.80	4.65
Mother only	92	17.90	4.68
Father only	11	17.00	2.93
Natural mother/stepfather	27	18.93	4.57
TOTAL	228	17.93	4.58

(missing cases = 22; withdrawn from analysis = 9)

Table 5-3 indicates that there was no statistically significant difference between these groups. Chapter 2 has indicated mixed findings with respect to parental presence in the home and it was noted that there has been little exploration of this variable in special populations. It was noted in chapter 4 that it was impossible to gain data as the reasons for the absence of biological parents (e.g. death, divorce) and, given the findings above, subsequent research may need to address such factors rather than merely considering existing family structures.

Siblings and Family Position (birth order)

Tables 4-12 and 4-14 provide descriptive statistics of these categories. As both of these are continuous variables, the relationship of each with total CNSIE scores was computed using the Pearson's correlation.

Table 5-3 indicates extremely low correlation coefficients demonstrating that the observed relationship between locus of control and these two variables, for this sample, is virtually nil.

Chapter 2 indicated that sibling/subject gender might be an important interacting variable (Schooler, 1972). It was noted that such data were not obtainable for the purposes of the

present study and this may have masked interaction effects. Perhaps, more important, is the fact that this study examined family structure rather than the potentially more influential family process variables (Shaw, 1991). One might suggest that it is not so much who is in one's family, as the dynamics by which it operates which will influence the formation of locus of control beliefs. Shaw and Scott (1991), for example, found that not only did parenting style appear to have an effect upon their children's locus of control but also, this latter variable mediated the effect of parental discipline on self-reported delinquency.

Parental Employment

Table 5-7 provides CNSIE mean and standard deviation scores for each category:

Table 5-7 Mean scores on CNSIE by nature of parental employment

Parental employment status	Number	Mean	S.D.
Both employed	24	17.75	4.09
Both unemployed	134	17.96	4.62
Mother employed (only)	9	16.56	3.97
Father employed (only)	21	19.95	4.42
TOTAL	188	18.09	4.53

(missing cases = 71)

Table 5-3 indicates that there were no significant differences between these groups.

It is possible to hypothesise that in an area of particularly high unemployment, children whose parents are not in work may feel particularly pessimistic about their vocational futures and that this could be reflected by a rather more external position. It is interesting to note, however, that the mean difference on the CNSIE total score between children of parents who are both employed and those who are both unemployed is a mere 0.21.

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These results suggest that parental employment/unemployment has little bearing upon the sample's locus of control scores. It is important to bear in mind the suggestion (O'Brien and Feather, 1990) that it may be the quality of employment rather than its presence or absence which exerts the major influence upon control related beliefs. Although data as to the nature of parental employment were not available, anecdotal information suggests that the majority of employed parents of the present sample were engaged in semi-skilled or unskilled employment. As such, one may not expect to find significant differences between the groupings.

Social Services Care

Table 4-17 indicates the numbers of children in each category. Because of the small number of children (n = 4) who fell in the 'other' category, it was decided to remove this group from the analysis.

Table 5-8 provides mean and standard deviation scores for the remaining categories:

Table 5-8   Mean scores on CNSIE by nature of Social Services care placement

Care status	Number	Mean	S.D.
Not in care	139	17.79	4.51
Assessment Centre	70	18.84	4.47
Community Home	46	16.67	4.59
TOTAL	255	17.92	4.59

(missing cases = 0; withdrawn from analysis = 4)

A oneway analysis of variance (see Table 5-3) failed to demonstrate a statistically significant difference between these groups. Despite this fact, it is interesting to note that children in assessement centres obtained a mean score more than two points above those in community homes. As those in community homes in Sunderland almost invariably pass

through assessment centres first, it may be worth considering possible reasons (other than chance) for this.

The researcher has already noted in Chapter 2 that the reported gains following treatment programmes in American children's detention facilities may merely reflect the fact that as they move from the period of initial incarceration to eventual release, a high proportion of individuals may become more secure and confident. Many of the children in assessment centres have been removed from their homes, schools and families and are very unsure about their futures. Decisions about their immediate future usually rest in the hands of powerful others in authority positions, some of whom, the children will have never met. In his clinical work with children undergoing residential assessment, the researcher has frequently found the children presenting as disinterested (and uninterested) parties who state that they are not concerned about the future because others will make the decisions anyway. In this respect, the words of the fictional sixteen year old skinhead, Trevor, held in a British asssessment centre, ring true:

> "You've got decisions to make about my life? You make them! They've got
> fuck all to do with me!" (Channel 4 Television, 1983)

As those who remain in residential care (i.e. transfer to community homes) adjust to residential life, they may become less disorientated and consequently become more likely to consider how they can achieve desirable outcomes. They may gradually come to hold an increasing belief that future outcomes will be influenced by their actions. Given this scenario, one might expect children in assessment centres to score more highly (i.e. externally) than their peers.

I. Q.

Tables 4 - 18 and 4 - 19 indicate frequencies and mean scores for full, verbal and visual I.Q.s.

Table 5-3 indicates low-order, nonsignificant, negative correlations for each of these with CNSIE scores. This finding appears to confirm the findings of the Scale's authors (Nowicki and Strickland, 1973; Nowicki and Duke, 1983).

School at time of assessment

Table 4-16 indicates the number of children attending each type of school.

As only one child in the sample attended a primary school for children with moderate learning difficulties, this category was excluded from the subsequent analysis.

Table 5-9 provides mean and standard deviation scores for the remaining categories:

Table 5-9   Mean scores on CNSIE by type of school attended

Type of school	Number	Mean	S.D.
Mainstream primary	13	18.85	4.08
Mainstream secondary	93	17.95	4.70
Primary E.B.D.	35	19.77	4.04
Secondary E.B.D.	31	17.68	4.58
Secondary M.L.D.	19	17.32	3.93
Disruptive Unit	36	16.44	5.06
Community Home (with education)	31	17.61	4.59
TOTAL	258	17.91	4.60

(withdrawn from analysis = 1)

A oneway analysis of variance found no significant differences between these groups.

In Chapter 2, it was suggested that there may be a difference between children whose

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behaviour represented a deliberate and conscious decision to challenge and/or subvert authority figures as a means of gaining personal power and status, and other children, whose behavioural difficulties are not generated as a calculated means to an end. If such a distinction is valid, one might anticipate that children in disruptive units may be more 'streetwise', more aware of their impact upon others, and have selected a particular behavioural repertoire to meet certain perceived ends. Children in schools for those with emotional and behavioural difficulties, on the other hand, may be far more confused about the impact that their behaviour has upon others and may be more likely to perceive their interpersonal world as unstable and unpredictable. Although several writers (e.g. Galloway and Goodwin, 1987) would dispute this simple dichotomy, notions of the mad (E.B.D.) and the bad (disruptive) persist within the teaching profession.

An intriguing question, therefore, was whether there were any differences between mean scores from these two types of educational setting. Table 5-8 indicates that the differences in mean scores was a nonsignificant 1.24 points. Thus, any differences between these two groups of children are not reflected by locus of control expectancies.

Behaviours

As the nine behaviours were scored as rank variables, non-parametric statistics were employed.

Table 5-3 indicates very low correlations between CNSIE scores and the aggregated behaviour score (Behtot). Similarly correlations between locus of control and each of nine behaviours were also low with only truancy and delinquency showing statistical significance. These relationships were both negative, suggesting that those who exhibit higher levels of delinquency and truancy are also more likely to score more internally on locus of control. The correlations are so low, however, that their practical significance is limited.

The data do not support the contention (Rothbaum, 1980) that externality will be a particular

feature of those who exhibit internalising/neurotic behaviours. The correlation for inward behaviours was a nonsignificant -.042.

The above results seem to contradict a wealth of findings which suggest a relationship between problem behaviour (in its various forms) and externality. The present findings, however, may be partly explained by the fact that, unlike other studies which generally compare delinquents with 'normals', this study deals with a population who all exhibit problematic behaviour to a greater or lesser degree. It may be argued, therefore, that although generalised locus of control measures will often differentiate between normal and many special populations, either the available measures (CNSIE and/or behaviour rankings) are not sufficiently sophisticated to offer a more finely grained analysis of differences within a special population or alternatively, that such within-population differences do not exist. This issue is discussed at greater length in chapter 8.

Academic

Table 4-20 indicates that only 9 children were included in the above average category. Because of this small sample size, this category was withdrawn from the subsequent analysis. Table 5-10 displays mean and standard deviation scores for the remaining cases:

Table 5-10   Mean scores on CNSIE by level of academic attainment

Academic attainment	Number	Mean	S.D.
Average	105	17.38	4.62
Below average	124	18.65	4.34
TOTAL	229	18.07	4.51

(missing cases = 21; withdrawn from analysis = 9)

Table 5-3 indicates that the difference between these means is statistically significant. The more external score of the group with with learning difficulties is consistent with the

majority of findings in the literature and support Findley and Cooper's (1983) conclusion, based on a meta-analytic survey, that such differences tend to be modest.

Administrator of the CNSIE

Table 5-11 displays the mean and standard deviation scores according to who administered the CNSIE to the children.

Table 5-11   Mean scores on CNSIE by administrator

Type of administrator	Number	Mean	S.D.
The researcher	35	17.11	3.93
Educational psychologist	33	18.61	4.68
Teacher	191	17.95	4.69
TOTAL	259	17.92	4.59

Table 5-3 indicates that there were no significant differences between these groups.

The reason for undertaking this analysis was to explore whether potential differences between groups could be explained by the effect of being interviewed by the researcher or by those from different professions. Would the researcher's identity as an educational psychologist, for example, influence the children's responses? Results suggest that the profession of the interviewer did not have an undue influence upon mean scores. Although the importance influence of the experimenter should not be discounted, the above results suggest (albeit crudely) that any such effects do not significantly depend upon his or her professional position.

This variable was, therefore, not included in further analyses.

<u>Summary of Section 1</u>

A comparison of categories by total scores on the CNSIE yielded few statistically significant results. The relationship between locus of control and age, sex and academic ability, a common feature in the extant literature, was affirmed by this study yet, in virtually all other respects, the variables under consideration had little apparent relationship with locus of control.

It is important to recognise that relatively simple statistical techniques were employed and multivariate techniques, searching for interaction effects, may have yielded hitherto unrecognised relationships. Given the quotation opening this chapter, however, and the general feel of the data, which suggested that total CNSIE scores bore little relationship to the variables of the study, it was decided that it may be more profitable to consider alternative methods of grouping CNSIE items.

Section 2   Alternative methods of analysing the relationship between the CNSIE and the variables included in this study

It has been widely argued (see chapter 2 for discussion) that locus of control may be a multidimensional construct and, if this is the case, aggregating responses to generalised scales such as the CNSIE into a total score may mask group differences. One group, for example, may score highly on a relatively similar group of items (e.g. those which consider the role of good fortune) yet score comparatively poorly on another set (e.g. those which examine relationships with parents). Analysing aggregated scale scores could result in these differences being concealed.

As Chapter 2 has demonstrated, a number of researchers have used factor analysis to examine dimensionality in several locus of control scales and attempts have been made (e.g. Raine, Roger and Venables, 1981) to consider whether this can aid differentiation between groups of subjects on various measures. Raine et al. (op. cit.), for example, found that in their

study using the CNSIE and a number of socialization scales that the first factor extracted from the locus of control scale, but none of the subsequent factors, correlated more highly with a composite socialisation score than the total CNSIE scale (.55 as opposed to .42). This finding provided support for those who advocate analysis of clusters of items rather than total scores for, as Rotter (1975) has pointed out, subscales are useful only to the extent that their scores produce a relationship with the behaviour in question which is better than that provided by the total test score.

This study employed three different techniques for grouping items in a meaningful fashion, factor analysis, cluster analysis and non-metric multidimensional scaling.

● **Factor analysis**

Although arguments have been put forward to suggest that factor analysis of dichotomous scale items is statistically unwise (Comrey, 1973; Comrey and Lee, 1992) it was decided that, given the large numbers of studies which have factor analysed the CNSIE (see chapter 2 for a discussion), it would still be valuable to explore whether this technique could inform the present study.

A principal components analysis was employed to examine the factor structure of the CNSIE (see appendix 7a and 7b). Kaiser's criterion, which involves the selection of factors with an eigenvalue greater than one, was employed to select the number of factors for retention (n.b. an eigenvalue details the amount of variance each item accounts for and the total of all eigenvalues is always equal to the number of variables in the analysis).

The analysis yielded little to assist the study. Fifteen factors were identified with eigenvalues greater than one. Factors 1 and 2, however, explained only 7.2% and 6.5% of the total variance respectively and all 15 factors explained only 60% of the total variance. Furthermore, on the unrotated factor 1, only one item had a loading greater than 0.4.

Selecting so many factors to account for little more than half of the variance would seem unmerited.

An alternative method of selecting factors is the graphical scree test (Cattell, 1966). In this method, a graph is drawn of the descending variance accounted for by the factors initially extracted. Ideally, the plot should show a break between the steep slope of the initial factors and the gentle one of the later factors. The factors to be retained are those which lie before the point at which the eigenvalues appear to level off. Examination of the scree plot (appendix 7b) produced for the present analysis shows a relatively smooth descent after the first two factors. As these account for such a small proportion of the total variance, this solution was also deemed to be rather unhelpful.

These results led the researcher to conclude that factor analysis would be an inappropriate means of further data exploration in the present study.

In contrast to the above findings, other studies of the CNSIE, and similar locus of control scales, have produced rather more satisfactory solutions. In most cases, the first factor accounts for approximately 10% of the variance and the number of factors with eigenvalues greater than one is usually between three and six (Coombs and Schroeder, 1988).

Although other studies appear to yield more helpful solutions, these tend to vary considerably from sample to sample. Chapter 2 indicated that there is little consistency across studies as to the items which load on a factor or the labels which have been given to each. In their review of six studies employing the CNSIE, Coombs and Schroeder (op. cit.) conclude that not only does the notion of locus of control as a generalised expectancy receive little support but also that the multiple factor solutions of the CNSIE appear to exhibit little generalizability beyond a specific sample.

Watters, Thomas and Streiner (1990) have proposed a number of reasons for these inconsistent findings. It has been argued (Comrey, 1973; Gorsuch, 1983) that there should

be a minimum of five subjects per variable and not less than 100 individuals per analysis. Although these criteria are met in the present study, this has not always proven to be the case in other studies.

Watters et al. (op. cit.) also point out that the samples used in these studies have varied greatly on such variables as age, sex, socioeconomic status and culture. Furthermore, the administration of the test, the factor analytic techniques and criteria employed have varied from study to study and, in some cases, there has been an incomplete reporting of the findings.

Another reason for the lack of replication of findings rests with the nature of the scale. The use of dichotomous data is seen by many statisticians (Gorsuch, 1974; Comrey, 1973, 1978; Comrey and Lee, 1992; Kim & Muller, 1978) as inappropriate for factor analysis. Watters et al. (op.cit.) cite Comrey (1973) who states:

> "When two-choice response variables are used.... severe distortion can be introduced into the correlation matrix with a consequent dramatic effect on the factor analytic solution" (p.650).

Gorsuch (1974) and Comrey and Lee (1992) point out that the main problem with binary data of this sort is that inter-item correlations can be artificially inflated or deflated depending upon the responses. The greater the deviation from a 50/50 split the greater this tendency.

Watters et al. (op. cit.) split their sample of 1,345 Canadian males aged 11-15 into two random groups. The responses of each group on the CNSIE were factor analysed separately and it was anticipated that the factor analytic solutions should be 'almost identical' (p.521). The results, however, indicated that there was only a limited degree of similarity. In explaining the differences between studies and that observed in their own work, Watters et al. conclude that:

"The dichotomous nature of the.. (CNSIE).. items may be amplifying the differences observed between samples to such an extent that the resulting factor structures are very different. Small differences in response splits may translate into unique factor solutions. Lack of agreement between factor analytic studies is not uncommon for other psychological scales.... In the future, investigators should avoid factor analyzing scales composed entirely of dichotomous variables" (p.522).

In an attempt to ascertain whether alternative methods of grouping scale items together could increase predictive power, this researcher opted to explore the potential use of cluster analysis and non-metric multidimensional scaling. Unlike factor analysis, these techniques do not make assumptions about the structure of the data, the sole requirement being the generation of a matrix illustrating the relationship between items. The use of dichotomous data is, therefore, non-problematic for these techniques.

The measure of association selected for these analyses was 'phi' which is the binary form of the Pearson product-moment correlation coefficient.

● **Cluster analysis**

There are many different types of cluster analysis all of which are used to explore data arising from the measurement of a number of characteristics for each of an assorted collection of individuals or objects. The aim of such techniques is to determine whether these individuals or objects can be subdivided into clusters which can be shown to be either relatively distinct or belong together.

Everitt (1977) points out that most cluster analysis methods are 'non-statistical' in the sense that they have no associated distribution theory or tests of statistical significance. Thus,

'....they are unable to relate from sample to population... (thus)....They are perhaps best regarded as techniques for generating hypotheses rather than methods for testing hypotheses' (p.63).

Probably, the most commonly used class of clustering techniques is that of hierarchical clustering (Everitt, 1977). In this procedure, the cases are generally grouped together on the basis of their mutual distances (i.e. their mathematical relationship). In agglomerative hierarchical cluster analysis, one would take the 40 cases (each item from the CNSIE) as the point of departure and group them together in a stepwise manner, to form new larger clusters, until all forty cases are united in one large cluster. This process can be graphically represented by the production of a dendogram (see Figure 5-3). Divisive hierarchical cluster analysis operates in the other direction with one large cluster being repeatedly subdivided.

Both procedures are hierarchical in that once a case has been allocated to a certain grouping it cannot normally be reallocated during a later grouping.

Agglomerative hierarchical cluster analysis is the more frequently employed and within this technique a number of alternative methods are available. These tend to vary in respect of the criteria used for identifying the two clusters situated 'closest' to each other. The two most common methods are single linkage and complete linkage.

At the beginning of either process, a matrix is computed detailing the relationship between items, each of which is regarded as a single member cluster. In single linkage cluster analysis, the two items which have the smallest mutual distance are linked together to form a new cluster. The items which represent the next shortest distance either lead to a third case joining the cluster already containing two cases or the formation of a new cluster pairing. Complete linkage follows a similar process although rather than searching for the minimium distance between two points, it defines cluster distance as the maximum distance between two points of the two clusters.

The choice of which method to employ is not easy. Jardine and Sibson (1968, 1971) have argued that, of all hierarchical agglomerative techniques, only single linkage clustering is mathematically acceptable. Williams, Lance, Dale and Clifford (1971), however, dispute this conclusion and suggest that other methods have proven to have a greater heuristic value

for the investigator.

In attempting to resolve this issue, the researcher followed Everitt's (1977) counsel that:

> "Since in practice these techniques are used essentially for data-simplification
> and data description, it seems more reasonable to adopt..(a)..pragmatic approach"
> (p.79)

The purpose of the cluster analysis in the present study was to generate a small number of clusters which might represent valid groupings of relatively homogenous locus of control items. Single linkage analysis tends to add items into one existing group rather than produce separate groupings. In order to maximise the likelihood that a number of relatively discrete groupings would be produced, the researcher decided to employ complete linkage analysis.

One disadvantage of hierarchical techniques is the 'chain effect' (Du Toit, Steyn and Stumpf, 1986). This refers to the tendency of relatively isolated items to link two natural clusters together in a rather misleading fashion. One means of overcoming this, mode analysis, is to remove isolated points prior to carrying out the analysis (Wishart, 1969) although this course of action was not pursued in this study as there appeared to be no justification for removing scale items.

A major difficulty with the use of clustering techniques is that it is not always easy to determine the particular number of clusters which best fits the data (Everitt, 1977). Du Toit et al (op. cit.), in examining this difficulty, argue that hierarchical cluster analysis is a means of, 'exploratory deterministic analysis' rather than a 'classicial inferential technique' (p.82). Everitt (op. cit.) suggests that the most practical solution is to search for clusters with high interpretability and predictive ability.

In this exploratory vein, the present researcher decided to employ a rather crude procedure of splitting the clustering solution by means of visual inspection of the dendogram. Perusal of the groupings suggested that the scale items could be divided into four clusters of
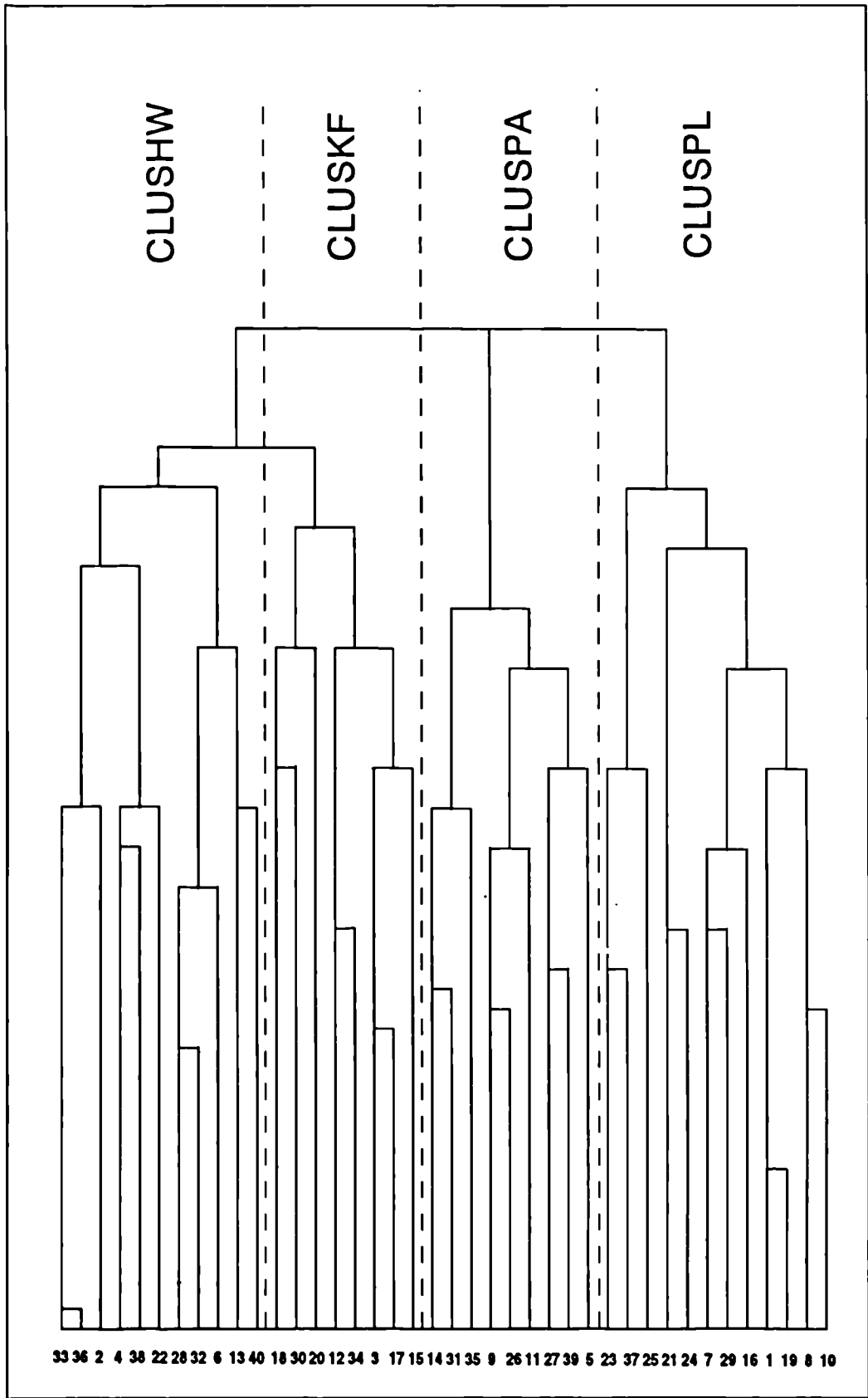
approximately the same size. The content of the items in each cluster was not known at this point in the analysis. Figure 5-3 (overleaf) displays the dendogram with the segmentation into four sections (subsequently labelled CLUSHW, CLUSKF, CLUSPA and CLUSPL) delineated by three dotted lines. The dendogram illustrates the sequence of pairings, commencing with items 33 and 36, then 1 and 19 until one overall cluster is derived. (Note, in dendograms produced by SPSS-X, new clusters tend to be drawn from the mid-point of the previous cluster. Where, however, two items are joined into a new grouping, the horizontal line continues from the uppermost item. For example, items 7 and 29 are paired. This pairing is subsequently joined with item 16 by extending along the axis of item 7. The uppermost line of the subsequent cluster, however, continues from the mid-point, that is, in line with item 29.)

● Nonmetric Multidimensional Scaling

Nonmetric multidimensional scaling (NMMS), like cluster analysis, is a means of representing the relationship between items. By presenting the distance between items in spatial form, this technique aims to produce an optimal representation of this complex space in a reduced number of dimensions with the distance between points reflecting the empirical relationships in the data. Nonmetric scaling, as opposed to metric variations, is based upon a ranking of these distances (similar to the difference between Spearman and Pearson correlations). Forgas (1979) points out the value of multidimensional scaling for social psychology, in particular, its applicability for complex data and the absence of rigorous assumptions about their nature. It is, therefore, suitable for use with data which are not appropriate for other multivariate techniques (Coxon and Jones, 1977)

Shepard (1962) observes that where one has a given number of items, all that is required for each pair in the multidimensional scaling analysis is a number specifying how closely these two items are related. The relationships between 'n' items can then be perfectly represented in n-1 dimensional space. In order for one to grasp the relationship, however, this must usually be simplified. Although the relationships between the forty items in the CNSIE, for

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Figure 5-3 Dendogram of cluster analysis illustrating segmentation into four groups

CLUSHW

CLUSKF

CLUSPA

CLUSPL

33 36 2 4 38 22 28 32 6 13 40 18 30 20 12 34 3 17 15 14 31 35 9 26 11 27 39 5 23 37 25 21 24 7 29 16 1 19 8 10

example, can be perfectly modelled in thirty nine dimensions, for practical purposes, any configuration would usually be reduced to two or three dimensions as one can't graphically visualise a configuration of more than three dimensions. Reducing the dimensions leads to an inevitable loss of precision, for as one reduces the number of dimensions, stress is increased. Stress can be defined as a measure of the extent to which relationships have been distorted in order to fit within fewer dimensions and can be calculated mathematically.

Despite the above difficulty, multidimensional scaling is particularly valuable for giving structure to data which may otherwise be difficult to interpret (Forgas, op.cit.). It is a means of:

> "....analysis for the discovery of previously unknown structure, and hence the achievement of new scientific insight" (Shepard, 1974, p.374).

Forgas comments upon the technique's clarity of representation and ready interpretability which are derived from the visual nature of the data representation.

Before exploring whether groups of CNSIE items offer greater insights than the total scale it is necessary to interpret the solutions obtained by the cluster analysis and the NMMS. Coxon (1982) argues that interpretation of multidimensional scaling solutions involves a two-stage process:

> "First, we look for significant patterns in the configuration, i.e. detect structure, and secondly, we ascribe a meaning or interpretation to those patterns or structures" (Coxon, op. cit., p.97).

Such a process appeared equally appropriate, and was thus employed, for the cluster analysis.

Detecting structure

a) cluster analysis

It has been noted that the solution to the cluster analysis (in the form of a dendogram) suggested that the items could be grouped into four, relatively same-sized clusters (see fig 5-3). Although a number of other solutions could have been selected, subsequent analysis indicated that the items in these clusters did appear to be linked conceptually (see below). The number of clusters selected is relatively arbitrary. If too many are selected, one may gain little assistance from the technique; if too few are selected, important data may be lost. Cluster analysis is not a hard and fast statistical technique but a way of visualising relationships which may assist the exploration of the data.

b) NMMS analysis

Examination of the NMMS solution in both two and three dimensions was undertaken. It was noted that using a two, rather than three, dimensional solution did not lead to a significant loss of data (RSQ = 0.547 for two dimensions; RSQ = 0.649 for three dimensions) and was far easier to analyse. (RSQ is the correlation coefficient between the original distances and that shown on the spatial representation). For these reasons, the two-dimension solution was adopted.

Figure 5-4 illustrates this solution. Visual inspection suggested that the items could be divided into four groups (which were subsequently encircled). No reference was made to the content of the items, as this may have prejudiced the derivation of clusters. The items were then colour coded according to their groupings in the hierarchical clustering in order to facilitate visual examination of the extent to which there was similarity between the two solutions.

It is interesting to note that both the cluster analysis and the NMMS solutions appeared to suggest division into four groups. Outliers were located to the next nearest item (e.g. item 37 in Figure 5-4 was nearer item 25 than items 38 or 28. The nearest item to item 33 was 27.

Figure 5-4   NMMS solution mapped into two dimensional space with segmentation into four groupings
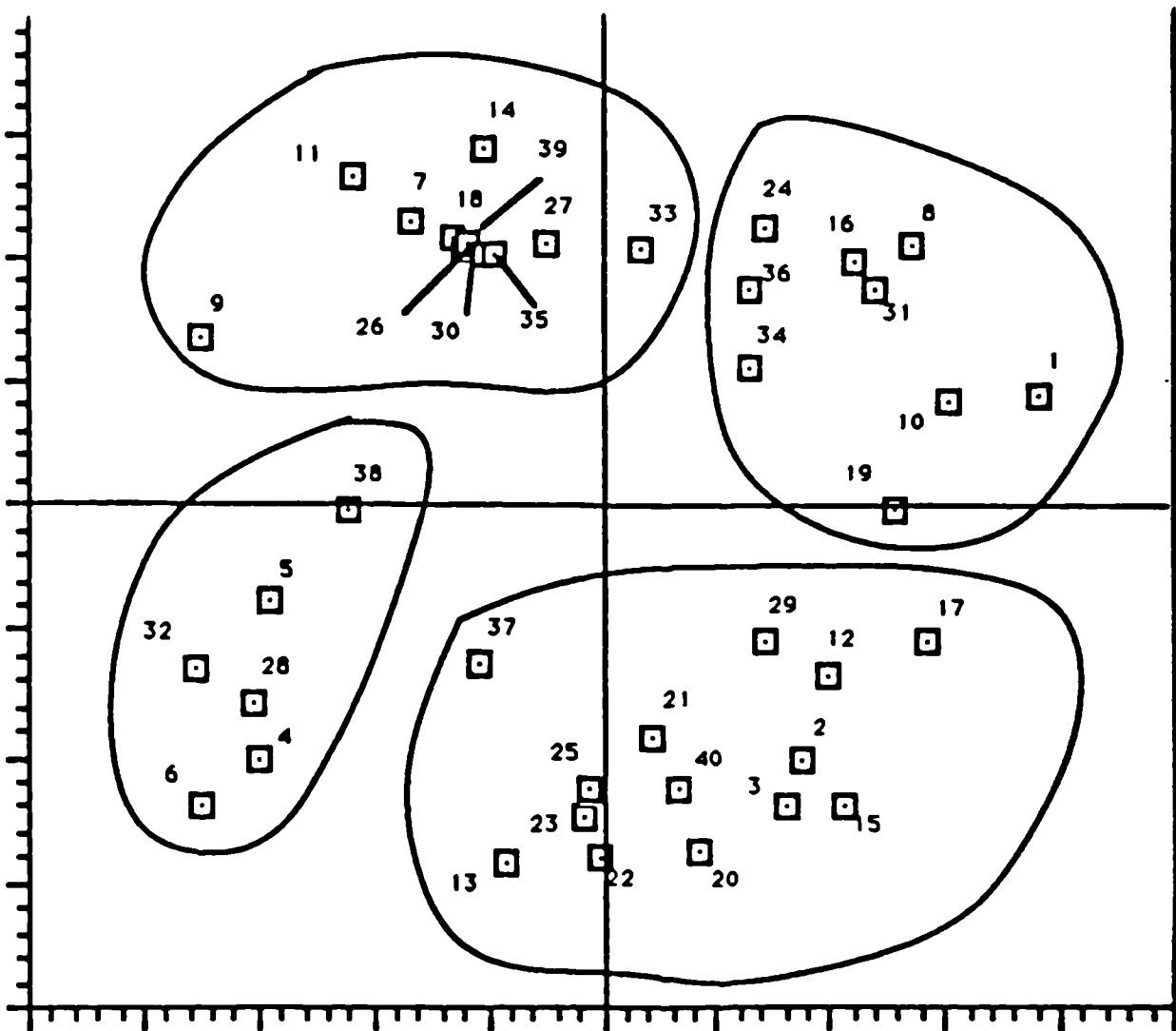
Table 5-12 details the two sets of four groupings into which the CNSIE items were placed.

Table 5-12   Location of the CNSIE items in the Cluster analysis and NMMS solutions

(n.b. the numbers refer to specific items on the CNSIE questionnaire)

Cluster analysis	Multidimensional scaling
CLUSHW 2,4,6,13,22,28,32,33,36,38,40	MDSXBL 4,5,6,28,32,38
CLUSKF 3,12,15,17,18,20,30,34	MDSXBR 2,3,12,13,15,17,20,21,22,23,25,29,37,40
CLUSPA 5,9,11,14,26,27,31,35,39	MDSXTL 7,9,11,14,18,26,27,30,33,35,39
CLUSPL 1,7,8,10,16,19,21,23,24,25,29,37	MDSXTR 1,8,9,16,19,24,31,34,36

Each of the eight sets of items (4 x cluster analysis, 4 x NMMS) were then examined in turn to ascertain the existence of any unifying themes.

Cluster analysis

Cluster 1. (coded CLUSHW) Items 2,4,6,13,22,28,32,33,36,38,40.

Five of these items (4,6,22,32,40) were related to success in school. This theme appeared to revolve around whether industry and effort were capable of leading to academic success. Other items, which were more contextually neutral, also appeared to show a degree of association. Item 38, for example, exploring the value of forward planning was closely associated with items 4 and 22. Item 28, on a similar theme, was most associated with item 32.

Items 33 and 36 showed the strongest linkage within the whole scale. These items appear to be virtually the same question and, within the scale, occur in close proximity to each other. Both items tap the extent to which the individual considers that anything can be done to improve negative perceptions of him/her which may be held by others. Conceptually, these

items might be considered better placed in Cluster 2.

Cluster 2 (coded CLUSKF) Items 3,12,15,17,18,20,30,34

Four items (12,20,30,34) relate to the ability to influence peers (although item 30 can also refer to relationships with adults) Unlike items 33 and 36 in Cluster 1, these items refer to a capacity to influence friends rather than those peers whose behaviour is marked by hostility. Items 3,17 and 18, initially appear unrelated but closer examination suggests that they examine perceived competence. Being good at sports, being strong and being lucky (luck for boys, may mean being both physically powerful and skilled at sports - two interrelated attributes (Hendry, 1978)) can all be perceived as 'God-given' qualities.

When both sets of items are examined together, a clear pattern emerges. The ability to be popular and to influence others, particularly for boys, is often closely associated with sporting and physical prowess. Many of the children in the present study have poor interpersonal skills and associate in peer groups where popularity may be significantly determined by physical attributes. As such, the relationships described above may be particularly strong within behaviourally disordered populations.

The remaining item in this cluster (15) "Do you believe that your parents should allow you to make most of your own decisions?" does not easily appear to fit conceptually within this cluster.

Cluster 3 (coded CLUSPA) items 5,9,11,14,26,27,31,35,39

These items all appear to relate to interactions with parents, with an emphasis upon power differentials. Six items make direct reference to parents, the family or the home. The other three refer to 'getting blamed for things', being 'punished' and suffering nastiness, all for no good reason. The great majority of the subjects in the present sample experience conflict in the home and, as with Cluster 2, the items above appear to be linked conceptually.

The only parental item in the Scale which is not included in this cluster is number 15 (see Cluster 2). This item appears to deal with the appropriateness of the subject being allowed to make his/her own decisions, not whether this is actually the case. Children with behavioural difficulties may often engage in power struggles at home and at school while simultaneously voicing the opinion that adults should exert more authority over them. It can be argued that much problem behaviour represents a demand from children that controls be placed upon them. It is, therefore, hardly surprising that responses to this item do not relate closely to those questions in cluster 3 which have a superficial resemblance.

Cluster 4 (coded) CLUSPL) Items 1,7,8,10,16,19,21,23,24,25,29,37

Most items appear to address the issue of whether one can influence the future, particularly bad things which may be around the corner. This is most apparent in items 1,7,8,19,23 and 29.

Items 10, (whether wishing can make good things happen) 21 (whether a four-leaf clover will bring good luck) and 24 (whether one has had a good luck charm) initially appear to be tapping something else. Other questions concerning luck (e.g. 3, 13, 17, 18, 40), a common theme in the locus of control literature, are located in other clusters. Closer examination suggests that items 10, 21 and 24, tap a different notion concerning magical properties which one may employ to influence one's future fate. In contrast, the 'luck' items in the other clusters appear to relate more to whether one has 'had the right breaks in life', whether one has been fortunate in having desirable physical attributes, indeed, whether one is a generally lucky person. In these respects, the element of luck is something which is not actively employed by the subject but, rather, is endowed and passively received.

The luck items, in cluster 4, therefore, are conceptually consistent with its overall theme - subjects' perceptions of their ability to directly influence future outcomes.

Three items fit the cluster less clearly. Item 16 "Do you feel that when you do something wrong there's very little you can do to make it right?" can be perceived as conceptually similar while items 25 "Do you believe that whether or not people like you depends on how you act?" and 37 "Do you usually feel that it's almost useless to try in school because other children are cleverer than you?" both appear more conceptually distant.

Item 25, clearly a measure of locus of control rather than of perceived competence, does not obviously appear to be located in the wrong cluster although it is somewhat surprising that item 37 is not subsumed within cluster 1.

General considerations

The four clusters do appear to be conceptually valid. Cluster 1 (perhaps the least internally coherent) addresses the benefits of hard work and whether this can bring success, particularly in an academic context. Cluster 2 explores peer relations, particularly the exercise of social influence, and perceptions of subjects' own personal attributes, particularly prized by boys. Cluster 3 concerns power relationships in the home and explores perceptions of undeserved recrimination. Cluster 4 is more decontextualised than the others and deals with subjects' perceptions of their ability to control future (usually negative) outcomes.

A small number of items, however, do not sit easily within the derived cluster groupings. Possible explanations have been offered and it has been noted that difficulties may stem from the differing interpretations to the questions by the respondents. This also applies to factor analytic and multidimensional scaling techniques.

Nonmetric multidimensional scaling

Group 1 (coded as MDSXTL) Items 7,9,11,14,18,26,27,30,33,35,39

This group of items (n=11) were similar to Cluster 3 (CLUSPA) (n = 9) and as with the

former cluster, many of the items dealt with issues in the home. Seven items appeared in both groupings. Of the four additional items (7,18,30,33), item 7 ("Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?") appears to fit conceptually as this is a common complaint of children who find themselves in conflict with their parents. Similarly, item 30 ("Do you think kids can get their own way if they just keep trying?"), can also be interpreted as reflecting domestic concerns.

In contrast to CLUSPA, the addition of items 18 ("Are most of the other kids your age stronger than you are?") and 33 ("Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?") and the omission of item 31 ("Most of the time do you find it useless to try to get your own way at home?") would suggest that, of the two, this cluster is rather less homogenous.

Group 2 (coded as MDSXTR) Items 1,8,9,16,19,24,31,34,36

This group (n =9) maps most closely upon Cluster 4 which deals with perceptions about one's capacity to influence the future. Five items are in both groupings. Seven items which are in CLUSPL have been relocated to other groups (7,10,21,23,25,29,37) and are replaced by others (9,31,34,36).

Items 25 and 37 are discussed above (see Cluster 4) and their loss is not particularly puzzling. The loss of items 7, 10, 21 and 29, and, to a lesser extent, 23, is rather less easy to explain.

The four new items do not appear to add to the group. They are more contextualised and tend to deal with home and peer power relationships.

As, is the case with MDSXTL, this group appears rather less homogenous than that derived from the cluster analysis (CLUSPL).

<u>Group 3 (coded MDSXBL)</u> Items 4,5,6,28,32,38

A small set of items, these appear to examine beliefs about the likely outcomes of hard work. Two items have a particular focus upon academic success. As such, this group would appear to be tapping a similar theme to that of CLUSHW. Five of the six items are common to both clusters. The omission of one item (22) (existing in the CLUSHW grouping) is rather surprising, for one might anticipate the queried link between homework and academic success to be highly related to studying hard and passing subjects (item 6). Such a link was established by the hierarchical clustering solution.

Item 38 ("Are you the kind of person who believes that planning ahead makes things turn out better?") was a relative outlier in the two dimensional NMMS solution. Its location in this grouping (on the grounds that this was its nearest cluster) may reflect children's perceptions that planning ahead and working hard are, to some extent, related.

Of the six items in CLUSHW absent from the present grouping, three items (2, 33, 36) appear to have little close relationship to the theme of hard work. Interestingly, items 33 and 36, the strongest pairing in the cluster analysis and apparently, very similar items, are pulled into separate groupings for the NMMS. solution. Item 33, however, is almost equidistant between the present and an alternative grouping.

It was considered that the items in this group were not clearly more or less homogenous than those of CLUSHW.

<u>Group 4 (coded MDSXBR)</u> Items 2,3,12,13,15,17,20,21,22,23,25,29,37,40

Unlike the other groupings, it is difficult to locate a cluster which this large set of items (n = 14) can map onto. Cluster 2 (CLUSKF), which examines power/popularity in peer relationships is the most similar although only five items (3,12,15,17,20) are common to

both. One of these, however, (15) deals with parents not peers, and another (3) is a decontextualised question about luck. Of the new items, three (23,25 and 37) fit the peer theme yet the others (2,13,21,22,29,40) do not in any obvious fashion.

The new items appear to examine luck-related and academic issues. Several items, central to the conceptual coherence of CLUSKF (18,20,34) are no longer present and, in the case of MDSXBR, it may be more difficult to suggest that the central theme is peer relations.

This group contains a ragbag of items for which it is not easy to provide a label. The predominant issues appear to be luck and peer relations and, to a lesser extent, academic success. One could argue that these three are, to some extent, related, although a number of highly related items appear in other groups

General considerations: comparision of clusters and NMMS groupings

As with that of the cluster analysis, it proved possible to derive broad groupings with some conceptual coherence.

It was noted that several items were placed in different groupings from those derived from the cluster analysis. Comparison of the content of these items suggested to this researcher that it was the cluster analysis solution which tended to yield groupings offering greater conceptual coherence.

The next step involved an examination as to whether these differences were shown to have statistical significance.

Analysing by cluster

Having obtained two sets of four variables as a result of the cluster analysis and NMMS procedures, all key variables were analysed to ascertain whether these groupings could

produce more sensitive analyses. Kurtosis and skewness of the frequency distributions indicated that the data could be considered to be metric, thus permitting parametric analyses. The behaviour scores, however, because they are essentially rankings, were deemed to require nonparametric analysis.

The following statistical techniques were employed:

a) T-test: (variables = sex, acad)

b) Oneway analysis of variance: (variables = family, employment, care, school)

c) Pearson correlation: (variables = age, age at referral, siblings, family position, full I.Q, verbal I.Q., visual I.Q.)

d) Spearman correlation: (variables = disrup, reftea, delinq, phyagg, veragg, prop, truant, inward, refpar)

The results of these analyses are presented in Table 5.13. which indicates all cases of statistical significance at the .05 level for all eight sub-groups and total locus of control scores (TOTAL). Data are provided for the total sample (A) and for boys (B) and girls (G) separately. Perusal of the table indicates that several relationships emerge which were not apparent when total scores were initially considered. Each variable is considered in turn, below.

Sex

A sex difference was found on the total locus of control scale although on the eight subgroups it pertained to only four, CLUSHW, CLUSPA, MDSXTL and MDSXBL. In each case, girls scored more externally. Two of the subgroups (CLUSHW and MDSXBL) appear to relate to the effects of hard work upon subsequent success. The other two both

Table 5-13   Significant relationships between study variables, total locus of control scores (TOTAL) and each of the cluster subgroups

Variable	Test	TOTAL	CLUSHW	CLUSKF	CLUSPA	CLUSPL	MDSXTL	MDSXTR	MDSXBL	MDSXBR
Sex	T-test	A	A		A		A		A	
Age	Pearson's r	A B	A	A B		A B		A B G		A B
Ref	Pearson's r		A B	A B	A G	A B	A G	A B	A	A B
Fam	Oneway Anova									
Sib	Pearson's r									
Fampos	Pearson's r									
Employ	Oneway Anova			A				A		
Care	Oneway Anova			A B	A G		A G		G	
Fulliq	Pearson's r			G						G
Verbiq	Pearson's r			G						G
Visiq	Pearson's r			G						G
School	Oneway Anova			A B		A B		A B		A B
Disrup	Spearman's r									
Reflea	Spearman's r									
Delinq	Spearman's r	A B G		A B	A B G	B G	A B	B G		
Phyagg	Spearman's r	B	B					A G		
Veragg	Spearman's r			A						
Prop	Spearman's r			A B				A B		
Truant	Spearman's r	A	B	B		A B		A B	B	B
Inward	Spearman's r		B	A B	A B G			G	B	A G
Refpar	Spearman's r				G			G		B
Behtot	Spearman's r									
Acad	T-test	A B		A B	G	A B	B G			A B

Key:
  A = Total sample
  B = Boys only
  G = Girls only

deal with relationships with parents, a consistent and important element concerning the girls in this study, many of whom were in the care of the Social Services Department.

Age

A significant correlation (-.168) between total locus of control and age has been noted earlier in this chapter. When examined by sex, however, total score is only significant for boys (-.272, p <.01).

When individual clusters are examined, five of the eight groups demonstrate significant correlations. When analysed by sex, four groups are significant for boys; only one for girls. Table 5-14 provides the correlation coefficients in each case.

Table 5-14   Significant correlations by cluster (includes cluster analysis and NMMS. solutions)

Cluster	Both sexes	Boys only	Girls only
CLUSKF	-.299**	-.371**	N.S.
CLUSPL	-.262**	-.306**	N.S.
CLUSHW	.130*	N.S.	N.S.
MDSXTR	-.247**	-.259**	-.245*
MDSXBR	-.213**	-.316**	N.S.

(* p < .05;   ** p < .01)

As indicated on page 190, correlations do not provide information concerning significant age-related shifts. For this reason, mean scores by age are provided below in Figure 5-5. This contains three graphs which details scores for both sexes combined, for boys only and for girls only.

CLUSKF, and its rough equivalent MDSXBR, relating to peer relationships, demonstrate a relatively smooth gradient demonstrating a decrease in externality with age. The data,

Figure 5-5   Relationships between age and locus of control subgroup clusters
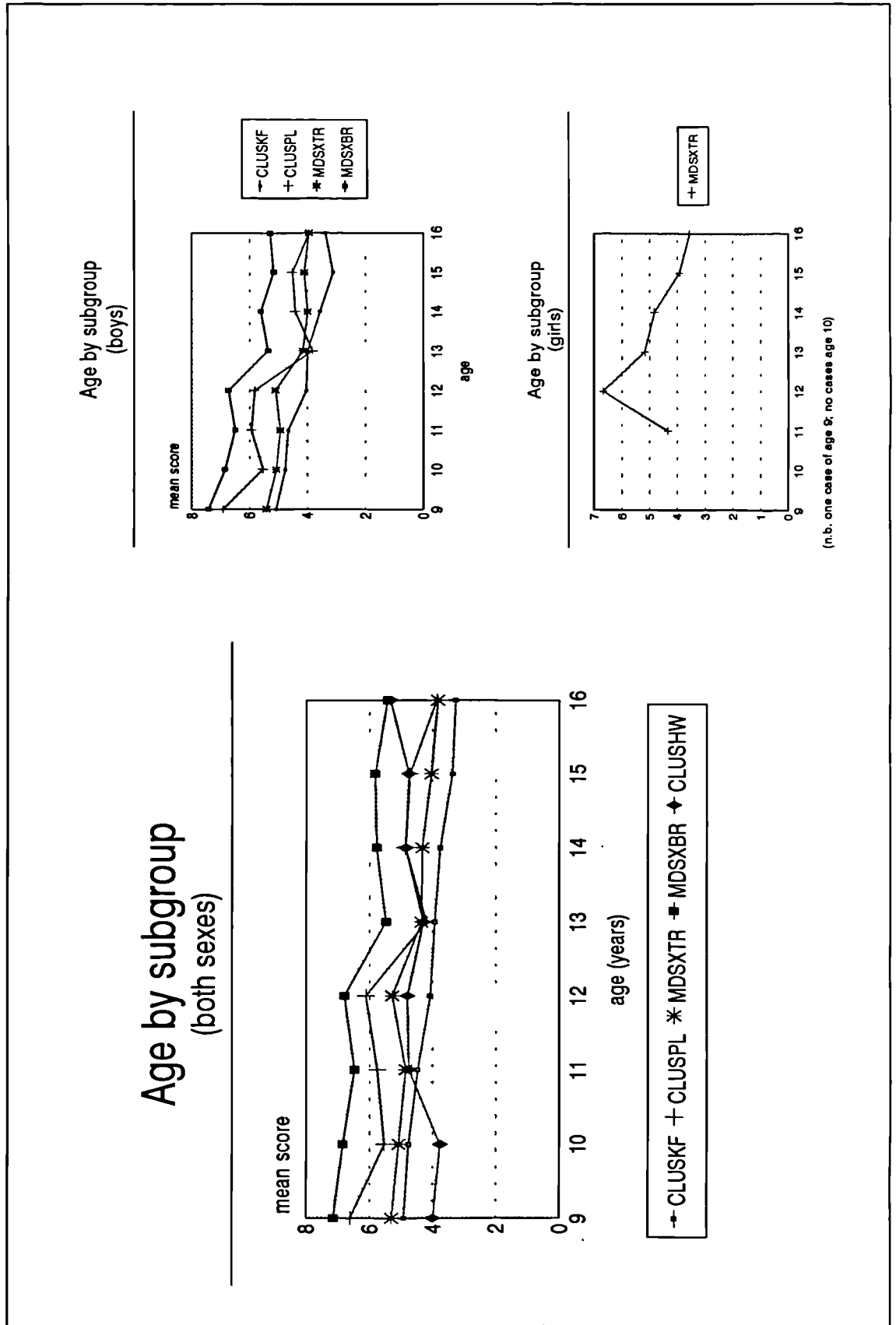
when analysed by sex indicate that this relationship is primarily a male phenomenon.

The profiles for CLUSPL and MDSXTR (relating to more general future outcomes), are more jagged although the trend towards internality with age is again evident. Interestingly, one of these (MDSXTR) is the only cluster which demonstrates significance for girls.

In the case of both sexes combined, CLUSHW shows a very modest trend in the other direction, that is, the older children tend to perceive less relationship between their efforts and academic success. Given the nature of the present sample, one could argue that the only surprising aspect of this finding is that the relationship is not stronger.

Age at referral

This variable generated a number of significant correlations both negative and positive. These were, however, generally very low (i.e. less than .3). The only correlations in excess of this figure, both of which were for girls only, were MDSXTL (.368) and CLUSPA (.339). Both of these clusters, indicating that referral at an older age was associated with higher levels of externality, appear to relate to relationships within the home.

The above relationship appears to fit a pattern which has already been noted of older adolescent girls who experience a relatively acute crisis in their family relationships and have subsequently been placed in a residential observation and assessment centre. A high proportion of these girls, have not presented sufficiently challenging behaviour earlier in their lives to warrant referral to psychological services. Unlike many of the boys, whose problems are often first noted in school at a rather younger age, this older group of girls is only perceived to be significantly problematic when they begin to engage in behaviours reflecting sexually promiscuity, unwillingness to attend school, a desire to stay out late at nights and a general failure to accept parental authority.

Family structure

There were no significant differences between the types of family grouping on any of the subgroups.

Number of Siblings and Family Position

None of the subgroups produced statistically significant results on any of these variables. Correlations were uniformly low. Of the 48 correlations produced (8 subgroups x 2 variables x 3 subject groupings), a correlation of -0.076 proved to be the highest for all subjects, -0.136 for boys only and -0.149 for girls only.

Employment

Two subgroups demonstrated significance although this was lost when boys and girls were studied separately. CLUSKF showed no clear pattern and a Scheffe test revealed no two groups which were significantly different from one another. Subgroup MSDXTR, however, appeared to differentiate the groups, with group 3 (father employed only) scoring more highly than the others (although statistical significance was only observed between group 3 and group 4 (both parents employed).

Care

Four of the subgroups demonstrated statistical significance on this variable (CLUSKF, CLUSPA, MDSXTL, MDSXBL) although when the sexes were analysed separately, clear differences emerged. These findings are shown in Table 5-15.

Table 5-15   *Significant differences between locus of control clusters and type of care*

placement

Cluster	Both sexes	Boys only	Girls only
CLUSKF	*	*	N.S.
CLUSPA	***	N.S.	***
MDSXTL	**	N.S.	*** .
MDSXBL	N.S.	N.S.	*

(* p < .05; ** p < .01; *** p < .001)

Scheffe tests indicated that there were no significant differences (p < .05) between any two groups on CLUSKF. On the other subgroups, children in Group 1 (assessment centre) scored significantly more externally than those in Groups 0 (not in care) and 2 (community home). The finding that children living in a residential observation and assessment centre demonstrated higher levels of externality on items related to relationships with parents (CLUSPA and MDSXTL) is related to the discussion noted earlier (see page 225). This is, for many, a period when relationships with family members are particularly volatile and prone to uncertainty. The reason why this feature was not evident in the case of boys may result from the fact that, for boys, placement in an assessment centre tends to be the result of antisocial behaviour in the community (usually in the form of delinquency), rather than, primarily, the breakdown of family relationships.

I.Q.

In previous analyses there had been no significant correlations between any forms of I.Q. and total locus of control. On two subgroups (CLUSKF and MDSXBR), however, a number of significant, if rather unsubstantial, correlations emerge in the case of girls only. These are presented in Table 5-16

Table 5-16   Significant correlations for types of I.Q. by locus of control cluster

Cluster	Fulliq	Verbiq	Visiq
CLUSKF	-.441**	-.400*	-.388*
MDSXBR	-.447**	-.467**	-.366*

(*p < .05; **p<.01)

Both of these clusters focus upon relationships with peers and suggest that higher I.Q. scores are related to greater internality on items related to this issue. The relationship between intelligence and social competence/popularity is complex. The majority of published studies have tended to find only a limited positive relationship between cleverness and peer group popularity (e.g. Parsons, 1953; Coleman, 1961; Hendry, 1975), while some report a negative relationship (Ishiyama and Chabassol, 1985). Crucial to these findings is likely to be the nature of the sample. Of course, the above cluster does not relate directly to popularity but to issues concerning peer group influence. It is not clear why the above relationship is only evident in girls.

All the above correlations are negative and are, therefore, in the direction found by those, comparatively few, studies which have found a relationship between I.Q. and locus of control, that is, higher I.Q.scores are associated with greater internality (Coggins, 1984).

School

This variable produced particularly interesting results as four of the subgroups achieved statistical significance. This is true both for all subjects and for boys only. When girls were examined in isolation, significance was not reached.

Scheffe tests were undertaken to search for statistical differences between pairings.

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Diffences between pairs of school types (where found) are reproduced in Table 5-17.

Table 5-17   Significant differences between types of school by cluster grouping for both

sexes combined and boys only

Cluster	Both sexes	Boys only
CLUSKF	None	3/8
CLUSPL	3/2 & 8	3/2,8 & 9
MDSXTR	None	3/8
MDSXBR	3/8	3/2,4 & 8

(key:

3 = primary EBD; 4 = secondary EBD; 2 = mainstream secondary; 8 = disruptive unit 9 = community home)

Children in the primary E.B.D. school (Group3) scored significantly more externally than other groups. It is interesting to note that Group 3 contained only two girls, the gender which in this study has tended to obtain higher scores.

Two of the clusters (CLUSKF, MDSXBR) appear to address the issue of peer relationships; while the other two concern one's perceived ability to influence the future (CLUSPL, MDSXTR)

Academic

Five of the eight subgroups demonstrated significant differences between those of average and below average ability although the picture is complex when gender differences are taken into consideration. Although in most cases, greater externality was reflected by lower ability, perusal of Table 5-13 will demonstrate that, regarding the sexes, no clear picture emerges. (In the case of MDSXTL, the tendency of below average boys to score more externally and similar girls more internally was cancelled out when both sexes together were analysed). Interestingly, those relating to the effects of hard work and academic success (CLUSHW and MDSXBL) were not related to current academic performance.

Section 3 The relationship between behaviours and the CNSIE

i. Deriving behaviour clusters

In order to examine the relationship between locus of control and behaviour more fully, it was decided that an attempt should be made to ascertain whether discrete clusters of related behaviours would aid prediction. As with the CNSIE items, cluster analysis and non-metric multidimensional scaling were employed, although on this occasion, the resultant cluster solution was mapped upon the visual NMMS solution. This is achieved by drawing contours on the NMMS based upon pairings derived from the cluster analysis (see Coxon, 1982 for discussion). If the two solutions, undertaken independently of one another, can be drawn with limited overlapping or crossing of boundaries and with the clusters appearing to be reasonably compact and connected, it would suggest that the two solutions have a degree of credibility (Carroll and Wish, 1982; Shephard, 1982). (Note this procedure proved too complex for the earlier locus of control analysis). The result is reproduced below as Figure 5-6. Perusal of the right sided cluster demonstrates that behaviours 2 and 5 formed the first pairing, These were then joined by item 1, and then, in turn by items 4 and 9. Visual inspection of suggested the identification of two groupings, which were subsequently labelled Behav1 and Behav 2.

Figure 5-6 Hierarchical clustering displayed as embedded in a two-dimensional scaling solution of the nine behaviours in the study.
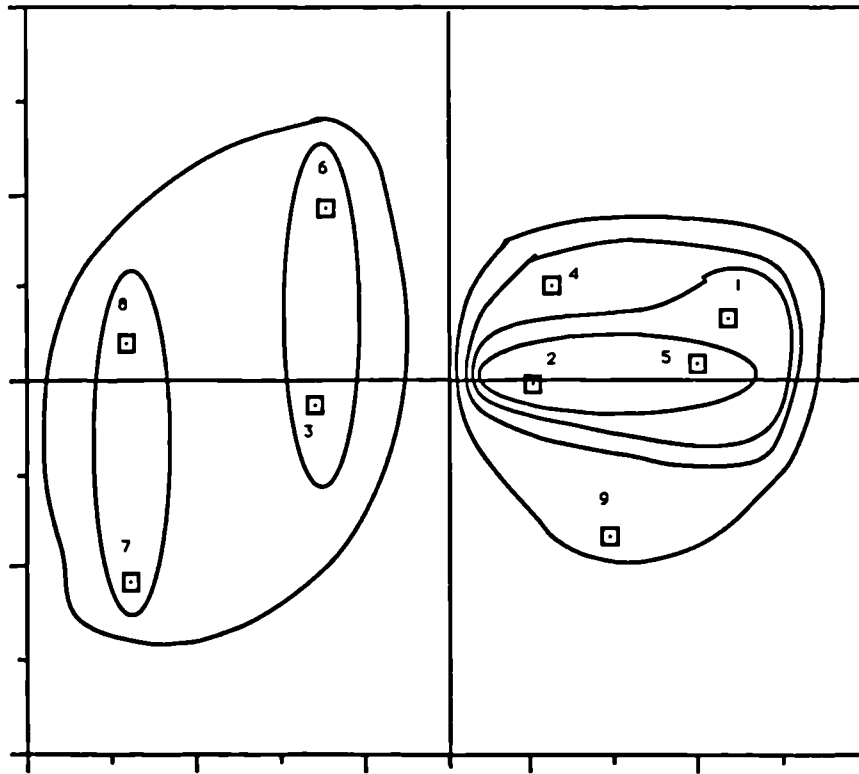
Behav 1 was comprised of the following behaviours, disruptiveness, verbal and physical aggression, negativism to parents and negativism to teachers, while Behav2 consisted of delinquency, damage to property, truancy and inward behaviour. While the first group appears indicative of general argumentativeness, aggressiveness and defiance, the second appears to capture more delinquescent behaviours. Interestingly, the inclusion of inward behaviour within this group appears to reflect Eysenck's (1964) assertion of a link between neuroticism and delinquency although subsequent research (see Rutter and Giller, 1983) suggests that this may be of a low magnitude.

ii. The relationship between CNSIE scores and behaviours

The distributions of the two behaviour clusters for all subjects and for boys and girls separately are shown on Figure 5-7. It can be seen that none of these are normally distributed.

Figure 5-7   Frequencies of behaviour cluster scores (behav1 and behav2)

Frequency of behav1 and behav2 (both sexes)
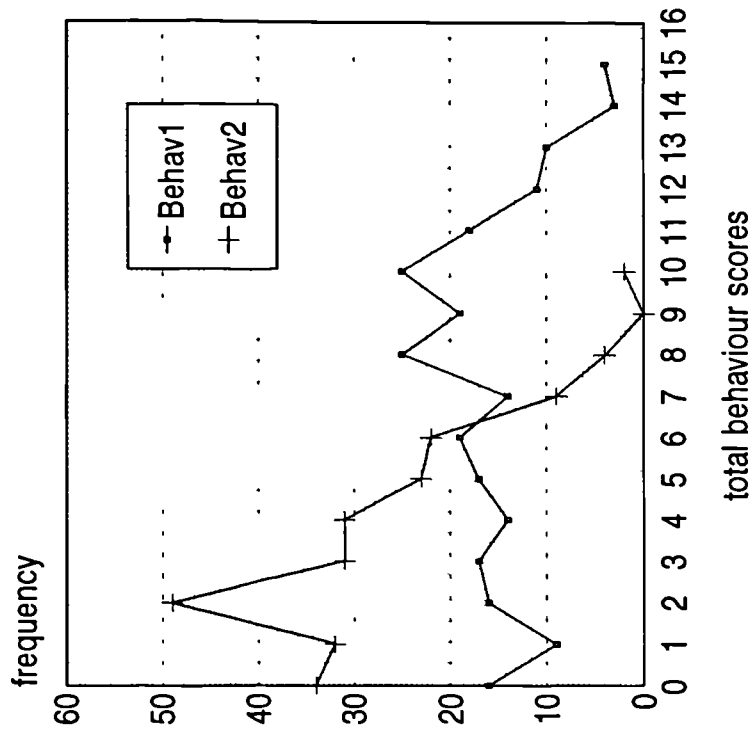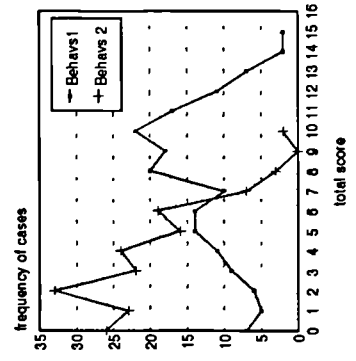
Further analysis of this data, therefore, employed non-parametric techniques.

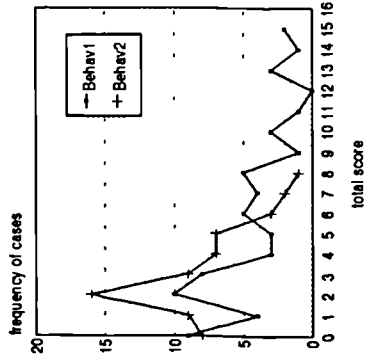Having derived the two behaviour groupings, Spearman correlations were computed for locus of control scores with:

- the total behaviour score

- the two behaviour clusters

- the scores for each of the nine behaviours with each of the eight locus of control cluster groups.

Results are provided in Table 5-18. Although a number of statistically significant relationships are demonstrated, the correlation coefficients (in no case reaching 0.2) were so low as to be practically meaningless.

Analysis of total score by behaviour cluster indicated a small but statistically significant correlation for Behaviour 2 (r = -.137) and a nonsignificant correlation for Behaviour 1 (r = .016). In order to examine whether relationships were stronger when the sexes were considered separately, Spearman correlations between the behaviour clusters and each of the two sets of four CNSIE cluster groupings for boys and girls only, were undertaken. The findings relating to Behaviour 2 are presented in Table 5-19 below. Correlations for Behaviour 1 are not shown, as in no case was statistical significance reached. While Table 5-19 demonstrates some statistically significant relationships, these are, as before, of a very low magnitude.

Table 5-18 Spearman correlations between locus of control and behaviours (n=237)

	Disrup	Reftea	Phyagg	Veragg	Refpar	Delinq	Prop	Truant	Inward	Behtot	Behav1	Behav2
TOTAL	-.022	-.006	.052	.004	.080	-.118*	.079	-.120*	-.042	-.034	.016	-.137*
CLUSHW	-.085	-.002	.024	-.076	.054	.005	.030	.075	-.059	.033	-.026	.002
CLUSKF	.080	.062	.103	.109*	.041	-.134*	.148*	-.097	.112*	.089	.092	-.028
CLUSPA	-.092	-.034	.057	-.036	.090	-.115*	-.037	-.032	-.144*	-.105	-.044	-.164*
CLUSPL	.054	-.011	.047	.019	-.040	-.089	.065	-.216*	.035	-.027	.013	-.128*
MDSXTL	-.085	-.036	.005	-.011	.090	-.144*	.015	-.056	-.088	-.082	-.020	-.159*
MDSXTR	.100	.070	.136*	.087	-.033	-.057	.161*	-.168*	-.026	.061	.090	-.094
MDSXBL	-.074	-.020	-.044	-.065	.020	.009	-.060	.090	-.088	-.071	-.052	-.035
MDSXBR	-.013	.005	.013	-.012	.086	-.085	.046	-.105	.116*	.003	.011	-.029

(* Statistically significant at .05 level)

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Table 5-19   Spearman correlations between locus of control clusters and behav2

	Both sexes	Boys only	Girls only
	(n = 237)	(n = 175)	(n = 62)
CLUSHW	.002	.001	.052
CLUSKF	-.028	-.059	-.057*
CLUSPA	-.164*	-.122	-.257*
CLUSPL	-.128*	-.119	-.167
MDSXTL	-.159*	-.109	-.277*
MDSXTR	-.094	-.102	-.099
MDSXBL	-.035	-.011	-.078
MDSXBR	-.029	-.062	.108

iii. the relationship of individual CNSIE items to the two behaviour clusters

A further issue, which was considered worthy of investigation, was whether children exhibiting different patterns of problem behaviour would respond differently to specific items on the CNSIE. For example, it is possible that children who score highly on those behaviours subsumed within a specific cluster (e.g. that relating to delinquent behaviours) may respond to specific locus of control items in a very different manner to those with other profiles.

In order to explore this issue, mean scores for each of the two clusters (Behav1, Behav2) for each sex were computed for each response, internal or external, to each individual CNSIE item. Thus, one was exploring, in the case of each CNSIE item, whether those who responded with an external response scored significantly differently on the behaviour clusters to those providing an internal response. This involved a series of 160 comparisons - 40 scale items x 2 behavs x 2 sexes (Mann-Whitney U). Those items where significant differences were found are indicated in Table 5-20.

Table 5-20   *CNSIE items in which internal/external responding was related to scores*

on behaviour clusters.

Cluster	Boys	Girls
Behav 1	26 (p=.027)	8 (p=.015)
		30 (p=.036)
Behav 2	10 (p=.008)	39 (p=.020)
	40 (p=.048)	

Given a 0.05 level of significance, this number of items could be expected to appear solely by chance. Perusal of individual items suggests no clear pattern nor obvious relationship to the two behaviour clusters.

Section 4 Comparing extreme scorers

"Since scores on...(locus of control).. scales are normally distributed, most people score in a middle range where their scores are likely derived from multiple unknown and variable factors. Consequently, total scores are of little value in describing an individual's expectancies. The main value of these scales appears limited to those rare individuals with extreme scores who do seem to have a general expectancy of locus of control" (Coombs and Schroeder, 1988, p. 84).

It is interesting to consider to what extent differences emerge between highly internal and external children. Rotter (1975), for example, has argued that extreme locus of control scores may reflect maladjustment at both end of the continuum as both highly internal and external beliefs may reflect an inability to gain a realistic picture of outcome contingencies.

One might hypothesise that these two groups may vary on a number of the variables under examination in the present study. Are the internal children, for example, more likely to exhibit behaviour difficulties of a different nature? Are they more able, intellectually and/or academically? Are there clear sex or age differences? Although an examination of the profiles of extreme scorers on locus of control scales would appear to have much to offer, this researcher has only found this exemplified in two published studies. Hung's (1977)

study compared groups scoring greater than one standard deviation above and below the mean, while Drummond, Barnard and Mehnert (1985) compared two groups, one falling above the 66th centile, the other below the 34th centile. Neither of these studies, therefore, considered such a small proportion of particularly extreme scorers as the present study.

In order to examine possible differences between highly internal and highly external children, it was decided to form two groups which, in total, would comprise approximately 20% of the total sample. Group 0 contained all subjects scoring less than eleven on the CNSIE. Group 1 contained those children scoring greater than 24. By chance, both groups contained 27 children (approximately 9.6% of the total sample in each case). Table 5-21 illustrates a breakdown of group membership by sex.

Table 5-21   Number of subjects in high and low scoring CNSIE groups by sex

	Group 0 (< 11)	Group 1 (> 24)	Groups 0 and 1
Boys	25	14	39
Girls	2	13	15
TOTAL	27	27	54

A Chi-Square analysis indicated a highly significant sex difference (p < 0.001), only two girls being found in the highly internal group. It was decided, therefore, that prior to undertaking any further analysis it would be necessary to examine the sexes independently. Given the small number of highly internal girls it was recognised that only boys could be meaningfully included in the subsequent analysis.

The differences between high and low scorers (group 0 versus group 1) were compared using t-tests (age, age at referral, siblings, family position, fulliq, verbiq, visiq), Mann Whitney U (behaviour scores) and Chi-square (family, care, school and academic). Cell sizes were too small to undertake a Chi-square for parental employment. Other than for behaviour, statistical significance was found only in the case of age (p = .030); the results indicating

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that the highly internal group tended to be older (mean scores of the two groups were 14.3 years and 12.5 years).

Similar findings emerged in respect of behaviour scores. Comparisons between highly internal and highly external boys indicated no significant differences for total behaviour scores (Behtot), for either of the two clusters of behaviour (Behav 1 and Behav 2), or for eight of the nine individual behaviours. The only significant difference was in respect of delinquent behaviour (p=.02) where a large majority of external scorers had no formal history of delinquency.

Section 5: Summary, discussion and general conclusion

The findings reported in this chapter suggest that there is little relationship between locus of control and the variables chosen for this study. Within this sample of boys and girls combined, total locus of control scores appear only to differentiate between sex, age, academic achievement and two of the nine behaviours (truancy and delinquency). These findings, relating to a special population, largely appear to support those from the literature which deal with normal populations although it should be noted that the correlations for truancy and delinquency are negative, not positive as one might anticipate (see chapter 2 for discussion).

Various techniques were employed to examine whether exploration of groups of CNSIE items would offer greater insights. Although factor analysis did not appear to offer helpful dimensions, cluster analysis and non-metric multidimensional scaling, which both make less assumptions about the nature of the data, appeared to offer conceptually coherent groupings. Analysis of the variables by the derived clusters yielded a number of significant relationships, a high proportion relating to the two clusters focusing upon peer relationships. It is difficult to offer firm conclusions as to the value of the clustering techniques. Clearly, where there is no strong relationship to begin with, as is the case with many variables in this study, such techniques cannot be expected to contribute further insights. In a few cases,

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however, the clusters did appear to offer additional information.

It is notable that the variables concerning the child's domestic situation (family size, number of siblings, birth order position, parental employment) appeared to have little relationship to locus of control. It may be that the ready availability, from case files, of such information led to a focus upon aspects of family life which are less important than how its members interact. In other words, it may be the dynamics rather than the structure of the family which are crucial for locus of control (see chapter 2 for further discussion).

The relationships between problem behaviours and locus of control are central to this study and the researcher manipulated both sets of data to heighten the likelihood of discovering relationships. Exploration of the relationships between total scores, clustered groupings and individual items all failed to yield correlations of any magnitude. Although there was some evidence to indicate a relationship between delinquescent behaviours and various clusters of items from the CNSIE, the relationships were so low as to be clinically, if not statistically, meaningless. Comparison of male extreme scorers also failed to indicate a link with locus of control, with the exception of delinquency where highly external scorers tended to have limited formal histories of offending. This finding appears inconsistent with much of the existing literature (see chapter 2).

The above findings suggest one of two conclusions:

a) The behaviour scores derived from case files are not sufficiently discriminatory as to reflect genuine differences between the children. That is, the problem is one of measurement.

b) Although it would appear that behaviourally disordered populations are more external (a position tentatively supported by the scores of the present population), one cannot support the notion that within such a disordered population, those whose behaviour is deemed more problematic are also likely to score more externally. It is recognised, of course, that the more homogeneous a population, the less like one is to find significant differences.

These two possibilities are considered in chapter 8.

Chapter 2 questioned whether a difference would emerge between children educated in disruptive units and those in schools for those with emotional and behavioural difficulties. It has been argued (Galloway and Goodwin, 1987) that there is little difference between such populations whose placement depends largely upon available L.E.A. provision. As Sunderland has both sets of provision, it was considered that placements were more likely to be determined on clinical (in addition to administrative) grounds. The researcher questioned whether children in disruptive units might be more aware of the impact of their behaviour and thus more internal.

The results of the analysis indicated that total locus of control scores did not differ by type of school although on some of the derived clusters, children in the primary E.B.D. school scored more externally than those in disruptive units, community homes or the secondary E.B.D. school. When extreme scorers on locus of control are considered, it is only the primary E.B.D. school which is heavily weighted towards externality.

The suggestion of an E.B.D./disruptive unit split on locus of control is shown as too simplistic and the quantitative data are unable to support the notion that children with very different locus of control expectancies are likely to be located in different settings. Although the boys in the primary E.B.D. setting tend to be more external, the fact that there is no alternative primary-aged disruptive unit, and that community home placements tend to be made for older adolescents, leads to the possible conclusion that this relationship reflects age, in addition to, placement differences. The age when the child was first referred to psychological services, however, appeared to have little bearing to locus of control despite the observation of the Elton Report (1989) that the more emotionally disturbed tend to be referred to support services at an earlier age.

It is interesting to note that a clear difference between care placements was demonstrated

for girls in relation to those CNSIE clusters which addressed relationships in the home. It has been noted that girls tend to be placed in assessment centres because of domestic upheaval/conflict (unlike boys whose placement tends to reflect delinquent activity) and the more external responses of girls in the assessment centre appears to reflect such current concerns.

Given the considerable differences of response to the CNSIE, one might anticipate that the highly internal/external groups would differ on a number of variables. Perhaps the most significant finding was the very low number of girls (3% of the female sample) found in the highly internal group while there was a much higher proportion of girls (20% of the female sample - twice as many as would be expected) than boys (7% of the male sample) in the highly external group.

As the overall percentage of children in each group was approximately 10%, the data suggest that girls with emotional and behavioural difficulties are unlikely to score highly internally, while a significant number will score highly externally even in relation to this special population. One would anticipate that this finding would be considerably stronger within the general child population.

The only other variable which differentiated extreme scorers was that of age, a finding consistent with the wider literature for normal populations (see chapter 2).

General conclusions relating to issues in chapter 5.

The findings outlined above tend to indicate limited relationships between the study variables and locus of control as measured by the CNSIE. Although further, more sophisticated, multivariate analyses may have yielded significant differences and/or relationships, the feeling which emerged from several years of handling and examining the data was that further analysis would merely have represented a futile search for statistical significance, the psychological meaningfulness of which was likely to prove trivial.

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More than sixty years ago, Tyler (1931) pointed out that a statistically significant difference is not necessarily an important difference and a difference which is not statistically significant may be important. Perhaps the most important difference encountered in this study concerns the existence of a high proportion of very external girls, many of whom appear to be engaged in conflict with their families. Such a finding may have important clinical implications.

The other major finding appears to relate to the apparent lack of relationship between the extent and degree of an individual's problem behaviours and their locus of control. In short, the findings indicate that simplistic statements about these variables are misguided. The results of this study suggest that one would be unwise to offer prescriptions about clinical interventions, geared to changing an individual's locus of control, merely on the basis of observed problem behaviour or on the location in a particular educational setting catering for children with behavioural difficulties. These issues are dealt with in more detail in chapter 8.

The data considered in this chapter have not answered the question as to whether there exist highly internal individuals whose behaviour represents an instrumental and deliberate means of goal satisfaction. It now seems apparent that such individuals (if their perceptions are reflected by CNSIE scores) are not strongly represented in any of the groupings (e.g. type of school) included in this study although if they do exist, they are likely to be dispersed in a random fashion. In order to gain greater understanding of the beliefs and attitudes of those whose scores are indicative of high internality, it would seem valuable to examine data of a more qualitative nature. This is one issue explored in chapter 6.

Chapter 6   Analysis of the vignettes

"Qualitative data tend to overload the researcher badly at almost every point: the sheer range of phenomena to be observed, the recorded volume of the notes, the time required for write-up, coding, and analysis can all become overwhelming. But the most serious and central difficulty in the use of qualitative data is that methods of analysis are not well formulated. For quantitative data, there are clear conventions the researcher can use. But the analyst faced with a bank of qualitative data has very few guidelines for protection against self-delusion" (Miles, 1979, p. 591).

This quotation appeared to sum up the feelings and frustrations of the present researcher as he approached the task of analysing 41 interviews of varying length and complexity. Two pressing questions were how to obtain 'purchase' on this voluminous amount of information and how to ensure that the researcher's perceptions were valid. This latter issue required not only attention to the interpretation of the children's responses but also consideration of the interview process itself and the effect this may have had upon the participants. A critical issue was whether the children's responses, both to the CNSIE and the vignettes, were influenced by social desirability:

"Whether we can believe everything that was said to us remains the central question of validity which is at the heart of all research with human beings" (Coffield and Ridley, 1992, p.18).

Paulhus (1986), in examining socially desirable responding, differentiates between impression management, the conscious act of responding to measures in order to create a favourable impression, and self-deception, which refers to the presentation of positively biased responses which the respondent actually believes to be true. Self-deception is likely to be a feature of responses, whatever the setting. Impression management, on the other hand, may be less of a problem in anonymous group-tests typical in scale development and in many of the locus of control studies discussed in Chapter 1, where individual respondents could not be identified. It is, however, more problematic in the present study, where both scale completion and the vignettes were conducted in an interview setting.

It has been argued (Snyder, 1979; Snyder and Gangestad, 1986) that individuals will differ in the extent to which they can and do observe and control the way in which they present to others. It is considered that those who are high in self-monitoring will regulate their self-presentation behaviours in ways which they perceive to be socially desirable and, thus, be highly responsive to social and interpersonal cues. In contrast, those who are low in self-monitoring are considered to lack either the ability or the motivation to regulate their self-presentations in such fashion.

Several writers have suggested (Dodge, 1985, Rubin, Bream and Rose-Krasnor, 1991; Nowicki and DiGirolamo, 1989) that children with emotional and behavioural difficulties may lack an ability to read social situations and understand what is acceptable/desirable behaviour. If this is the case, one might hypothesise that the children in the present study may exhibit comparatively low self-monitoring behaviour.

It has not been possible in this study, however, to ascertain the extent to which impression management and self-deception impinged upon the children's responses, neither have individual differences in self-monitoring behaviours been examined. In undertaking the interviews and analysing the children's responses, however, potential sources of bias were recognised as problematic, and wherever possible, minimised.

Coffield and Ridley (1992) highlight the tendency of some writers to accept the veracity of responses unquestioningly, so demonstrating an understanding of the dynamics of adult-child interaction which borders upon the naive. They quote one writer (Balding, 1987) who states:

> "...we have established that nearly 100% honesty can be assured when the boys and girls are convinced:
>
> a) of the value of the exercise to themselves;
>
> b) that their teachers will not read the answers;

c) that the completed questionnaires are anonymous" (p.viii).

In their focus upon adult-child interaction, Coffield and Ridley focus upon the tendency of some children to deliberately mislead out of a sense of mischief or bravado. Their critique does not, of course, discount other forms of impression management and self-deception.

Many children tend to reply affirmatively to closed questions of the yes/no type, particularly in those cases where they are unsure how to respond. The children in the present study were puzzled by many of the questions, both because of the complexity of the issues and because of, in many cases, their decontextualised, generalised presentation. In order to limit any automatic tendency of the children to respond affirmatively in such situations, the interviewer attempted to present questions in as balanced a fashion as possible by offering alternative options, for example:

"If you were really pleasant and friendly would that make a difference or not any difference?"

Although such questions become more lengthy (and clumsy) this tactic may help to avoid acquiescence through simple affirmation. It should be noted, however, that this addresses syntactic rather than semantic issues (the tendency towards affirmation being demonstrable even if the question is not fully understood) and, as such, it does not fully address issues of social desirability or presentation.

Procedure

All interviews were typed into transcripts. The vast majority had been tape recorded and these were checked for accuracy and retyped. A small number of interviews (n = 5) had not been taped as these had been undertaken as part of the researcher's ongoing casework (see chapter 4 for discussion) In addition, one girl objected to the use of a tape recorder. It is

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important to note, therefore, that the transcripts of these eight interviews do not represent a fully accurate representation of verbatim responses. These interviews are identified, however, where extracts are quoted.

Although the analysis was informed by a search for the presence and elicitation of the locus of control construct it was decided that an initial emphasis upon this construct may result in a failure to perceive and analyse other important and relevant data. For this reason, it was decided to undertake the reading of the transcripts in three stages. Firstly, the technique of the 'long soak' (Smith, 1975) was applied. This involved the repeated reading and rereading of the transcripts with the aim of establishing themes and patterns. At this stage, the researcher aimed to avoid undue focus upon control related themes although, in practice, this proved difficult.

The second stage involved reading and rereading the transcripts again but, on these occasions, examination focussed upon issues of control. These were identified and subsequently classified according to their nature. Thus, an attempt was made to differentiate between locus of control, competence, self-efficacy, self-control and personal causation. It was anticipated that arguments about the centrality and value of such constructs could then be offered.

The third stage involved further reading and rereading in a search for any issues which proved relevant to the locus of control construct. It was considered that searching the transcripts solely for examples of this construct could yield new insights missed in previous searches.

Having identified recurrent themes and patterns in the data, the second task was the 'interrogation of the data' (Coffield and Ridley, 1992) involving the undertaking of a series of constant comparisons (Glaser 1969) between individuals' responses and between responses on the different items for each individual. Thus, an attempt was made to look at individual differences on the total set of items and to consider whether answers varied

consistently for individuals across situations. Were the children's expectations, for example, different for teacher confrontation than for those with the police? Were there differences between the sexes or between older and younger children? Finally, an individual case (Shaun) was studied in depth in the hope that a tentative judgement could be offered about the nature of his or her locus of control beliefs. This case study is included as appendix 9.

It is important to note that although the research stance adopted here is essentially qualitative, it does not sit easily within the naturalistic research paradigm. Blumer (1979) seeks to contrast naturalistic research with a range of other methods including those which start with:

> "...a constructed model of what is to be studied (making)...contact with the actual world through deductions from the model... (and studies).. such as survey research, which aim to provide an idea of how people might interact as opposed to how they have acted or are acting... (or which)...seek to measure attitudes or personality traits" (p.xxiv).

Hammersley (1989) suggests that Blumer's conception of naturalistic research stresses investigation of actual processes of social interaction in 'real world' settings, and involves construction and continual reconstruction of theoretical models. The present study, however, does not employ ethnographic methods such as participant observation, and relies upon the use of case files and interview data.

Unlike those who advocate the use of naturalistic techniques to derive new theories, for example, grounded theory (Glaser and Strauss 1967) and analytic induction (Cressey, 1953), the present study endeavoured to explore and clarify existing theoretical personality/ attitudinal constructs and to ascertain the heuristic value of a questionnaire and the semi-structured interview.

It was tempting to reduce the data from the interviews into numerical form and present the findings as averages and percentages. This drive towards measurement is described by Reason and Rowan (1981a) as 'quantophrenia'. They caution that:

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"Some things which are numerically precise are not true (p. xiv)"

Analysis of the transcripts suggested that the data were not best served by quantitative analysis. The contradictions, inconsistencies and uncertainties in the children's responses would be lost in a sea of numbers and mask the realities of the children's phenomenological worlds. In many cases, certain issues were not discussed or answered in a clear manner. To illustrate, in the police vignette the researcher decided, in his analysis, to count the number of children who stated that they would run away from the police officer. Although, initially, this appeared to be a simple task, it became clear that, because of the way in which the question was interpreted or understood, some children had not considered this option. This may be because they had interpreted this particular situation as one from which running was impossible or, alternatively, because they considered that this answer was outside of the researcher's frame of reference. It was interesting to note that such a reply tended to be negated by the researcher who quickly followed up with a supplementary question indicating that the situation was one from which escape was impossible.

Because it was considered that they might often hide more than they could reveal, numbers and percentages are rarely provided in this chapter.

THE VIGNETTES (see appendix 6 for details of content, and appendix 10 for glossary of slang/local dialect)

1. Conflict with peers

All respondents replied that the hypothetical black eye and torn coat were most likely to result from a fight. At first, it was usually suggested that this would involve a third party seeking to cause trouble. This involved such acts as bullying, 'stirring' (i.e. trying to enrage/ irritate), spreading malicious gossip and/or arguments about the ownership or use of

possessions. Of the seven girls who were interviewed, four suggested that fights would be likely to be with other girls, the other three described incidents with boys. Two girls stated that fights between girls were often over boyfriends; Sarah (assessment centre) said a fight might ensue with another girl:

"...if she took my boyfriend off me or I took one off her"

Pam (secondary E.B.D.) and Pauline (disruptive unit) both described situations where they had been struck forcibly by boys. Pam commented that her boyfriend had been jealous because he had thought that she was being over-friendly with another boy. Pauline had been hit when she had laughed at a boy who had asked her out. Although their responses had been different, only Pauline struck back, both girls presented an acceptance of violence as part of everyday life.

Conflict with or over girls very rarely figured in boys' accounts.

Although the children invariably presented themselves as the innocent party in conflict situations, as the interviews progressed, several of the children became increasingly prepared to admit to starting fights themselves.

The majority of the children stated that their initial response to peer provocation was to try to ignore it although very few felt confident that this would prove successful. Many of the children in this study will have received much advice from adults in authority over them and the strategy of 'ignoring troublemakers' is likely to be one that is repeated regularly. It was, therefore, difficult to gauge to what extent this strategy was cited because it was considered that this is what the researcher was expecting. Bruce's (secondary E.B.D.) comments illustrate the gulf between teacher and pupil perceptions. In the interview, Bruce complains that he is provoked by others who call him names:

J. What sort of names?

B. Like spacker head and that. (pause) They just call back and that.

J. They call you all those names and what do you do then?

B. Just call them back or hit them

J. Right...right. Whose fault is it when you've been in a fight?

B. Mostly mine

J. You think it's your fault. Why's it your fault?

B. For...turning round and answering back them (sic)

J. What do you think you should do?

B. Ignore them

J. If you think you should ignore them, why don't you?

B. Cos I don't like that sort of thing. They make them worse.

J. What makes them worse?

B. If you ignore them.

J. Right. So you think that although you're supposed to ignore them, you think that if you did, it would make them worse?

B. It does

John (disruptive unit) can clearly differentiate between the expectations of his world and that of the adult.

J.   Do you enjoy getting into fights?

John   No

J.   So how can you avoid them?

John   Just walk away from them

J.   And do you?

John   No.

J.   If you don't like fights, why don't you walk away?

John   People will say I'm scared and that

(extract taken from handwritten notes of interview)

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Paul (secondary E.B.D.) is one of the few children who consider ignoring to be a successful strategy:

> "Them get sick of being ignored and they don't bother with me. Go for somebody else."

For the majority, however, ignoring usually results in an escalation of intimidatory behaviour. Darren (secondary E.B.D.) commented that his usual response to name calling was to call names back. On other occasions he would try ignoring his tormentors:

> J. What happens if you ignore them?
>
> D. Err....they start doing it more (pause). or I just walk out.
>
> J. You may walk away from them.....And if you ignore them do they do it more? (n.b. unfortunately, a leading question)
>
> D. Aye
>
> J. And what happens then?
>
> D. I end up punching them
>
> J. You end up punching them....Who's controlling the situation, you or them?
>
> D. (without hesitation) Them

An alternative strategy when one is assaulted is to retaliate with words rather than fists. During the interview with Andrew (primary E.B.D.), it was clear that he was concerned about perceived provocation by another boy, Lee. Andrew appeared not to believe that he could exert much influence upon his aggressor, yet he signalled determination to ensure that any aggravation was not one-sided:

> J. Why would he (Lee) be cross with you?
>
> A. I don't know, everytime I see him he just punches us and shouts at us
>
> J. But have you done something to upset him then?

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A. (shakes head)

J. You can't think of anything that's upset him?

A. Naa...'cause every time I punch him I call him

J. Pardon?

A. Every time I punch him I call him

J. You punch him?

A. I mean...every time he punches me I call him

J. Right, so what do you call him? You swear at him do you? What do you say to him?

A. Just call him a blackie 'cause he's got a black eye.

J. Right...does that do any good...calling him names?

A. Naa

J. So why do you do it?

A. Just to get on his nerves

J. Right

A. 'Cause he gets on my nerves

J. So supposing you wanted him to stop being nasty to you, would that be a good thing to do or a bad thing to do?

A. Bad

J. Right, do you think if you stopped calling him names it would make a difference?

A. Naa

J. It wouldn't. So it doesn't really make-

A. (interrupts) 'Cause even if I don't call him....when he comes up to us he still punches us

J. Oh, that's really worrying you at the moment, isn't it? Yeah, I wonder what you could do about that? Have you any idea at all what you could do?

A. Naa...just..em... tell the cops.

Andrew's answer to this final question illustrates the hopelessness he perceives in his attempts to reduce Lee's intimidatory behaviour. Although he refuses to adopt a passive response, he appears to believe that no actions on his part can affect likely outcomes.

Andrew's dilemma illustrates an important conceptual difficulty regarding the construct of locus of control. If this is interpreted narrowly, all that is necessary for Andrew to be deemed nearer the internal than external pole is that he recognises that outcomes are contingent upon his behaviour. But, in this particular case, Andrew does not believe that any action he engages in will stop his perceived persecution. As such, there appears to be a (realistic) perception that negative outcomes, in this very specific context, are not contingent upon his behaviour - he has no power to change what is happening. The issue of interpersonal power/control has become merged with locus of control, ostensibly a different construct. (This difficulty is addressed in chapter 2 and at the end of this chapter:)

A significant number of the children indicated that they would not instigate physical conflict but would meet violence with violence. Stephen (secondary E.B.D.), for example, comments that he'd:

"Get back into him if he starts on me"

David (disruptive unit) stated that he had often been beaten by bigger lads. He appeared resigned to his inability to avoid fights:

D. Then I gans, "I can't be bothered man" and just turn round.....then they just jump on me back and start punching into us

J. And what did you do then?

D. (pause) Just start on them

Later in the interview, David is asked about nights in the Town Centre. It is suggested to him that it is often difficult to keep out of fights there:

D. Nor, I just hope I have...I hope I don't get into any trouble but if anyone starts, I'm away (i.e. start fighting back). I just get straight into them

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There was relatively little comment about the value of fighting back and most of the children made few remarks about the outcome of physical conflict other than to make reference to 'giving as good as I get'. Although it appeared that those who were more confident in their ability as fighters were generally less persistent in their attempts to avoid physical conflict, virtually all the children, irrespective of their perceived pugilistic skills, stated that such altercations were likely to end in blows. Barry (secondary E.B.D.) was one of very few children to admit to being a poor fighter. He was eager to avoid fights by whatever means possible:

B. I can't fight properly. I back off straight away 'cause I'm git soft. I'm like a person who doesn't fight and...fights if it's needed....when they're fighting with me. (pause) I don't normally fight, me.

J. So if you get into a scrap you...?

B. Come off worst

J. Are you saying that fights are a way to solve problems or not?

B. I...If anybody wants to start a fight with us I say, "'Ere, I dinna want to fight!" and I just walk away from them, but they, like, come back.

Unlike the majority of children interviewed, Barry has no qualms about shouting to his mates for help, seeking adult support or trying to talk his way out of trouble. His desire to avoid fights and his lack of perceived competence as a fighter are such that he appears considerably less concerned about his public image. Paradoxically, his poor self-image permits him a wider range of acceptable options than his more socially constrained peers who tend to hold fatalistic perceptions that conflict cannot be avoided. Thus, in the majority of such cases, perceptions of personal competence and social pressures unite to limit the amount of influence that can be exerted in the avoidance of provocation.

The option of running away was one which a few children offered although this was rarely suggested in cases where numbers and size were relatively equal. However, even those who were apparently concerned about their image and eager to maintain face would rarely worry

about running from someone significantly bigger than them. The following extract is from an interview with John (disruptive unit):

J.   What if the other person was much older than you, say fifteen years old?

John   I'd still fight them, it's got nowt to do with their size or age. I'd fight them unless they're git massive

J.   What would you do if they were like that?

John   Run away from them

J.   Would you be embarrassed?

John   No. I'd say, "Look at the size of him! I wouldn't be able to reach his face."

(extract taken from handwritten notes of interview)

One boy, Darren, however, professed to be totally unconcerned about the size, claiming to have a 'speciality punch':

"Right in the grind! (motions an undercut to the genitals)... They have to gan down then. If they dinnit I just whack them in the face and they're down for good."

One boy, Lee, for whom self-presentation issues seemed highly influential, commented twice that fighting was not a good way of sorting out problems. Given a hypothetical scenario in which an argument broke out over who could play on a swing in the park, his reported response was that he would say:

"No, that's not your swing, it's the Borough of Sunderland's, 'cause they the ones that put it up"

When asked what would happen then, he replied, without recognising the irony:

"It would turn into a fight"

A number of the boys spoke of the physical effects of fighting. When asked how he felt after a fight, Barry's (primary E.B.D.) response typified these:

"I always go shaky. I don't know why"

When asked whether the fight had in any way been beneficial. he replied:

"Well it ... it got some bad things outa me system"

Barry denied, however, that he actively sought conflict:

"....but I don't go up to them and ask them for one (a fight). It's if them start"

Paul (secondary E.B.D.), who was one of the most physically aggressive children in this study, was asked how he felt after a fight

"Like, relieved.....get rid of all aggression"

Few of the children thought that they could be helped by others to avoid fights. Several made reference to teachers but were generally dismissive of the help they would provide. Peers and parents were rarely mentioned as sources of assistance. One eleven year old boy, Lee (primary E.B.D.), however, explained that he had little trouble from same-aged peers and none from older lads because:

"...if they hit me, me dad hits them"

Such a statement is more than a schoolboy's idle boast, for Lee's father is widely known throughout several Sunderland communities as a very violent figure. Resorting to dad was a response which was cited by only one other child.

In the majority of cases, however, the overwhelming perception was of the individual having to contend with a one to one situation without external support.

It should be noted that a large number of the children in this study appear to have histories marked by an abnormal number of violent experiences. What is more difficult to ascertain, in each case, is why physical aggression was such a common feature of their lives. There was little evidence that the children actually enjoyed fighting or that it was instrumental in meeting their needs. Paul (secondary E.B.D.) was an exception who seemed to take some pleasure from physical conflict. During the interview, he kept returning to discussion of fights which he claimed to have practically every day. His apparent enjoyment of brawls was atypical of the other children in this study. The following extract offers an illustration:

> P. ......it's only me who can stop us (i.e. me) from, like, smashing something up....like, like the other night I was going to punch this kid all over 'cause he looked at us the wrong way.... see I didn't like the look of him, so I ran over and hit him....There was three of us and I says, I says, "I don't like the look of them lads." I says, "I tell you what, I'll go over and hit the big 'un, yous twos hit the next ones" so the three of us were going to hit them, three, so I ran up to him...punched him...and all them had just said it for a joke and I took the joke serious so I went back and I apologised for hitting him but it was ower late then.
>
> J. Did you get worked over?
>
> P. No.... it was ower late. I...I punched him in.

Such incidents are, perhaps, timeless. Witness, for example, some four centuries earlier, the attempts of Sampson and Gregory, servants of the house of Capulet, to engage their enemies in conflict.

> G. I will frown as I pass by, and let them take it as they list.
>
> S. Nay, as they dare. I will bite my thumb at them; which is a disgrace to them, if they bear it.   (Romeo and Juliet, Act 1, Scene 1)

In both Verona and Sunderland, such slights are often difficult to resist.

Paul appeared in the interview to be a young man for whom violence is an important (if not pleasurable) means of influencing others. He claimed that he was rarely to blame for starting fights but that such a response was a legitimate means of dealing with situations where others 'wind him up'. An aggressive response was more likely when he was in a bad mood. Whether such explanations are strongly held beliefs or mere rationalisations for behaviour of which he might consider the interviewer to disapprove is unclear.

Barry, who avoids fights whenever possible, and Paul, who appears to enjoy them, illustrate both the difficulties and the strengths of the vignettes. Although their responses are vastly different, based upon different goals and self-perceptions, they both appear to present relatively internal locus of control expectancies. Barry, despite stating that he has little control when there is 'bother', still suggests that he can employ a range of strategies which will often enable him to gain the outcome he seeks. Paul, in contrast, indicates that he can sort situations out to his advantage by drawing upon his fighting skills. In both cases, therefore, perceived outcomes seem to be linked to the individual's behaviour. The complexity of the respondents' worlds and the tenuous nature of the researcher's interpretations, however, render conclusions highly problematic. On the other hand, it is this very complexity which demonstrates the poverty of simple forced-choice questionnaires. Attempts to reduce this complex interweaving of control-related issues to dichotomous questions such as, "Do you feel that when a kid of your age decides to hit you, there's little you can do to stop him or her?" (Question 23 from CNSIE) may be misleading because, as in Paul's case, an affirmative response may not reveal what is essentially an internal perspective. In such an instance, being hit at the outset is immaterial and irrelevant for his general expectation is that ultimately the outcome (victory or defeat) will depend upon his own behaviour. Preventing conflict appears to a less important concern than ensuring a satisfactory conclusion.

Summary of vignette 1

The general perception obtained from this vignette was that, for both sexes, fights were a regular feature of everyday life which were, in the majority of cases, unavoidable. Thus, with regard to preventing trouble, the link between behaviour and outcomes was often tenuous with many of the children appearing rather fatalistic about the influence which they could exert. As noted above, however, avoiding such a situation was not always an objective and some children saw fights as neutral or even, positive outcomes.

The preceding discussion does not consider the validity of an individual's perception that others are seeking conflict. Research suggests that conduct disordered/aggressive children are more likely to misattribute hostile intentions to others, particularly where the data are ambiguous (Dodge, 1985; Rubin, Bream and Rose Krasnor, 1991). Given the responses above, this is particularly unfortunate for if it is believed that conflict is difficult to avoid, such a misreading of social signals may have negative repercussions.

2. Police

The majority of respondents considered that they would be most likely to be stopped because of mistaken identity. Rather fewer indicated that they might have committed an offence, either trivial, for example, riding a bike without lights, or comparatively serious, for example, burglary.

Several children stated that their first reaction would be to run if at all possible. In such cases the efficacy of other potential strategies was reduced because the researcher asked the children to consider a situation from which flight was impossible. For some, this meant that they would be likely to be forcibly restrained. In turn, this would increase the likelihood of potential conflict and reduce the potential value of other strategies.

When the children were asked to consider whether they believed that they could influence

outcomes, it proved necessary to differentiate between those situations when they were culpable and those when they were innocent of any misdemeanours. There was little indication that opinions varied as to what was formally recognised as wrongdoing although in certain situations (e.g. riding a bicycle without lights) the children concerned did not necessarily consider such behaviours to be inappropriate.

Where the child had been stopped by the police, subsequent to the commission of a misdemeanour, it was generally considered that his/her subsequent behaviour would not significantly affect those outcomes relating to being charged with that offence. Despite this, in some cases it was believed that if one were pleasant, the treatment meted out at the police station might be more agreeable. Michelle's (disruptive unit) comments illustrate this:

> M. Well, if you're pleasant, they don't give you such a hard time
>
> J. You don't think so?
>
> M. They might still get you done for what you've done but they don't give you a hard time at the police station.
>
> J. Right, they give you a nice....so you think you can influence the police then by being nice to them...or not much?:
>
> M. You can for them to be nice to you but not when it comes to, like, when you're getting done for what you've done.

When asked how much influence he has, however, David (secondary E.B.D.) has a rather less sanguine view:

> D. Nowt...It doesn't matter what you say you cannot do nowt against them. They gonna beat you up. "One of them fell over when we were chasing them."
>
> J. One of the policemen fell over?
>
> D. No. The police say that. They'll hit you....why this is what Paddy and them lot reckon. They hit you under there (indicates armpit) with their truncheons....got nee bruises.

J. And how do you think you should behave?

D. Well if you gan to the cells and all that and keep ringing the bell. (pause) It does nee good, you just, you're just there longer.

J. So you think you should....?

D. Just sit down....and wait for them coming.

Such situations illustrate the complexity of control issues again. In the case of the commission of an offence, police action was generally perceived as an outcome directly contingent upon one's behaviour. Luck, a central feature within the locus of control literature, is, of course, important to the offender, and some may perceive apprehension as more the result of bad luck than one's own actions. This was not a salient feature of the present interviews, however.

Once one engages with the police officer, one may or may not consider that future outcomes are contingent upon subsequent behaviours. Even this, of course, is a gross oversimplification. One would anticipate that all the children would recognise, for example, that a serious assault upon the officer would produce a new series of outcomes - the link between certain behaviours and outcomes is, therefore, clear. It is apparently obvious to all that one can make matters worse by acting in a seriously aggressive fashion. David (secondary E.B.D.) illustrates this point:

J. ...if you're stopped by a policeman do you think you'd be thinking,"Well, there's nothing I can do about this; he's either going to do me or he's not" or would you be thinking, "I might be able to talk this guy around and change the way he deals with this"?

D. Err..(pause)..It would depend on me, the way and (sic) act and that

J. Upon the way you act?

D. Like, if I retaliated all the time, it was, like, I was really hating his guts he might...try and...get us done more because he doesn't like the way I was acting.

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A more important issue, however, concerns the extent to which one feels that one can improve adverse situations. Here, the responses were mixed. One boy, Neil (primary E.B.D.), for example, stated that, guilty or innocent, there was little influence he could exert. Presented with a hypothetical situation in which he had been incorrectly accused of breaking a window, he stated that there was nothing he could do to influence the police officer. He was then asked:

J. If you were really pleasant and friendly, would that make a difference or not any difference?

N. No, they might just think you're trying to say it wasn't you and then they'd let you go so...

J. So he might think you're just doing it to get off?

N. Aye

J. And what if you're really stroppy and nasty and sort of like unpleasant with them?

N. They might still finger you anyway.

J. So whichever way you... whichever way you react...?

N. It doesn't matter which way you act, they'd still.., they wouldn't help you

Another youngster, Sean (disruptive unit), who had a substantial history of offending, recognised how he could annoy police officers but did not appear to believe he could improve matters:

J. When you're with coppers, what are you like? How do you behave?

S. (pause) What do you mean?

J. Well, are you dead stroppy with them? Do you refuse to talk to them? Are you nice and pleasant...or what?

S. Refuse to talk to them

J. What do you do? Do you refuse to look at them?

S. I'll look at them but don't say nowt

J. What do you think the coppers are thinking?

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S. Being cheeky and that

J. Does that make them mad? (n.b. a leading question, unfortunately, which was only noted in hindsight)

S. Aye (pause)

J. Do you not talk to irritate them?

S. Sometimes

J. Yes...yes... What do you think is the best way to respond to a copper?

S. What do you mean?

J. Say you're going to get done...and you want to get off. What is the best thing to do?

S. (long pause)

J. Is it best to say, "Come on copper, I'll have you!"?

S. (laughs and shakes head)

J. What about ignoring?

S. (shakes head)

J. What would you do?

S. I don't know... I don't know what I'd do.

J. Is there anything you can do to make things work out better?

S. Not really.

Sean's responses to the questions suggest that he is unused to reflecting upon his behaviour in this way.

In contrast to Sean, other respondents believed that the adoption of a friendly, personable demeanour could lead to a more satisfactory outcome. Speaking of the police officer's reaction, Gary commented:

'Cause like, when like, if he says, "You've got to come and see us sometime", like, well he could say, "Why, he wasn't very pleasant, he could have been more... he could have spoke nice to us" and that.'

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Many of those who thought that being positive would prove helpful commented that they might still behave in a challenging/aggressive fashion. One factor which appeared in several cases to be influential was the perceived fairness of the police apprehension. Paradoxically perhaps, if the child were guilty of the offence (and, therefore, there seemed less influence that could be brought to bear) the legitimacy of the apprehension could result in him/her displaying rather less surliness. In a number of such cases, the general explanation was that as the culprit he/she was responsible for the situation:

J. Supposing a policeman comes up to you and says, "I think you smashed a window last night" would you be different if you had done it than if you hadn't, or would you be the same?

G. Different

J. How would you be different?

G. Because if I've done it...

J. Em...

G. It's me own fault but if I hadn't done it

J. Yeah

G. It's different then

J. So how, would you behave differently though?

G. Yeah

J. How would, in what way would you behave differently? What would you do? What would you do that would be different if you had done it?

G. That would be different

J. Em...

G. 'Cause I'd just take the responsibility of what I've done.

Michelle (disruptive unit) differentiates between a situation when she is innocent and might challenge police authority, and one where she might have been apprehended for good reason. Her response to the latter situation is likely to be more measured:

J.   So if you got told off by a copper, a policeman, em...and you'd done something wrong, would you be pleasant to them?

M. If they were shouting at us, I'd just... I would give a little bit of stick back, I wouldn't shout back at them...

J.   Why not?

M. 'Cause I know it would be my fault for doing it.

Several respondents remarked that despite the wisdom of placatory behaviour they would not be able to stop themselves becoming aggressive. The following is an extract from an interview with Maria (secondary E.B.D.):

J.   If a copper is having a go at you...is there anything you can do which can make things turn out better or worse...according to the way you act?

M. It all depends on the way you react on them....if you do as you're told, they're ganna be nice

J.   Would you snap at them if you're in a bad mood?

M. Aye, probablys

J.   So even if you felt that it might be best not to, you might still do that?

M. Aye

Christopher (secondary E.B.D.) stated that even if he were innocent of blame, there was little he could do to make matters better. Although recognising that he could make matters worse, his desire to stand up for his rights appeared more important to him than any consequent negative outcomes:

J.   So supposing, for example, you're in there and the policeman was talking to you, do you think that by shouting at him, would that help? Or would it make matters worse?

C. It would make matters worse, probablys

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J. And would you still do that?

C. Aye

J. So would you think about –

C. (interrupts) Well, if I'm in the right, I should shout back, shouldn't I?

J. Right.....right

C. I dinnit let people get at me for nowt.

Cheryl (secondary EBD), however, took a different tack She argued that where the police had stopped her in error they could do nothing without proof. Her strategy was to be obstructive:

J. How do you behave when the police are asking you questions?

C. Sometimes I don't answer. Sometimes in my head I take the piss out of them. Sometimes I'd sit on a chair and swing on it and ignore them.

J. How do they respond?

C. They get angry sometimes...I'm not really bothered. They can't do anything if you haven't done anything. I hate them! I hate them! Every copper I come to knows my name.

(extract taken from handwritten notes)

Mary's (secondary E.B.D.) account has a similar feel to it. Prior to the following extract she has spoken of her visit to the police station on a charge of theft:

J. When you got done that time...what were you like with the coppers?

M. Wouldn't talk to them.

J. You wouldn't talk to them. (pause) Did you think that would make things better or worse?

M. Dinna know

J. Why didn't you talk to them?

M. 'Cause I dinna like them (pause)

J. Why not?

M. They were shouting at us

J. And what did you do?

M. Just ignore them

J. Did you think about how that might affect what they did afterwards?

M. Nah (pause)

J. Did you speak to them later?

M. Aye, when they started being nice.

J. When they started being nice. Is that because you wouldn't talk to them?

M. (with knowing smile) Aye....'cause they kept shouting at us.

Maria continued by stating that she used 'ignoring' with her parents and teachers as this had the effect of making people more friendly towards her. Here, Maria, appears to have found a powerful means of controlling others.

An important empirical dilemma concerns the way in which the researcher deals with accounts which do not ring true. In one striking case, responses did not always match the investigator's own knowledge of the child. Bruce (secondary E.B.D.) is a young man who has formerly spent several years in a school for children with learning difficulties. When presented with the vignette, he comments that his first reaction would be to run, yet when asked what he would do if the police officer had him by the arm, he responds:

B. (laughs) Stamp on his foot

J. Is that what you'd really do or...

B. Or thump him in the gut

J. Would you really do that?

B. Yeah

J. If a copper stopped you and had you by the arm would you really attack him?

B. I wouldn't attack him, just thump him. It's not attacking is it?

J. Well, you're saying you'd thump him and try to get away. Do you think that would make things better for you or worse for you?

B. (pause) Better (pause)

J. Why would it make things better?

B. I'd tell my mam and dad my part of the story.

J. (missing this response) Pardon?

B. If they heard what I'd got to say, it would be better.

Barry is known to have a propensity for confabulation and to display a near total lack of physical aggression. His initial response, seemingly a fantasy, leads him to a position in which he has to search for a rational explanation. His poor language skills only serve to make this task more difficult for him.

This example illustrates the difficulties inherent in research of this nature. Knowledge of the individual may enable the researcher to detect responses which are open to question. If the researcher dismisses these, however, does the whole process become flawed?

Summary of vignette 2

The children's replies suggest that few believe that they can influence matters to their advantage although the majority recognise that they can make matters worse. Although the self-defeating nature of aggressive behaviours was noted, many indicated that poor self-control and/or matters of principle would stop what they recognised to be the most productive responses. Although the children appeared to consider that they could exercise little influence upon outcomes, this rarely resulted in a passive acceptance of the situation in which they found themselves.

The researcher was surprised to note that Barry (see above) was the only respondent who threatened to assault the police officer. Given the deep antipathy and mistrust of the police which is commonly found in children with behavioural difficulties, and which was a

common feature of this study, one might anticipate that this vignette might provide a forum for the playing out of aggressive fantasies. That this was not the case could suggest that the researcher's presence was an inhibiting or constraining feature and/or that the exercise was undertaken with a degree of commitment and seriousness, it being generally unadvisable to strike a Sunderland policeman, (both options, of course, being compatible with one another).

3. Peer affiliation

Two main areas were explored in this vignette. Firstly, the researcher tried to explore the explanations children offered for rejection by peers. Secondly, an attempt was made to gauge the amount of influence the child felt he or she could exert over them. This latter issue was rather broader than that of the first vignette as it dealt with a wide range of peer relationships rather than merely the avoidance of 'trouble'.

A higher proportion of children than the researcher anticipated (a litte more than half of the sample) replied in such a fashion as to indicate that they had not experienced ostracism of the kind referred to in this vignette. Given their case histories, this was rather surprising.

Only one respondent identified stable negative personal characteristics as a reason for unpopularity. Barry (secondary E.B.D.) stated that he had few friends and those he had were also generally unpopular. After referring to one friend whom he considered to be 'thick', he was asked why he associated with him:

> B. I dinna sometimes. (long pause) It's just somebody that I've got.
>
> J. Would you choose him as a mate if you could choose whoever you wanted?
>
> B. (with disdain) Oh no, not him! (pause)

Later, the researcher asked Barry how he might make other kids like him in the future:

B. Aye, help them. Well, I do help them. I give them like sweets and that but....

J. It doesn't work?

B. Just asks for more and more. The more you give them the more they asks.

J. The sweets don't make them like you?

B. (shakes head)

J. Is there anything else you can do to make them like you?

B. (pause) That's all, really.

Approximately 20% of the children stated that unpleasant behaviour on their part may have been the major reason for rejection. Behaviours cited were, fighting, being nasty, 'grassing', and leading others into trouble. A similar proportion suggested that ostracism was less a function of their own behaviour, merely nastiness on the part of others. Reasons offered included, a wish on the part of others to tease or 'stir', boyfriend rivalry (by a girl) and competence (both too good and too poor!) at sports. One boy blamed his surname which is synonymous with the location of a famous national disaster.

For a small number of the children, peer affiliation at school was not deemed important. A modification of the famous quip of Groucho Marx (i.e. that he wouldn't want to join any club which would be willing to accept him as a member) was provided by some children who commented that they didn't want to associate with peers in special education. Cherry (secondary E.B.D.) observed:

"Who wants to knock around with anyone from here?"

Gary (disruptive unit) comments upon his schoolmates:

"Nutters man, nutters!"

He subsequently elaborated:

"I talk to them now and then but all they dee is pinch cars and I don't want to get mixed up with people like that....smoke dope."

The researcher's attempts to investigate children's perceptions about the extent to which they could influence their peers and/or make themselves more popular were rather unsuccessful. The children's responses were less detailed than in many of the other vignettes and it proved difficult for the researcher to code responses other than placing them into a 'neutral' category. Many of the children provided neutral, non-committal responses suggesting that they were merely one of a group with equal degrees of influence. At times, it appeared that some were indirectly resisting consideration of the issue as it was presented. It is not clear to what extent this was fuelled by defensiveness, because the issues were painful to consider, or merely because the questions were not sufficiently meaningful to the children.

As, in all the vignettes, the response, 'it depends' highlighted the importance of context. David (secondary E.B.D.), when asked if he sees himself as a powerful member within a group, replies:

D. It depends who's outside

J. It depends...on what?

D. Why, it depends whether they're like, older than you or the same year as you. Like, if they're the same year as you, then, I think...you're one of the powerful ones, but if you're not, if they're older than you, then... (unfinished sentence)

The difficulties of engaging and exploring peer relationships with children with emotional and behavioural difficulties, who often have negative interpersonal experiences and who may also experience difficulty in communicating with adults in authority positions (i.e. the researcher) is illustrated by the following extract. Mary, (secondary E.B.D.) is asked why other children may be avoiding her. She replies:

M. Dinna (long pause)

J. Why might kids take a dislike to you?

M. 'Cause I might have a better boyfriend than them did....something like that. Someone them fancied that you're going with and them wanting it.

J. So one likely reason why other kids might be nasty to you is because of your boyfriend...?

M. And them hadn't.

J. It would be less about how you were as a person and more about who you were going out with?

M. That's what it mostly is about here (at the school)

J. Boyfriends?

M. Aye

J. Can you influence whether people like you or not?

M. Don't know....don't do much with them.

J. Can you make people like you when you want to?

M. If I want to

J. And do you want them to?

M. Not bothered

J. Are you popular in school?

M. Nah

J. Is there anything you could do to become more liked?

M. (pause) Nah

(In the example above, the use of a high proportion of closed questions was employed as (an apparently futile) means of eliciting responses from a girl who was proving relatively uncommunicative. Mary's response to more open-ended questions had often been to say 'Dunno' and it had proven difficult to encourage her to enter into detailed discussion. As with many of the children, it was hoped that once a response has been given to a closed question, the opportunity might arise for subsequent elaboration. The effectiveness of this ploy varied substantially from child to child.)

How does one make a judgement about Mary's position? She states that she can make people like her if she wants them to, but almost immediately afterwards indicates that there is nothing she can do to be more liked, a situation which, she claims, doesn't bother her anyway. In his clinical work with children, the researcher, has frequently encountered children whose replies that they, "..are not bothered" do not appear to be consistent with other available data. Not only may such responses serve to mask the child's true feelings, they also represent an effective means of closing down, or otherwise diverting, the topic under consideration

A number of children differentiated between the local environment and school. In such cases, it was usually stated that peer relations were more harmonious and greater influence could be exerted with associates in one's own community. Unlike mainstream schools, the special schools and units were attended by children from throughout the City. The behavioural characteristics of many of these children were such that peer conflict is a commonplace. As such, the suggestion that relationships at home were superior to those at school appeared quite understandable.

Summary of vignette 3

In general, the children's awareness of the impact their behaviour has upon others seemed limited. It was interesting to note that most of those who were prepared to state that their behaviour could lead to peer rejection, indicated that they had both friends and enemies. On the other hand, those who stated that they experienced difficulty in finding and/or influencing friends appeared to struggle when asked to provide reasons for this, and generally seemed less willing to suggest that it was their behaviour which was a significant feature. The tendency of unpopular children to lack insight into interpersonal dynamics is a consistent feature in the literature (see Dodge and Feldman, 1990 for a recent review) and may explain these differences.

On the other hand, a failure to perceive the impact one has upon others may be motivated by a need to maintain one's self-esteem. Statements that one's behaviour is not influential in establishing sound peer relations might suggest a degree of defensive externality, for if one cannot exercise influence over others then one can't be held responsible for one's limited social success.

Although several questions are raised in this section, the children's limited, rather vague, responses made analysis particularly problematic and it was difficult to arrive at any conclusions. It would appear that discussion of peer relationships is difficult for children although whether this is prompted by defensiveness, anxiety over a particularly sensitive area, or a lack of insight is unclear.

4. Teachers

When presented with this scenario, almost all of the respondents, stated that this would be most likely to be the result of inappropriate behaviour on their part. Most frequently cited behaviours were, shouting out, throwing things around the room, swearing and engaging in disputes with peers. Such behaviours were rarely seen as highly inappropriate. When asked, for example, why he might be sent out of class, David (secondary E.B.D.) replies:

"(pause) Messing about really..(pause)..nothing very serious... just jumping around."

Teacher censure and ejection from the classroom were widely seen as responses to a sequence of behaviours, inappropriate or otherwise, which are initiated by the child.

Attributions of blame for misbehaviour, however, were often complex as several of the children did not accept full responsibility for their behaviour. Thus, although their expectancies that their behaviour would be closely linked to outcomes were strong (i.e. suggesting a degree of internality) they did not always perceive such behaviour as fully their responsibility.

Teachers' moods were frequently cited as important catalytic influences upon pupil behaviour and vindictive or verbally aggressive behaviour by teachers could lead to disruptive behaviour in response. A number of children stated that they would only act inappropriately in those lessons where they disliked the teacher. Here the direction of 'causality' is unclear, for children often tend to dislike those teachers who cannot exert sufficient control over the poor behaviour of their charges.

It was often suggested by the children that the extent to which they would be pleasant with the teacher was determined by that teacher's handling of them. Although teachers may be provoked it was generally considered that teachers were still responsible for creating the tone of the relationship. When asked whether he behaved differently with teachers at the disruptive unit than with those at his former comprehensive, Lee (disruptive unit) replied:

> L. All depends what the teachers are like with us. (pause) If they're nasty to us, I'll
>   be nasty to them.
> J. Why would a teacher be nasty to you?
> L. Dinna.... put them in a bad mood
> J. Would it be you who'd put them in a bad mood?
> L. Uh huh (affirmation)

All the children who were asked, considered that it was relatively easy to get their teachers into a bad mood although, of these, only a comparatively small proportion thought that they could get teachers out of a bad mood into a good one.

The importance of mood figured frequently in discussions about teacher-pupil conflict. In these cases, as with all the vignettes, the presence of a bad mood was seen as an exculpatory factor. Not recognising that someone is in a mood and, therefore, attempting to avoid conflict is perceived as an error of judgement which renders attribution of blame problematic. This is illustrated by Paul (secondary E.B.D.) who, in response to discussion of whether or

not he liked a particular teacher replied:

P. Depends what mood I'm in...what mood she's in.

J. If you're in a bad mood and you do something wrong...right...is it your fault?

P. No it's the teacher's or somebody else's fault

Seeking to question this assertion, the researcher continued:

J. And you really believe that?

P. Uh huh. When I'm in a bad mood.

J. When you're in a bad mood, you think it's the teacher's fault. What about later on when you've calmed down?

P. Oh it was my fault

J. Do you think the teacher should change their behaviour when you're in a bad mood?

P. Uh huh (affirmation)

J. You do?

P. (nods) 'Cause they think, "Oh, he's in a bad mood - couldn't give a shit. Get on with it!"

J. Right. So, supposing you're in a bad mood, scowling, what should happen?

P. They should just leave you alone to calm down...or ask you what's the matter.

J. And supposing there's a major blow up and the teacher hasn't done that, whose fault is it?

P. (pause) Mine...... for being in a bad mood.

J. You think it's your fault but you think the teachers ought to have still seen it anyway?

P. (pause) Not if they....sometimes I think, mind their own business.

Many children stated that their behaviour had now improved and suggested that this was prompted by personal change and/or different treatment by teachers. Several children

commented that they had 'calmed down' since their transfer to special school either because of a change in their own awareness or because the teachers treated them better. David's (secondary E.B.D.) response illustrates the former position:

J. Do you think that you'll get into bother with teachers in the future?

D. I don't know, 'cause I haven't been in bother with the teachers here.

J. Why's that, then?

I. 'Cause...like, compared with what I used to be I've calmed down quite a bit.

J. Is it you that's changed?

I. Yes

J. Do you think that you needed to change?

I. I didn't until, like, I had a talk with my mam and she told us what I was like and that 'cause I didn't know what I was doing.

Several commented that the teachers in special educational settings were more friendly and understanding and it was this factor which had proven to be the calming influence. An important factor seemed to be the time teachers had to spend with individuals. David (secondary E.B.D.) remarks that his present teachers are different to those of his comprehensive school:

"They're good to you and I like them ones. Like, say you put your hand up in this school, right, they come to you straightaway. At school (i.e. the comprehensive) takes no notice of you and you gan, "Oh eff (sic) she's (the teacher) doing and all that." So I starts knocking and she's come over, "What you saying?" and all that and I tell her to shut her mouth and eff off and that....'cause you get sick of waiting for them, man."

Sometimes, accounts seemed confused, with respondents veering from positions where teachers were seen to be at fault to those where the children accepted total responsibility. Barry, (primary E.B.D.) exemplified this confusion. At the beginning of the interview he

stated that he had regularly been ejected from lessons when:

"I hadn't even been deeing nothing!"

His explanation was that this was:

"'Cause I'm the bad un"

When this was explored further, he appeared to be using this expression both to describe the process of teacher labelling (Hargreaves, Hester and Mellor, 1975) and to describe aspects of his behaviour. The description of one incident, when he had sworn at a teacher, seemed to lead to a shift of perception whereby he was subsequently accepting greater responsibility for outcomes. When asked whose fault it was when he was in trouble at school, the interview proceeded thus:

B. Well it was mainly my fault, 'cause I was a bad un

J. Were you? And you've changed now have you?

B. Yes

J. How have you changed?

B. Why...(pause)...teachers here are more nice to you than at the juniors

J. I, so it's the teachers that are different rather than you then, is it?

B. Yes. But I've changed a bit. Here, I've got more nicer but I can 'ave me bad weeks and stuff like that.

J. Right. Why do you have bad weeks? What do you think causes them?

B. I don't know. I just go a bit off.

J. Do you? How much is this behaviour down to you and how much of it is down to the teachers, do you think? (pause) Can you say that it's half and half, or is it more you or more the teachers'?

B. It's more my fault than the teachers'

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Despite the above example, it was often difficult for the children to offer a truly interactive perspective in which blame was shared by both teacher and child. Several children noted that at times it was their fault, at others, the teachers'. Total attribution of blame to teachers, however, was a rarity. One example is provided by Peter (primary E.B.D.) who, while recognising that his behaviour led to his difficulties, was unable to accept that his removal to a special school resulted from his behaviour. Peter had stated that he had experienced difficulties not only in his first year at the comprehensive school but also in his former primary school. The following transcript takes up the subsequent conversation:

J. Why would a teacher kick you out of a classroom and shout at you?

P. I mess about

J. You've been messing about, have you?

P. Everyone.

J. Everyone's messing around. So why would it be you that got kicked out?

P. 'Cause I was the one who started it off

J. Ah, right, so you start the trouble and then when everyone joins in you get done for it.....So when you get shouted at and then you've been kicked out of lessons has it been just because you really deserved it then, has it?

P. Sometimes

J. Did you ever feel that you had got unfairly treated?

P. Yeah...

J. Can you give me any examples of any time when you perhaps you have been treated unfairly?

P. Before....Mr. Wright, the Deputy Head of House....he pulled us out of me lessons. Me mam said she wouldn't sign no more reports and she...she..she flung the report in the fire and....

J. Was it because it wasn't very good was it or...?

P. 'Cause I had a comment on....She says, "I'm not goin' to sign any more reports", so I told the teachers and so they give us another one so I keep flinging it in the bin and the Deputy Head dragged us out of the classes and he says, "Give this to

your mam"...and he expelled us...and I flung the letter in the bin.

J. In front of him?

P. Yeah

J. Or behind his back?

P. In front of him. I flung it in the bin and grabbed hold of me arm and he kicked us onto the ground and started dragging us along and just flung us out of the doors.

J. He hit you?

P. Yeah. An I start running across the fields an he was runnin' after us and me mam saw him and... me mam was....and then our Paul told 'im to get lost, and that's how I got threw out...from...the comp.

J. Right...right. Do you think it was your fault all that happened?

P. No, not really

J. You don't think so, whose fault was it?

P. Mr. Wright's

J. Mr. Wright's? Why was it his fault?

P. 'Cause he wanted us to come here (special school) and chucked us out the comp.

Peter continued by adding that the educational psychologist also wanted him to transfer to the special school because she didn't like him. He then reiterated his belief that he had not left his comprehensive school because he had misbehaved.

The researcher then focused upon a confrontation Peter had encountered with another teacher. This originated from a visit to Peter's primary school by his future Head of House.

P. Miss. Jobson, the Head of House and....came...down to the schools to see like who'd come her House or summat and me mam came down and she says I'm an epileptic and she says, "Oh, I can handle them" and I wrecked the classroom and she start bossin' us about and that and me mam came down she says....I was expelled and Mr. Wright, awful Mr. Wright, was kicking us about and then on Monday me mam came down saw Miss Jobson, and the Headmaster came in and

just start arguin' and me mam says, "Gan te all yer lessons" and then Miss. Jobson just got 'old of us and put us in the car and drove us home.

J. Do you feel that she had it in for you?

P. Yeah

J. Do you see yourself as someone who really.......didn't start the problems then?

P. (shakes head = 'no')

J. Do you think it's the teacher's fault?

P. Yeah

J. Hmm.... Could you have done anything to stop them being nasty to you? Was there anything you could have done to avoid this from happening?

P. Just stop carrying on?

J. Yeah.. Would that have made a difference?

P. (shakes head)

J. You don't believe so? No?...Even if you'd really been making the effort and you'd stopped clarting about, you think you still would have got into trouble and been told off?

P. Mmmm (affirmation)

The preceding passage illustrates the complexity of unpicking such constructs as locus of control, self-efficacy and self-control in interview settings. In several cases, the children recognise the link between their actions and subsequent outcomes yet they still absolve themselves from blame by explaining that their behaviour was triggered by others. Peter's position, however, appears rather different and is, perhaps, rather more puzzling. He recognises that his behaviour has led to undesirable outcomes yet, later in the interview he argues that even if he had changed his behaviour the same outcomes would have ensued. At the end of this passage the interviewer's line of questioning is less than neutral, yet Peter resists the implicit suggestion that he may have been able to exert some influence. Unlike those whose position is essentially internal but who are either not able or choose not to behave in ways desired by their teachers (see, for example, the case of Stephen discussed in chapter 8), Peter appears to switch from a relatively internal to external position as the

interview progresses.

It is important to recognise that retelling such accounts may lead to a revisiting of powerful feelings of frustration and rejection. As he relives the battles with hated authority figures, a psychological need to absolve himself from responsibility may lead to denial and a shift from earlier statements. It has been argued, for example, (Cantor, 1990) that emotionality is more likely to influence cognition than vice versa.

It is important to recognise the stress Rotter places upon the value of reinforcement in predicting behaviour. Unlike many of the other hypothetical situations explored in this study, classroom conflict did not appear as an experience which the majority of children perceived as aversive. For such children, everyday life in school can be dull, boring and repetitive. Disruptive behaviour can be a means of enlivening the experience (Willis, 1977; Corrigan, 1979; Woods, 1976) and observing an increasingly infuriated and frustrated teacher can be rewarding in itself. Some observers saw ejection from class as a valued goal but on occasions, such ploys misfired - Lee (disruptive unit):

> J. Did you ever set out to get kicked out of class?
>
> L. (pause) Once...I didn't like the lesson...wouldn't kick us out.
>
> J. She wouldn't? 'Cause she knew that's what you wanted?
>
> L. Aye
>
> J. So what did she do?
>
> L. Put us in a corner by myself...and let us do nothing.

Others saw ejection from school as a desirable outcome. Pauline (disruptive unit) has learning difficulties and struggled to cope in school for many years. Her transfer to the disruptive unit resulted from an altercation in which she had hit a female teacher who had pulled her hair in an argument. Pauline commented on more than one occasion that this conflict had been her own fault and she considered that her transfer to special education was contingent upon this behaviour. She added that she had wanted to be excluded from school

although had not been aware of alternative settings.

At the time of this interview, this researcher had queried in his notes whether this response could be taken as an example of defensive internality (Phares, 1979) - an attempt to suggest that she had more control over her life than she really believed. When reading the account of the interview many months later, the emotional tenor and the 'feel' for the respondent's perspective is lost and such judgements are more difficult to make.

Summary of vignette 4

It became clear during the interviews that conflict with teachers was not considered to be significantly problematic for many of the children. Often such conflict resulted from a desire to enliven what was frequently perceived as an unstimulating and unappealing daily routine. The majority of the sample had experienced frequent exclusion from classroom and the school and most readily accepted that their behaviour had triggered this response.

The notion of mood figured strongly in this section. It was frequently suggested that conflict was far more likely if either party was in a bad mood. Children could influence their teachers' moods although usually only in a negative direction.

Several children stated that their behaviour had improved, either because of maturation, an awareness of a need to change or because of changes in teacher behaviour (i.e. they appeared more positive to the children) resulting from a move to a new school setting.

In general, the children were optimistic about their capacity to influence future interpersonal relationships with teachers and their responses generally were indicative of an internal locus of control. Their academic aspirations and expectancies, however, were not a feature of these interviews.

5. Parents

The reasons given, by both sexes, for being punished at home were many, arguing with parents or siblings, not coming in on time in the evenings, not helping with household chores, being in trouble with teachers or the police. It was generally recognised by the children that punishments were primarily a consequence of their own wrongdoing although a number complained that they tended to get an unfair share of the blame when fighting with siblings (usually because they were seen as older and were expected to be more sensible). It was also considered that they would be more likely to be castigated if their parents were in a bad mood.

Gary (disruptive unit) complained that he is regularly sent to his room for fighting, a punishment not meted out to his younger brother:

J. Why did you get sent to your room then?

G. 'Cause she says I'm the oldest and should have....I can't think of the word

J. Sense?

G. Sense, aye.....It wasn't that word but that's what she meant, more sense.

J. Maturity?

G. "You should be more mature!"

Some children complained that, at times, they were dealt with unfairly because their parents were in a bad mood. Gary (disruptive unit), for example when asked whose fault it is when he 'gets wrong' off his mum, replies:

"It depends, mostly my fault though but sometimes 'cause she's in a mood"

Most of the children indicated that they would go to their rooms/remain grounded if their parents insisted upon it. A smaller number stated that such sanctions were not applied because their parents knew that this might lead them to abscond. David (disruptive unit)

explained that his mother wouldn't ground him because:

D. It's she knows I wouldn't just stay grounded 'cause, em, all I need to do is flit out
   of me bedroom

J. Yeah

D. Me bedroom window

Rather than challenging parental authority in a direct fashion, the majority had confidence in their ability to resolve the situation by other means. Thus, although parental power was recognised and accepted, it was widely considered that parents could be outmanoeuvred by a range of whining, irritating and/or placatory behaviours. The principal options appear to be either getting one's parent(s) so exasperated that they would let you go out for the sake of peace and quiet, or being pleasant and friendly in order to get them 'in a good mood'. The complexity of such enterprises is illustrated by Cheryl (secondary E.B.D.):

J. Would your mother send you to your room?

C. She's never done that. She grounded us for two weeks but I went out the next day.
   She told me to go out 'cos I keep bugging her. I kept on so much that she kept
   changing her mind.

J. Why were you grounded?

C. I got peed. Someone drugged my drink...bacardi and coke. I couldn't taste the
   bacardi...I don't know why. I had two large glasses... they kept topping it up. I
   thought, "Something's going on here" 'cause my hand was shaking. Darren was
   putting it in. I couldn't tell what was happening.

J. Who's the boss at home?

C. Me mam. Mam definitely is. If you get on the wrong side of her you're in trouble.

J. How come you got out when you were grounded, then?

C. You can bug her...keep asking her...she gets sick and says, "Yes, you can get out!"
   Mam's the boss but you can get your own way. Sometimes you can tell when she's
   getting mad 'cause her eyes open wide. She's got ginger hair...people say that

people with hair like her's, get mad easily. Often can tell when she's getting mad 'cause her eyes look like they're going red but they're not. I back down then.

Later in the interview, Cheryl is asked what she does when her mother gets angry:

C. Get out of the road. That's what I used to do...go to my bedroom, stay there until me taxi came (for school). I normally give me mam the silent treatment...sometimes it never works.

J. Why do you do that?

C. Trying to get her to say sorry...'cause she blames me for nicking her fags.

J. What happens when you give her the silent treatment?

C. Like she kinds of talks us around. You know when someone's giving someone the silent treatment...they speak to you...you tell them to shut up and they've got you talking to them? Supposed to ignore but they've got your attention...You go, "What?"...then you're talking to them. It's canny hard...you forget.

(extract taken from handwritten notes)

Gary (disruptive unit) also differentiates between being in charge and being able to get his own way:

J. What about..what about when you get sent to your room is it..em...do you get cross when you get sent upstairs?

G. I get sick but I act as if I'm not bothered and then she and then she just lets us out and I just keep on moaning, "Can I go out?" But sometimes I go up and say, "Oh, I've seen so and so today and they were asking after you" who she hasn't seen for ages, but I usually do see them when I say that.

J. Em.....

G. And I just keep talking and get let out

J. Is that what you do? Can you get round your mum easily then?

G. Aye

J. So who's in charge at home, you or your mum?

G. Me mam's in charge

J. She's in charge, is she, but you can get round her easily?

G. Aye

One boy, Paul (secondary E.B.D.), explained that he could get round his parents by doing jobs around the house which might overturn his being grounded and lead him to get out the same night. He was then asked:

J. So you know how to manipulate them, then?

P. Uh huh... get round them... If that doesn't work I play one against the other....me mam against me dad. Like, mam against me dad... telling me dad one thing and me ma's saying (inaudible)...

J. What sort of thing might that be?

P. Like me dad... I said to me mam once that me dad wouldn't buy us any clothes out me Christmas money...and me mam started shouting at me dad, and I told me dad that me mam wouldn't. So, like, they were both shouting at us at once, so I telled her that thing, and him that one, and they took the attention off shouting at me and shouted at each other...and that kept me off...took the heat off, off me and put it on them....Well, I sneaked out the house and left them to it.

Occasionally, such behaviour can lead parents to adopt other stategies. Ian (disruptive unit):

I. Well, they dinnit ground us cause they only let us out 'cause they're sick....they're sick of us when I'm stopping downstairs and making too much noise.

J. So they don't ground you?

I. They just say, "Get out"

Other children stated that they were smacked by their parents yet only one, Michelle (see

below) complained that this was an unfair form of punishment.

The discrepancy between power and influence highlights an important issue concerning the operationalisation of the locus of control construct. It would be easy to equate this with the exercise of power rather than with a recognition of the contingent link between behaviour and outcomes. A child may recognise that s/he has little formal power at home, that parental directives must be obeyed, yet still believe that s/he can influence outcomes to a significant extent by acting in a certain fashion.

Once one begins to contextualise issues by examining individual circumstances, the complexity of the construct is further demonstrated. Several children commented, for example, that they could manipulate one parent but not the other, others pointed out that they could influence parents when they were in a good mood but not if they were in a bad mood. Given such situations, it proved difficult to make judgements about individuals' locus of control even in the specific domain of the home.

One case where externality seemed relatively apparent concerned Michelle (disruptive unit), whose relationship with her parents had broken down. Her father originates from the Middle East and has strong views about what is acceptable behaviour for a teenage girl. Conflict was heightened by Michelle's behaviour at school which resulted in her being excluded. Michelle complained that she was powerless at home, that she was sick of being physically chastised by both parents or locked in her room. Although she sometimes wished to strike her father, she would not dare to, neither would she try to discuss her concerns because:

"Anything I said might come out wrong"

Her eventual response, running away from home was the only response she could think of. Eventually she was placed in a local authority children's Home.

Michelle recognised that her parents behaviour was provoked by her own actions yet believed that:

"...I shouldn't be getting hit for these silly things 'cause me friends weren't."

When asked if she had ever considered changing her behaviour she replied:

"Sometimes I used to think, 'Oh, I'll be good, I'll be good' but I...you cannot change yourself for someone else."

She added that not only did she feel unable to change, she also didn't want to.

Michelle's responses suggest that she had little confidence in her ability to bring about desired outcomes at home. She appeared to see her parents' expectations and demands as inconsistent with her own self-concept and generally considered that there was no way she could effect change in these circumstances. Although, her behaviour may be able to improve outcomes, she demonstrated little confidence in her capacity to conform as required or, indeed, in its likely efficacy anyway.

As has been the case throughout this study, Michelle's locus of control beliefs concerning her parents are difficult to unpick. She states that she could improve matters by behaving differently but her words lack conviction and, besides, she doesn't feel able or willing to change. How does one estimate her position on an internal-external continuum with regard to a specific issue of such a nature? To suggest that she should be located nearer the internal pole, on the basis of her comments about improving outcomes, would seem a misrepresentation of her true beliefs and render the construct virtually meaningless. As this study repeatedly demonstrates, judgements depend greatly upon how strictly one interprets the definition of locus of control.

<u>Summary of vignette 5</u>

The children in this study tended to have a strong set of expectations that their behaviour was greatly related to subsequent outcomes. Although generally perceiving themselves as lacking in power, many indicated that they could exert influence in the pursuit of selected goals.

In situations where their parents were perceived as being in a bad mood, it was necessary to find ways to overcome this. Many children, however, considered that the only option was to get out their parents' way until they became calmer.

The responses to the issues concerning relationships at home were generally suggestive of greater internality than in most of the other vignettes. Considering the high proportion of this sample who experienced family conflict this is somewhat surprising. One possible explanation is that the ability of many of the children to manipulate and overcome the wishes of their parents, in itself, has shaped and heightened this apparent sense of internality.

6. Someone is furious!

This vignette was included in order that any interpersonal conflicts which had not already been explored could be addressed. Approximately 40% of the children cited their parents as the most likely person (mothers cited twice as frequently as fathers) for them to be in conflict with. Although this is hardly surprising, it is possible that many of the children were still focusing on family issues raised in the previous vignette.

The next most frequent category was siblings. Unlike several of the other categories, conflict with siblings was often seen in a relatively neutral light, and, in some cases, somewhat amusing. Robert (mainstream secondary), for example, responds:

R. Me sister. Yes, I always whack her one. I did it this morning. I was sitting down

eating my Rice Krispies and we had an argument over them.

J. Would you rather not get into such situations?

R. It's a laugh with my sister.

(extract taken from handwritten notes)

The only other categories which were identified by three or more children were peers and teachers. The analysis of these (and those regarding parents) were included in appropriate sections, above.

This vignette often led the children to return to issues which had been discussed earlier in their interview. Although it often yielded additional information which could facilitate insights into the child's world, the vignette, by itself, rarely offered new areas to explore. It has been noted that sibling conflict was identified by several children although this was not unique to this vignette. Neither was this usually perceived as unduly problematic.

7. Reflecting upon the past and influencing the future

After the first few couple of interviews had been completed, the researcher decided to introduce a new, more general question. After discussing the six vignettes, he endeavoured to explore the nature of the children's expectancies concerning future outcomes in general. This process also took into consideration atributions for past experiences.

Each child was asked to reflect upon significant past events and consider the extent to which these were generally the result of his own actions as opposed to those of powerful others or luck-related factors. Such a question reflected, therefore, Levenson's work (1973, 1981) on external sources of locus of control.

The child was then asked to consider what he hoped for the future and then, as before, to gauge the extent to which he believed these desires were contingent upon his behaviour as

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opposed to luck, fate or the decisions of others.

The researcher encountered major difficulties when he attempted to put these questions to the children. His efforts to present them in a manner which was both unambiguous and meaningful to the children were often met by incomprehension and puzzled expressions. There were a number of key reasons why this was the case:

a) In his efforts to achieve balance (i.e. not present the question in such a fashion that the child might simply agree with the proposition) and in seeking to help the child to deal with a highly abstract, hypothetical issue, the researcher recognised that the questions which he posed often became long and complex. The ability of some of the children to retain the substance of the question in their memory while considering an answer was limited.

The often clumsy attempts of the researcher to differentiate between internal and external perspectives and to phrase these in such a way that the child was not cued to answer in a particular way, were not always successful. Stephen (secondary E.B.D.) had become increasingly less communicative as the interview progressed and the researcher had struggled to maintain the youngster's interest and willingness to engage with the questions. The following extract, from the end of the interview illustrates the lack of success which ensued:

> J. How about the future? There's different kinds of people. Some people think that what happens to them in the future is down to whether they're lucky...down to whether other people make things happen for them. Other types of people think it's got nothing to do with other people."I can make things happen!" The first lot say,"I may get what I want if I'm lucky, if someone likes my face, if someone does things for me. It's not down to me; it's down to someone else. Which sort of person are you?
>
> S. What you've just said, the last one.
>
> J. You think it's down to luck and other people?

S. (nods)

J. You do not think that you've got much control over your life? Will your getting a job, marrying the right person, getting the things you want...will you not have much control over these?

S. (mumbles in agreement but rather diffidently)

J. Hard questions aren't they?

S. Yes.

Stephen was considerably more communicative when the topic of conversation was motorbikes or when discussion ranged over concrete events of certain aspects of his life. When the focus shifted to relationships with his mother or upon the sort of abstract issues represented by the passage above, he rapidly became detached and unresponsive.

It is difficult for the researcher to come to a conclusion about Stephen's position on this issue. It would be too easy to record his reply as indicating an essentially external position. Given the pattern of his responses, however, this, would not appear to take into adequate consideration the possibility that he was tired, bored, confused and/or irritated to an extent that his replies had become a poor reflection of his true beliefs. Indeed, one should consider the possibility that he had no clear beliefs about this issue at all. This is exemplified in an interview with Lee (disruptive unit) who was in his penultimate year of statutory schooling.

J. Do you have any plans or wishes for the future?

L. Naa!

J. None at all?

L. Naa

J. What are you going to do when you leave here?

L. Dunno

J. No thoughts?

L. Not yet

J. What about next year?

L. No idea

J. What about a job?

L. Don't know what I'll dee yet (pause)

J. Do you not plan ahead much?

L. (shakes head)

J. No (pause) Do you think that you can get things you want in the future?

L. Sometimes (pause)

J. Do you think that what happens to you in the future depends on what you do or will what you do not make much difference?

L. ...(inaudible)...Things I dee!

Lee's final response, suggesting an internal perspective, does not sit easily with the general impression he provides. His comments that he gives little thought to the future are echoed by his teachers at the disruptive unit who informed the researcher that he rarely appeared to consider the likely consequences of his actions. In addition, he was due to appear in Court charged with a very serious offence. The uncertainty of whether he might receive a custodial sentence (which, given the charge might prove to be particularly traumatic) may have had the effect of closing his mind to the future. As in the case of Stephen above, it is difficult to form any clear conclusions as to his position on an internal-external continuum.

Recognising the complexity of the language and concepts involved, the researcher explored various means of representing the internal-external continuum. One technique was to depict such a continuum in space:

J. If you think of the things that's happened to you in your life....going back right, the most important things in your life. Do you think that these things have happened because of the way in which you behaved or do you think that things didn't depend on you? (pause) Think of a straight line. At one end you might say that things happen in your life as a result of your actions. At the other, you might say that things happen because of other people, or because you're lucky or

unlucky. In other words, not much to do with you. Where along this line are you? At this end? (gesticulates with arms)....This end is where everything's down to what you've done and this end is nothing to do with what you've done.

An alternative technique was to ask the child to consider their position in numerical form, as a fraction (e.g. about a half, a quarter etc.) or as a ten point scale:

> J. ...if it's totally to do with your behaviour it's ten marks and if it's got very, very little, it's about one mark, right. So if you think the way you behave's got <u>everything</u> to do with what happens to you and the way people treat you, it's ten, or, if it's got <u>nothing</u> at all or very little, it's one. Whereabout's would you say it would fit...? What sort of number would you say?

The choice of a ten point scale reflected the researcher's belief that, in this abstract presentation (as opposed, for example, to a five or seven point Likert scale written down in front of the respondent), this might prove more meaningful to the child than other numerical alternatives. A ten point scale was employed by Ortman (1988) who asked adolescents to score personal perceptions of control and responsibility. Unlike the present study, however, the respondents' ratings were used for quantitative analysis. Unfortunately, Ortman's paper fails to discuss whether a ten point scale appeared most appropriate.

It is difficult to assess whether either of the above techniques made the question more comprehensible to the children or easier to answer. Reading the transcripts above, one may conclude that such techniques may have complicated matters and served as distractors. In reality, however, the researcher considered that they could have eased children's difficulties. The methods were only employed if a decision was made during an interview that one or other might prove helpful. Neither technique was used in the majority of interviews.

b) Not only were the length and complexity of the question structures problematic, there was also a difficulty in selecting the appropriate vocabulary. The researcher struggled to

generate questions using language which all the children could comprehend. Words such as control and influence often proved problematic, either because the child did not know their meaning or (potentially more problematic) because their understanding of such words was rather different to the researcher's and that of their peers. To overcome this problem the expression 'down to you' was often employed as it generally appeared meaningful to the children.

In an effort to overcome the problems described above, the researcher attempted, on several occasions, to formulate one or more questions which could be used in the interviews. The diverse nature of the interviews, reflecting significant differences in emotional tenor and intellectual sophistication, did not lead the researcher to consider that a standard question would prove appropriate.

c) In order to assess a generalised rather than a more specific expectancy, the researcher endeavoured to gauge general beliefs about the future. Often the children found this extremely difficult and it proved necessary to assist them to identify specific aspects of their future lives which were important. This focussing upon particular events made it more difficult to differentiate subsequently between generalised and specific expectancies.

d) This question was, perhaps, particularly prone to the confounding influence of social desirability. In the opinion of this researcher, a child, asked whether he feels he has much influence upon his future would be likely to believe that adults in authority positions would be seeking an affirmative response. The highly decontextualised nature of such a question, which many children found difficult to respond to, is, perhaps, more likely to be subject to social desirability influences than one which is more immediate to the child's experience and can be answered more easily.

e) This question, perhaps the most demanding of all, was always posed at the end of the interview. By this time, many of the children were fatigued, bored or simply less willing to explore their personal thoughts and feelings. The children were generally courteous and

patient but, in a number of cases, by the end of the interview, their length of utterance and willingness to give detailed consideration to the questions was considerably reduced.

Having outlined a number of factors which rendered the administration of this question problematic, the difficulties in making judgements based on the answers obtained are illustrated by reference to the interview with Michelle (disruptive unit).

Michelle's response to the prolonged question (see extract above) seeking placement on a continuum, was that it was 'about in the middle'. It was not clear whether this reflected her true belief or simply incomprehension of the question. Her responses to further questioning suggest that this may, in fact, reflect a mixture of more specific internal and external beliefs. When asked to indicate things which had affected her life, for which she had not been responsible, she spoke of her placement into residential care:

"....didn't do nothing and I got put in there"

Earlier in the interview Michelle had also spoken of her inability to resolve her conflicts with her parents. When the researcher asks about the future, however, Michelle suggests a more internal position:

J. What about the future? To what extent do you think that what happens to you in the future will be a result of what you do.... or will these be the result of other things?

M. What I've done

Is this simply the easiest response for her to provide? Michelle doesn't have to generate alternatives and, perhaps, this is what she thinks the researcher wants to hear. The researcher is puzzled as Michelle's response does not seem consistent with her earlier remarks. He tries to clarify any difference which may exist between perceptions of the past and those of the future. His next question seemingly ignores Michelle's statement and reflects his

understanding of her earlier statements:

J.   The things you do. So you feel that in the past a lot of things have happened to you, which haven't been necessarily related to what you've done?

M. Em (signals affirmation)

The researcher then returns to future expectancies:

J.   Do you think things will be different in the future or will you be able to make things happen as you want them to? Do you understand my question?

M. Well.....like what do you mean? Like getting jobs and that?

J.   Getting a job, getting married, getting money, getting cars, getting...

M. If I work at school and get good marks and that, then you earn it yourself in that way

J.   Can you get most....can you get what you want in life then?

M. (shakes head)

J.   You can't...why not?

M. Why too young really

J.   But when you're older....do you think if you want something and you want people to treat you in a certain way and you want certain things to happen...can you go and get those things?

M. Uh huh (affirmation)

J.   Down to you or down to other people?

M. It's down to me

J.   What about luck...is luck important?

M. (shakes head)

J.   It's not important?

M. No, I don't think it is.

Despite reiterating the question a number of times in slightly different ways, Michelle

persists in her statement that she can exercise control over her future. What then, if anything, can one take from this short extract? Earlier in the interview Michelle had stated her belief that she had little power to influence her domestic situation and her only course of action was to run away from home. She saw herself essentially as a passive agent in her placement in residential care. When asked about the future, however, her perspective seems more optimistic. This may reflect the fact that she had now left home. An alternative explanation is that she sees adulthood in a different light to childhood. One might hypothesise that her experiences have led her to believe that it is adults who have control over the future, who make things happen. A competing hypothesis is that her attributions of the past reflect real and meaningful experiences, whereas talk of the future, has less immediacy and salience, and, as such, it may be more influenced by social desirability and the employment of optimism as a coping mechanism. Further exploration of these issues in subsequent interviews would be necessary before such questions could be answered.

It could be argued that the questions asked of Michelle moved away from consideration of locus of control to other control-related issues. An individual may believe that what will happen to him is contingent upon his actions (internal locus of control) yet, this is not the same as believing that he can get whatever he wants in life (a new Ferrari, a highly paid job, a trial with Manchester United). Such latter beliefs may be more easily considered as extreme examples of the self-efficacy construct. Within the jumbled melange of different theoretical perspectives there is the important empirical (and clinical) question concerning the extent to which one feels that one can influence the future.

Summary of issue 7.

The discussion of this question has highlighted the considerable conceptual and methodological difficulties encountered by the researcher. Unlike subsequent researchers who have examined expectancies in highly specific situations, Rotter (1966, 1975) has stressed the importance of the construct as a generalised expectancy. This researcher introduced question 7 in order to explore how the children felt about general matters of

importance in the future and to assess the extent to which replies were consistent with those relating to specific contexts (parents, teachers, peers etc.).

Unlike these other vignettes, interpersonal conflict was not necessarily an important feature for consideration. Rather, the central issue concerned the extent to which the individual believed that his or her behaviour could lead to the attainment of desired goals. This necessitated a wider consideration of the potential influence of powerful others such as employers, bank managers, landlords and training agencies, of which the children are likely to have had little experience. Rotter (1975) notes that the locus of control expectancy will have greater predictive utility in unfamiliar situations of which individuals have little prior experience. The difficulty, however, is that this lack of knowledge and experience, in combination with the generalised, decontextualised nature of this issue, led the majority of the children to struggle over the question and, as a result, they often provided less than convincing responses. Interestingly, this question appeared to pose as many difficulties to the fifteen year olds as it did to the primary school children.

Given the personal circumstances of, and the poor prognosis for, most of the children in this sample, the researcher was somewhat taken aback by the high proportion of children who indicated that they believed that what happened in the future was 'down to them'. To the considerable surprise of the researcher, none of the children answered in a consistently external fashion. Only a small number of the children (n = 5) replied in a fashion which suggested that, on balance, they might be considered to be nearer the external pole of a continuum.

The issue was compounded by the differing interpretations placed upon the question. Several children interpreted this as referring to either their ability for self-control or the control which they could exert over others. Similar findings were noted by Ortman (1988) who found that older adolescents varied in their understanding of what it meant to exercise control. Four of the sixteen adolescents in her sample defined control as being able to control oneself emotionally, five suggested that it meant being able to recognise the constraints of

a situation and act in as goal-directed a manner as possible (cf. deCharms, 1968), five simply defined control as being in charge. The remaining two respondents offered idiosyncratic definitions which did not fit any of the above categories.

Despite the researcher's endeavours, it proved very difficult to structure the questions in such a way that the children could fully grasp what was being sought. In order to maintain rapport and reduce the likelihood of frustrating or alienating the children, it was usually decided that continued refocussing of the questions was impractical. As such, the researcher often felt obliged to accept the child's construction of the meaning of the question.

Where locus of control is interpreted in its narrowest sense, that is, concerning the extent to which outcomes are seen as contingent upon one's own behaviour, then this particular question failed to differentiate between the children. As it shaded into other control-related issues such as the exercise of personal and interpersonal power, it became difficult to compare like with like and, as a result, the picture became confused.

The responses of Ian (disruptive unit) highlight this difficulty. His hopes for the future were perhaps among the least optimistic of this sample. He appears to perceive his future as fixed with little means of changing matters. A lengthy extract from Ian's interview is presented as this illustrates many important points made throughout this chapter.

Ian attributed the important things which had happened in his life as the result of his behaviour rather than due to the actions of others or bad luck. When asked about his future, he replied that it would be hard as he was unlikely to get a job and imprisonment would be an inevitable consequence:

> J. And that's it, really...that's your future staked out is it? Is there another? Is there any alternative? Is there another way?.....Is there another future or is that definitely what you think's going to happen?
>
> I. Aye, that's probablys what'll happen

J. Yeah...yeah..is there anything you can do to change that if you wanted to?

I. I don't know.

J. Is it something you're happy about or is it something that makes you unhappy thinking about it?

I. Naa, I dinnit want to dee it...it'll probably's mack us unhappy

J. You don't want to do that?

I. No, but if I've got to dee it, I'll have to dee it

J. What do you mean, if you've got to?

I. If I've got nee money, I have to dee it won't I?

J. So there's no other way forward then that you can think of?

I. No.................no.

J. Yeah...yeah. (pause) Assuming that the future is what does happen, right. Will that be because of you? Will it be your fault or will it be someone else's fault? Or will it just be bad luck, or what?

I. Bad luck

J. What's the bad luck part of it? How would you be unlucky?....What would have been bad luck in that future?

I. Don't know

J. (pause) Unlucky 'cause you've been caught? Or unlucky because you've behaved in that way?

I. Behaved and caught

J. Yeah

I. What I've done.

This extract illustrates the difficulty of relating psychological theory to the particular phenomenological world of an individual. Ian appears to believe that he can exert little influence upon the future, that financial constraints will compel him to offend yet, paradoxically, he considers that it will serve him right if he is incarcerated. He would consider himself unfortunate to be caught and also believes that finding himself in a situation where offending is perceived to be a necessary means of financial survival is similarly

unlucky. Ian's fatalism, his belief that he cannot shape his future, his belief in the role of luck, all point to an external locus of control. Yet, he recognises that it is his behaviour which would lead to his incarceration. Despite his belief that he has little opportunity to avoid a criminal career (upon which he has already embarked), he would still appear to blame himself for his actions.

De Charms' (1968, 1981) notion of personal causation may offer a more apposite theoretical explanation in this case (see chapter 2). One might consider Ian to be a 'pawn' whose behaviour is impelled by powerful economic forces over which he has little control. His limited academic skills and disciplinary record at school, together with the limited employment opportunities within his community are such that his limited vocational and economic expectations are wholly realistic.

Whether Ian is perceived as an 'external' or as a 'pawn', one feels that his future expectancies are uncomfortably accurate.

Preliminary conclusions: making a judgement on the basis of an interview

It was noted in Chapter 2 that many commentators have argued that therapeutic work should be undertaken to increase levels of internality in children with emotional and behavioural difficulties. The almost universally accepted means of identifying children with external perceptions is through the administration of a locus of control scale. The usual means of gauging the success of the intervention involves readministering the scale and observing whether scores have changed (e.g. Bean, 1988; Charlton, 1985a).

It should be remembered, however, that Rotter's theory arose from clinical work with individuals in therapy situations. The development of scales resulted from a need to produce quick, inexpensive, relatively reliable measures which could be administered in group settings. If one assumes that, as in the case of Phares' (1976) patient, Karl S., it is possible to assess locus of control beliefs, particularly where extreme positions are held, within a less

structured interview situation, then it is conceivable that interviews such as those discussed in this chapter may present a valuable source of data.

Analysis of the interviews, however, indicates that it proved virtually impossible to obtain a clearcut, consistent picture of an individual's locus of control using the vignettes in a one-off session lasting, on average, between thirty minutes and an hour. There may be several reasons for this:

a) contradictory answers

It has been noted that the children's answers often appeared to be contradictory and this rendered analysis of the interviews extremely complex. Perusal of a particular transcript extract often indicated one idea or perspective which was later countered by one or more remarks suggesting quite the opposite. There are many reasons why this may be so including, the suggestive nature of some of the researcher's questions, the difficulties for the children of responding to decontextualised issues, the children's unfamiliarity in dealing with hypothetical situations and the impact of strong emotions which may have resulted in defensiveness as past conflicts are relived. It is also quite possible that, in many cases, the children simply changed their minds or thought that they would respond differently in situations which appear similar.

Although a list of possible reasons can be drawn up, it often proved difficult to offer explanations for specific children in specific situations. Lee (primary E.B.D.), for example, presented a long list of behaviours which had resulted in his being sent out of class. Nowadays, however, this no longer happened:

""'Cause I'm behaving meself".

The change in his behaviour, he explained, was motivated by a desire to transfer to a mainstream school next term. When asked later in the interview, however, who was to blame

for his behaviour, his response proved to be puzzling:

L. Some people else's...like some like the boy next to me or someone at the back of me... sometimes it's been my fault, sometimes it hasn't been my fault.

J. Right...so is it mainly your fault or mainly the other people's?

L. Mainly other people's

J. Mainly other people's?

L. Uh huh

J. Right, what sort of things do they do?

L. Like...call you names and things like that and you get angry

J. Right, but now you're not in any bother now you say -

L. (interrupts) No

J. So much now... so what's changed?

L. Nothing really...just that behaving meself.

J. Do they still call you names?

L. No

Despite the initiation of a series of supplementary questions, it proved impossible to gain a clear picture as to whether Lee believed that his misbehaviour was his fault and, if so, whether the unpleasant outcomes contingent upon this were things he could control.

b) situational and contextual differences

It became clear that there were significant differences between the various situations which were presented to the children. Where external positions were offered, these tended to relate to conflict with peers and in dealings with the police. In contrast, many children believed that they could influence outcomes to a considerable degree at home and, to a lesser extent, in school and with friends.

Several children commented that their behaviour could have significantly more impact upon

teachers than police officers. One boy (aged 11) suggested that this was because:

"Like, policemen are strict and, like, teachers are not sometimes."

In some respects, it was easier to explore how the vignettes differed in terms of the sample's responses than to gain a consistent picture of an individual across these areas. Although this was an interesting finding, it does not assist the clinician in identifying individuals who might benefit from a specific intervention with the aim of increasing internality. Even this, however, represents an over-simplification as the ubiquitous response to the researcher's questions, "It all depends" frequently prefaced a request for additional contextualisation.

Appendix 9 provides a detailed analysis of the responses of one child, Shaun. It illustrates the very different responses which were often provided to questions about various aspects of the children's lives. The interview transcript reflects the general impression, gained by the writer during the course of the interviews, that an individual's locus of control is rarely consistent across a variety of situations.

c) conceptual difficulties

"Every time I do something wrong....I always get wrong, and every time I do something good....I get wrong."

(Andrew, primary E.B.D.)

This quote seemed to capture the essence of an external locus of control. Unfortunately, clearcut examples were rare and the analysis of the transcripts frequently demonstrated the difficulty of determining what is actually meant by this construct. Chapter 2 has shown the many and diverse interpretations which have been adopted, from a narrow consideration of the link between behaviours and future outcomes, to perceptions of control over oneself and others, a notion in which power is far more more evident. Rotter (1990), in attempting to explain the success of the locus of control construct has argued that:

> "...the heuristic value of a construct is partially dependent on the precision of its definition" (p. 489)

His definition and discussion of this construct (Rotter, 1966) is widely cited yet this does not appear to have resulted in a clear and universal understanding of its meaning (Palenzuela, 1984). A detailed reading and clear grasp of the literature can, however, enable one to grasp the theoretical differences of different writers and, as a result, produce a clear, statement of how one understands the meaning of the construct. This position was reached by the researcher at the outset of the present investigation, at which time Rotter's construct did not appear to be particularly problematic. The apparent misunderstandings and confusions of others (see chapter 2 for discussion) could be highlighted and explained. Items in locus of control scales which appeared to be measuring other constructs (e.g. personal competence, self-control, control over one's behaviour) could be identified and the value of the scale discussed. It was not, however, until the present interviews were undertaken that the complexity of the construct was fully perceived. The difficulty did not appear to lie in understanding Rotter's definition but rather in knowing what observations could be accepted as evidence for the formulation of judgements.

In this respect, Blumer's (1955) critique of attitude measurement is equally applicable to discussion of locus of control:

> "....the current conception of attitude...does not tell us...what data to include as part of an attitude and what to reject as not belonging to an attitude. Not knowing what enters into an attitude, we obviously lack guidance in selecting the kinds of data needed to identify or to delimit the attitude. Instead, we have to proceed arbitrarily, either relying on our personal impressions of what to include or else falling back on some technical device, such as a measurement scale" (p.59).

It is surprising that so few of the many studies of locus of control make reference to the conceptual difficulties inherent in this construct. The ubiquitous use of the self-report questionnaire may, as Blumer (op. cit.) implicitly suggests, help to mask such difficulties,

although simple scrutiny of locus of control scales such as the CNSIE reveals conceptual confusion (see chapter 2). The researcher's efforts to analyse the interview data in this study, however, threw the problematic nature of the construct into clear relief in a way which was not as apparent when the quantitative analysis of scale data was undertaken.

d) methodological difficulties

It has been already been noted that the interviews were undertaken with a sample of children, many of whom experienced substantial difficulties in interacting with others. These could concern cognitive, affective and/or linguistic factors. There was little motivation for the children to engage in the interview other than for the fact that some appeared to find adult attention rewarding. The length of some interviews clearly taxed some children and in many cases responses became less detailed as the interviews neared completion.

Further issues for consideration

The difficulties experienced by the experimenter in drawing upon semi-structured interviews to explore children's locus of control beliefs have been outlined in some detail and a number of explanations for the problematic nature of this inquiry have been offered. The interpretations above, however, merely represent one individual's attempt to make sense of extremely rich and complex data. What sense would others make of such data? Would opinions concerning an individual's locus of control vary even if identical transcripts were scrutinised? To what extent would such opinions reflect subjects' scores on a self-report questionnaire? These issues are explored in chapter seven.

Chapter 7. Blind ratings of transcripts and their relationship to the C.N.S.I.E.

Earlier chapters have indicated that a task of the present study was to explore the following issues:

a) to what extent will judgements of individual children's locus of control, on the basis of semi-structured interview data, be consistent from one rater to another?

b) to what extent will the derived ratings reflect the children's locus of control as measured by a self-report questionnaire (the CNSIE)?

In order to explore these questions, a number of transcripts were presented to raters who, with no other knowledge of the children concerned, were asked to rank each case on a five point continuum of internality-externality (see Chapter 4, section D for full details). It was decided that transcripts of extreme scorers only on the CNSIE (both internal and external) would be selected as these were of particular clinical interest. It was also anticipated that analysing extreme scorers would increase the likelihood that any correspondence between the two techniques would be demonstrated.

Figure 7-1 shows the range of C.N.S.I.E. scores for the forty one children who took part in the semi-structured interviews. The shading patterns indicate the scores of those who were, and were not, selected for the blind rating exercise. It can be noted that those cases which were selected for the rating exercise (indicated as 'rated') represented extreme scorers. One subject, scoring in the range 9-11 was not used as he had proven relatively uncommunicative in the interview and there appeared to be insufficient data upon which to derive an estimate of internality-externality. Of the seven cases scoring between twenty one and twenty three on the CNSIE, three scored the highest total of twenty three. As only one case could be selected, the single female was chosen in order to ensure representation by both sexes.

The two groups of six children, therefore, contained the majority of extreme scorers. In each group there was one girl and five boys.

Figure 7-1 Extreme scorers selected for rating exercise (from total sample receiving semi-structured interview)
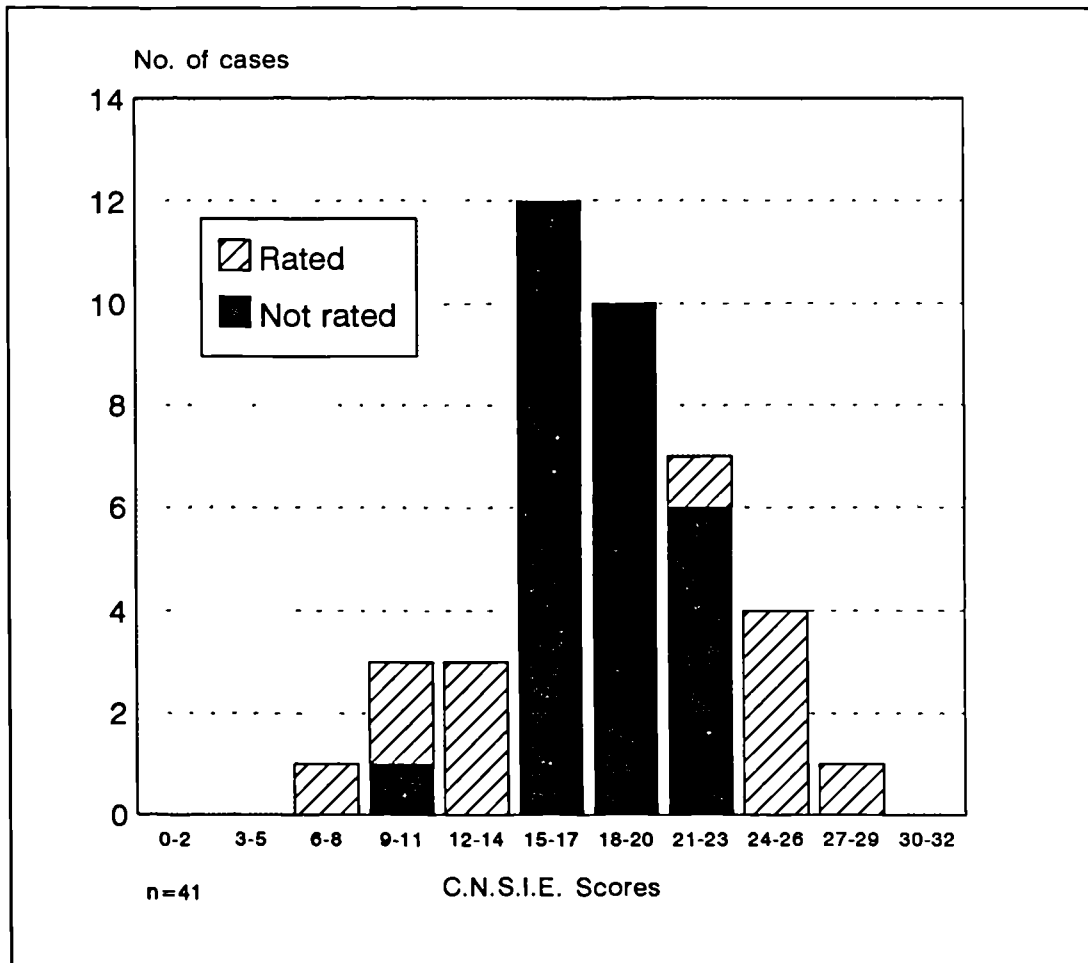

Table 7-1 (overleaf) shows the scores provided by the blind raters. For each child, the table shows the score obtained on the CNSIE, the ratings on the five point scale (1 = highly internal; 5 = highly external) from each of the four blind raters (under box headings A,B,C and D) and these four scores as an aggregated total for each child. In addition, all ratings for both the internal and the external groups were summated to yield a total score for each.

Table 7-1   Ratings provided by blind raters (A - D) for each child.

Name	CNSIE Score	A	B	C	D	Total
Internal on CNSIE						
Barry Bakerstone	14	3	2	4	3	12
Stephen Baker	8	3	4	2	4	13
Richard Kearney	9	3	5	4	2	14
Chris Smith	9	4	2	3	4	13
Robert Stephens	13	2	3	2	2	9
Gary Casey	12	2	1	3	4	10
TOTAL						71
External on CNSIE						
Claire Bell	27	2	2	3	4	11
Aaron Welsh	24	3	1	2	2	8
Gordon Lowrie	24	4	4	2	5	15
David Watson	25	4	4	3	5	16
Darren Boyd	25	4	4	3	4	15
Mary Owens	23	1	4	3	2	10
TOTAL						75

The aggregate score of the six children scoring highly internally on the CNSIE is 71, compared with 75 for the highly external group. This suggests that the blind raters did not perceive the two groups as substantially different.

When one examines the profiles of individual children, there still seems to be little clear difference between the two groups. Although the three highest (i.e. most external) ratings (two of 15, one of 16) are of children who also scored externally on the CNSIE, one of the other three children in this group obtained the lowest of all ratings (8) and three of the six children were rated more internally than four of those in the internal CNSIE group.

Inter-rater agreement for each child appears relatively low. In 33% of cases there was a three point gap between at least two of the four ratings, and in a further 50% of cases there was a gap of two points. Although it is hardly surprising that no child obtained the same score on each of the four ratings, one might have anticipated that more than two children (Robert Stephens and Darren Boyd) would have obtained three equal ratings. Interestingly, not only was the fourth rating only one point away from the others but also both these children's ratings reflected their scores on the CNSIE.

These findings suggest that, in the case of this population:

a) there appears to be little overall relationship between scores on the CNSIE and responses to the vignettes

b) the responses to the vignettes were understood very differently by raters with a high degree of professional experience in interviewing children with emotional and behavioural difficulties

Three important issues need to be explored when one considers the above findings.

- To what extent did the two techniques explore the same issues?
- To what extent did the raters have a clear understanding of the locus of control construct?
- To what extent were difficulties exacerbated by the choice of subject population?

The researcher had made a deliberate attempt to explore similar issues in the vignettes to those in the scale. Many of the interviews incorporated questions from the CNSIE and the same themes (e.g. relationships with parents, peers, the influence of good fortune) appeared in both. As the interviews were semi-structured and attempts were made to be responsive to the children, the relative weighting of these themes was, therefore, unlikely to be equal.

Furthermore, additional issues (e.g. long-term career and affiliation goals) were introduced into the interviews whenever this seemed appropriate.

If one accepts Rotter's notion of a generalised locus of control with a degree of overlap in different aspects of one's life, it would be anticipated that such relatively minor differences of content should not greatly influence the picture obtained. Such a position is supported by Furnham (1987) whose analysis of five children's locus of control scales (including the CNSIE) indicated limited item overlap but moderate to high inter-scale correlations (from 0.48 to 0.81).

A greater difficulty, in analysing the findings, concerns the raters' understanding of the locus of control construct. In order to obtain the cooperation of busy professionals it seemed necessary to limit the definition of the construct to one side of paper (see appendix 8). This may have resulted in the raters gaining a limited and/or a widely differing grasp of its meaning. An added complication was the inconsistency between the general understanding of the construct outlined in chapter 2 and its operationalisation in the CNSIE, which appears to include items relating to personal competence (see chapter 2 for discussion). Chapter 6 has illustrated how difficult it has proven, in practice, to separate out constructs which seem less problematic when presented theoretically. The relative extent to which the differences in the blind ratings are the product of variations in theoretical understanding, rather than being being rooted in methodological/procedural influences upon perception and analysis of the data, is unclear and an attempt to resolve this issue was beyond the scope of the present study. Resolution of this issue would require extensive discussion with the raters and an examination of the mechanisms by which they came to make their decisions. Such a procedure would require one to make considerable demands upon the raters' time and this would need to be negotiated at the outset. It is highly unlikely that the raters would have been willing to engage in this relatively prolonged activity.

It has already been noted that there is a vast discrepancy in theoretical understanding of the locus of control construct and its operationalisation in self-report questionnaires. Such

issues have been raised in the present comparison of two different assessment techniques.

Irrespective of theoretical understanding, it is necessary to recognise that blind raters may gain much less information from a semi-structured interview than the original participant-assessor. The contextual understanding of the participants and important paralinguistic and non-verbal cues are largely absent from the transcripts which provided the only basis for the above ratings. Thus, much potentially important information is absent. In subsequent informal discussions with several raters it was stated how difficult it had proven to gain an impression of the children without having been party to the interview. One must question to what extent any clinician would wish to make a diagnostic formulation on the basis of such material.

It is necessary to recognise that the above findings may only apply to the present special population. Several raters commented that the transcripts had highlighted the particular difficulties of interviewing children with emotional and behavioural difficulties. In particular, judgements were often necessarily based upon comparatively short and, rather inarticulate responses to the interviewer's usually longer (and, on several occasions, similarly inarticulate) questions. Often the children seemed uncertain how to respond and their frequent contradiction of earlier statements tended to make arrival at an overall rating more difficult. Although these issues pertain to all children, and any inter-group differences are likely to be quantitative rather than qualitative, the particular difficulties of exploring the self-perceptions of children with emotional and behavioural difficulties were thrown into stark relief by the semi-structured interviews in a fashion far less salient than when using simple yes/no questionnaires. One may wish to speculate, therefore, whether the interview procedure would have produced results easier to interpret if one had drawn upon a more articulate, less stressed and more socially advantaged population.

The discrepancies noted above reinforce the findings of chapters five and six which have demonstrated the immense complexity of the locus of control construct and the problematic nature of its assessment. The temptation to persevere with simple questionnaires is

seductive yet the present research suggests that such techniques may mask a number of complex conceptual and methodological difficulties.

Chapter 2 has indicated that it has often been argued that clinicians and educators should strive to reduce external locus of control in individuals. If a judgement concerning one's locus of control based upon responses to a questionnaire, is not reflected by perceptions of that individual's position in subsequent interview situations, how does one proceed? This key issue is explored in chapter 8 which presents an overview of the study's findings and offers discussion and general conclusions.

Chapter 8 Conclusions and recommendations

The possible relevance of locus of control for work with children with emotional and behavioural difficulties has an immediate attraction for researchers and clinicians. The notion that such children may often fail to grasp the relationship between their actions and subsequent consequences appears to have a face validity both to professionals working in the field and to lay observers. During the course of this study, this researcher was frequently approached by teachers and psychologists who, having heard of his work in this area, wished to learn how they might draw upon this construct in their professional work. As the study progressed, his response to these enquiries became less optimistic. In the context of social research, Coffield, Robinson and Sarsby (1980) cite the words of Nietzsche as a guiding principle:

> "It is a popular error to have the courage of one's convictions: rather, it is a matter of having the courage to attack one's convictions" (p. 14)

This research represents an attempt to explore the the locus of control construct with particular reference to children with emotional and behavioural difficulties. Chapter 1 has indicated that the researcher considered that the construct might be of significant importance for work with this population. In the light of the study findings, however, he considers it appropriate to challenge, not only his prior conviction, but also that of the existing literature.

Unlike wider attribution theory, the origins of the locus of control construct are rooted in clinical work (Hilgard, 1987) and the particular value of the construct for work with special populations of adults and children has been repeatedly stressed (Knight, 1992; Benson and Deeter, 1992). The basis for such assertions has been the perceived explanatory value of the construct (e.g. Charlton, 1985b), that is, the construct appears to offer us new phenomenological insights, and/or the repeated finding that special populations tend to score more externally (Nowicki and Duke, 1983). It was noted in Chapter 2 that this latter finding has frequently led to claims that:

- assessment of the locus of control of children with emotional and behavioural difficulties may have significant clinical value

- attempts should be made to shift the locus of control of such populations towards greater internality

Such claims appeared to this researcher to be rather naive and over-simplistic, yet worthy of investigation. For this reason, the present study has endeavoured to explore how this construct applied to a relatively large sample of children with emotional and behavioural difficulties. This exploration involved examination of a series of issues which, cumulatively, may help to answer the question posed at the end of chapter 2:

"To what extent is the consideration of locus of control beliefs a valuable exercise for those who wish to assist children with emotional and behavioural difficulties?"

While recognising the limits to which one can generalise from this study, it is considered important to offer tentative conclusions which address a wider population. The researcher will attempt to draw conclusions on the basis of the resolution of a number of the following issues which were central to the present study:

1) Are there demographic aspects of the lives of children with emotional and behavioural difficulties which appear to be significantly related to locus of control?

2) To what extent is locus of control related to the perceived frequency, severity and extent of problem behaviour?

3) To what extent should researchers and clinicians focus their attention upon extreme scorers?

4) What are the separate and combined contributions of quantitative and qualitative approaches to the assessment of locus of control?

The writer will then reflect upon the study and consider the implications for further work in this field.

Finally, he will outline some of the personal gains of skills, attitudes and knowledge which he considers have resulted from this undertaking.

Issue 1

● Are there demographic aspects of the lives of children with emotional and behavioural difficulties which appear to be significantly related to locus of control?

Such a question does not simply provide an opportunity for reseachers to engage in a plethora of statistical calculations resulting in a mass of findings, the practical significance of which is generally unclear. Although this researcher has suggested that much work in this field is dominated by quantophrenia, defined by Reason and Rowan (1981a) as an undue readiness to reduce data into numeric form in order to make it 'measureable', such approaches may be the most appropriate for generating answers to such questions as, "Does internality increase with age?" and, "Are there features of children's family lives which appear strongly related to locus of control?

Such answers are of crucial significance for those who would advocate the assessment of locus of control of children with emotional and behavioural difficulties, for gaining an insight into those factors which may influence internality/externality is likely to assist those with responsibility for intervention. It may, for example, enable us to make sense of differences between individuals, decide upon the need for, and nature of, interventions, and recognise and understand the significance of any subsequent changes of expressed attitude and/or changed behaviour.

A considerable amount of research has explored the relationship between locus of control and such variables as age, sex, I.Q., family structure and academic attainment. Often, such work has focused upon normal, rather than special, populations and findings have been mixed (see chapter 2 for a review). The present study has attempted to explore the relationship between such variables in a special population. This has involved consideration of total scores and scores from clusters of items which were generally shown to be closely related to one another.

It has been argued (Raine, Roger and Venables, 1981) that the highly generalised nature of such scales as the Rotter Scale and the CNSIE may mask important relationships between important variables and groups of Scale items. For this reason, the scales have often been subjected to factor analysis in anticipation of the possibility that discrete factors may yield greater predictive power. Such techniques are problematic as the derived factor solutions have rarely matched across studies, similar items rarely having been grouped together. Furthermore, the items within the factors have often had limited conceptual overlap beyond that of the construct as a whole.

This study explored the usefulness of three related techniques for examining groups of items within the CNSIE - factor analysis, cluster analysis and non-metric multidimensional scaling. Factor analysis proved unhelpful as it generated a large number of factors, each of which explained very low variance. Despite the considerable body of work in this area, the dichotomous nature of the scale items did not really lend itself to the use of factor analysis. This difficulty may also help to explain the inconsistency between solutions in different studies (Comrey, 1973, 1978; Comrey and Lee, 1992).).

Cluster analysis and non-metric multidimensional scaling both involved visual inspection of the solutions and, like factor analysis, required subjective estimation of appropriate groupings. Although the nature of the items was not clear to the researcher when the groupings were determined (he was merely juggling numbers at this point), the solutions

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appeared to fit conceptually rather more clearly than many of the published factor analytic solutions cited in chapter 2. Items concerning peer relationships tended to be linked in one group, for example, while those relating to relationships with parents were largely found in another. Analysis of the solutions produced by the two techniques suggested that, in this instance, it was cluster analysis which produced groupings with most conceptual coherence. Of course, it would be inappropriate to suggest that this finding would necessarily apply to other sets of data.

The findings of this study suggest that, for the present population, there is little meaningful relationship between total scores on the CNSIE and the variables studied. Although statistical significance was achieved in the cases of sex, age, truant and delinquent behaviour and academic ability, the differences and/or correlations tend to be relatively small and may be considered, therefore, to have little practical significance. To illustrate, the finding that children rated 'below average', academically, obtained a mean score 1.27 points higher (on the forty item CNSIE) than those rated as 'average' cannot, in itself, support the widespread claims (Hisama, 1976; Knight, 1992) that professionals should take a particular interest in the locus of control children with learning difficulties.

Although a number of statistically significant relationships are found when scores from clusters of scale items, rather than total scores, are considered, one must question the extent to which these are merely chance effects. Table 5-13, however, suggests that the distribution of statistically significant relationships was not wholly random and certain cluster patterns (e.g. that relating to peer relationships, CLUSKF) appeared to increase the measure's predictive power.

Perhaps the most interesting finding from the quantitative part of the study is the existence of a high proportion of girls scoring relatively externally (see, in addition, issue 3, below). The tendency of girls to score more externally is a feature of the locus of control literature, although the imbalance in the ratio of highly internal to highly external girls appears not to have been noted before. Although the sample size is small and further studies would need

to be undertaken before such a finding could be established with confidence, it would appear appropriate to consider possible explanations for the above finding.

It has been suggested (DeBrabander and Boone, 1990) that the more external responses of females may reflect what they consider to be socially acceptable answers, for in many societies, women are considered to be less in control of their own lives. Many of the girls in the present study, however, by actively challenging authority figures at home and/or at school, may be considered to have departed from a traditional gender stereotype and, in the opinion of the researcher, would be unlikely to offer more external responses merely because this reflects society's view of females.

An alternative explanation is that social desirability influences boys with emotional and behavioural difficulties rather more than girls. One might argue that, in our culture, such boys may wish to suggest perceptions of control even if the reverse were true. Rather than girls producing external reponses which provide a false picture of their true cognitions, in the present study, it may be the boys who feel obliged to offer a socially desirable picture of internality. In this scenario, the reality may be that both sexes share a relatively external perspective but boys are more reluctant to admit this.

The above suggestion may help to explain the fact that few respondents in the interviews offered a clearly external view of their world. The apparent non-existence of highly external subjects, reflecting the case of Karl S. reported by Phares (1976), proved somewhat puzzling, particularly as responses to the CNSIE reflected high externality in certain cases. Perhaps the need to appear in control of one's circumstances is more pressing in a face to face interview than when one is completing a more impersonal questionnaire.

It may be important to consider the different ways by which issues of social desirability may affect special populations, although this issue cannot be resolved in the present study as further data are needed. To explore this issue, one might wish to work in considerably more depth with a small number of high scoring boys and girls. By working with this cohort over

an extended period of time, one might seek to explore the extent to which initial responses to scales and interviews were changed as a result of the developing relationship with the researcher. Differences between responses to the scales and perceptions voiced in interview could be raised more easily where a trusting relationship had been established. A major methodological difficulty, however, concerns how one would differentiate changes in locus of control, resulting from a greater willingness on the part of the child to disclose true feelings and perceptions, from shifts in internality/externality arising as a result of these interchanges.

The literature is replete with studies which have explored the relationship of locus of control with a vast array of psychological and demographic correlates. Generally, findings have not demonstrated strong relationships. Similarly, the present study, focussing on a highly special population, has offered little support for the notion that the construct has anything other than a weak relationship with these variables.

In the opinion of the writer, there would appear to be little value in persisting in a search for statistical relationships between the locus of control construct and demographic variables. Findings are both too insignificant (practically, if not statistically) and inconsistent.

Issue 2

● To what extent is locus of control related to the perceived frequency and extent of problem behaviour?

This study has endeavoured to bring a more detailed approach to the consideration of children with emotional and behavioural difficulties. This researcher has argued that simple categorisation is misleading, for the failure to consider differences in the types of problem behaviour may mask important relationships between these and locus of control. Following from the work of Rothbaum (1980), it was considered, for example, that the relationship between inward behaviour (e.g depression, self-mutilation) and externality may be

considerably stronger than for outward behaviours (e.g. disruption, aggression).

The finding that there was virtually no relationship between locus of control and behaviour scores was, perhaps, somewhat surprising. Where statistical significance was obtained, the correlations were so small as to be practically meaningless. These findings were consistent not only for aggregate scores for the nine behaviours but also for the two clusters of behaviours and for each of nine individual behaviours. Thus, not only was there no specific behaviour which appeared to be particularly related to locus of control, there was no relationship between this construct and the aggregated scores of all the behaviours.

Given the consistent finding that children with emotional and behavioural difficulties are generally more external than normal populations (a finding supported by the relatively high mean score of the present sample), how can this finding be explained?

In the opinion of this researcher, the observed lack of any clear relationship may result for one, or both, of two reasons:

  i. measurement difficulties
  ii. the relative homogeneity of the sample

i. measurement difficulties

Difficulties of measurement for the present study involve both the assessment of locus of control and of problem behaviour.

The assessment of locus of control by means of self-report questionnaires has rarely been questioned in the literature other than with regard to the perceived superiority or otherwise of particular scales. The measure used in the present study, the CNSIE, is by far the most popular children's generalised scale and almost 1,000 studies in which it has been employed are known to its author (Nowicki, 1993, personal communication). Despite its popularity

in both the United States and Great Britain, a significant finding from the pilot study for the present research exercise, was that many of the children's perceptions could easily be misrepresented, either because they failed to understand the questions sufficiently, or, because the grammatical structure of the questions led them to provide a response which did not reflect their intention. The researcher endeavoured to overcome these problems to as great an extent as possible by sensitising the administrators of the scale to this issue and asking them to attempt to ensure that the children understood what was meant.

In the opinion of this writer, group administration of the CNSIE to a British population, even if questions are read aloud to alleviate reading difficulties, would introduce a tendency for misrepresentation which would seem unacceptable. This suggestion, however, has not been voiced by other British researchers, perhaps because, by adopting the standard procedure of distributing questionaires to large groups, such a difficulty does not become apparent. Although it is recognised that one cannot generalise findings from a group of North-East children with a variety of special needs to the rest of the country, the writer would advocate great caution in the use of scales such as the CNSIE, particularly those whose piloting has been undertaken in other cultures.

The researcher has also noted a degree of conceptual confusion which exists within the CNSIE. Chapter 2 has indicated that some questions appear more related to perceived competence than to locus of control. Although this presents a very real difficulty for those who wish to understand the relationship of locus of control to problem behaviour, this cannot, by itself, explain the limited relationships observed in this study. Even if the CNSIE contains some items which tap constructs other than locus of control, the higher scores of special populations on the scale still stand. A lack of conceptual purity, therefore, is unlikely to be a sufficient explanation for the study findings.

The approach to considering problem behaviour in this study is predicated upon an assumption that any differentiation will be valid and meaningful. It was recognised that measurement would be problematic, however, and the ranking of behaviours, albeit by one

individual (the present researcher) who studied case files in great depth, was not considered to be an exercise of great objectivity.

All systems of ranking/rating the behaviour of others are prone to methodological and conceptual weakness and the present study is no exception. Although the ranking system employed follows established techniques (Rutter, 1967; Achenbach and Edelbrock, 1983), one might question the extent to which it is possible to provide numerical rankings of certain forms of behaviour in a meaningful fashion (e.g. verbal aggression). One may also challenge the extent to which a case file can be seen as representative of an individual's behaviour in the same way as one might challenge a teacher's rating of a child on scales such as the Rutter B. Furthermore, the ratings in the present study are third hand in that they represent the researcher's understanding of the perceptions of other professionals. In partial defence, it can be argued that case files tended to include the perceptions of multiple informants (see chapter 4 for discussion) and this may have resulted in the reader obtaining a broad overview taken from a variety of perspectives.

In the opinion of the writer, researchers need to temper their desire for scientific rigour with a degree of pragmatism. Although measurement difficulties were recognised in assessing the children's behaviour, it was considered that this was the best (if not only) means by which a post hoc analysis could be undertaken. The richness and voluminous nature of the source data were attractive and it was considered that accusations of excessive subjectivity might be a price worth paying if the process resulted in a strong conviction that the scores reflected a behavioural reality. The researcher's opinion was that, to a significant extent, they did although it is recognised that there is no objective means of supporting this perception.

ii. The homogeneity of the sample.

A further explanation for the lack of a meaningful relationship between problem behaviours and locus of control may reside in the fact that all the children in the study were perceived

as having emotional and behavioural difficulties sufficient to warrant professional intervention. It is possible that while locus of control scales have sufficient discriminatory power to differentiate between normal and behaviourally disordered populations, their explanatory power is insufficient for comparatively homogenous groups. Put simply, the construct may fail to discriminate between those with comparatively major, as opposed to comparatively minor, behaviour problems.

This suggestion, when located within the wider locus of control literature, leads the writer to the following conclusions. There is much evidence to support the argument that children with emotional and behavioural difficulties (however these are defined) tend to score more externally than normal children although observed differences are usually small. The evidence presented in this study suggests that the nature and severity of their problem behaviours have virtually no relationship with locus of control. If the relationship between the two variables is so tenuous, the argument that children with emotional and behavioural difficulties require individual assessment and/or individualised/group interventions geared to encouraging internality, begins to appear more than a little flawed.

Issue 3

- To what extent should reseachers and clinicians focus their attention upon extreme scorers?

It was considered that although the relationship between locus of control and the other study variables was weak, this may obscure important differences between highly internal and highly external scorers. It was hypothesised that there may be a number of important differences between these two groups.

Comparison of the highest and lowest scorers on the CNSIE demonstrated an important sex difference. Although virtually the same number of girls as boys formed the highly external group, the internal group contained more than twelve times as many boys. The implications

of this finding have been discussed above.

The small number of girls in the internal group, therefore, precluded comparison of extreme female scorers with other variables and, thus, further analysis involved boys only.

Comparison of highly internal and external groups of boys yielded only two statistically significant difference, those of age (the highly external boys tended to be younger) and delinquency (delinquent boys tended to be more internal). These findings reflect those already noted for the total sample.

An important question, identified in chapter 2, was whether the problem behaviour of highly internal children might be more deliberate, intentional and goal-driven than those who are highly external. In this respect, it could be argued that children attending disruptive units feel more in control of behaviour-outcome contingencies (and have deliberately chosen to challenge authority figures) than those in special schools for children with emotional and behavioural difficulties. As Sunderland has both forms of specialist provision, it was considered that comparison by educational setting may prove illuminative.

Findings indicated that there was no significant differences between extreme scorers on the basis of type of educational intitution attended. This supports the earlier finding of no significant difference between institutions on locus of control scores.

The above findings do not, of course, undermine the hypothesis that the present population may contain some highly manipulative, socially aware, children whose grasp of interpersonal realities are reflected by a high degree of internality. This notion may be best explored by recourse to the type of qualitative approach discussed in chapter 6 and below. All that can be concluded from the quantitative analysis is that it would be erroneous to argue that such differences between individuals in this study is reflected by the types of educational establishments attended.

● What are the separate and combined contributions of quantitative and qualitative approaches to the assessment of locus of control?

> "There is no **one** royal road to truth in the social sciences....All methods have their strengths and their weaknesses and all are, in varying degrees, messy and unsatisfactory because life is messy and unsatisfactory" (Coffield, Robinson and Sarsby, 1980, p.16; emphasis as in original).

Eschewing methodological parsimony, this study employed a variety of methods, both quantitative and qualitative, in its exploration of locus of control. It is important, however, to reiterate the point that qualitative methods were used for relatively narrow purposes. Bryman (1988) has argued that:

> "...the distinction between qualitative and quantitative research is really a technical matter whereby the choice between them is to do with their suitability in answering particular research questions" (pp. 108-109).

In the present study, both methods were employed to explore different, but related, issues. It was hoped that the combination of methods and findings would provide a clearer answer to the questions which the research was addressing.

Henwood and Pidgeon (1992), however, consider that the quantitative/qualitative distinction should not be reduced to purely a technical matter, for this may obscure an important epistemological dimension to this issue concerning what constitutes legitimate inquiry and warrantable knowledge. Such a distinction, while recognised by this researcher, was not a feature of the present study which adopted methods dealing with non-numerical data because, following Bryman (op. cit.) these seemed most suitable for certain issues. Thus, interview and case study material were seen essentially as heuristic devices for exploring and developing existing theoretical conceptions rather than as means of generating theory from relatively unstructured data (as, for example, would be the case in 'grounded theory', Glaser and Strauss, 1967).

The relative strengths and weaknesses of interviews and self-report questionnaires in research work have been subject to much analysis (Paykel, 1983; Oie and Zwart, 1986). The strengths of the questionnaire, its speed of administration, the opportunity to establish its psychometric properties, the tendency towards greater standardisation of administration and scoring, and its suitability for the application of inferential statistics, have resulted in its almost total domination of work in locus of control. Of course, one should recognise that this tradition closely reflects the pre-eminence of quantitative methods in wider American psychology.

Henwood and Pidgeon (1992) note that while the quantitative paradigm allows the researcher significant control over the data:

"....its very strength - that of simplification - is also its Achilles' heel!" (p.99).

This appeared to ring true in the present research in which a most striking feature was the immense complexity of the locus of control construct. This is generally ignored in the literature, principally, it would appear, because quantitative techniques often place less requirement upon the researcher to consider, to any significant extent, exactly what is being measured. Rather, the emphasis tends to be upon a particular scale's psychometric properties. A detailed study of the CNSIE (Livingston, 1990), for example, accepted its test-retest reliability, yet challenged its validity. This challenge was based, not upon detailed consideration of the wording of the questions in the light of existing theory, but, rather, on the grounds that the statistical analyses which Livingston had undertaken, suggested a verbal ability artifact and, possibly, a social desirability artifact (both points also noted as possible contaminants of the present study). Interestingly, there was no indication that Livingston had actually read the items themselves. In the opinion of the writer, the numerical emphasis upon scale validation may have, on occasions, resulted in a degree of psychological myopia.

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The difficulty of relating theoretical concepts to their measures is, perhaps, voiced rather more frequently in such disciplines as sociology (Bulmer and Burgess, 1986) and philosophy (Wilson, 1989) than in psychology, and a major weakness of much of the work reviewed in this study is that, in the vast majority of cases, neither the construct nor its measures are seen as problematic. Wilson (op.cit.) argues that much research in the social sciences is plagued both by conceptual overlap and by conceptual hiatus (that is, a logical gap between the original construct and the subsequent research measures) and observes that:

> "What actually happens, nearly all the time, is that empirical researchers are (a) so conceptually naive, and (b) so thoroughly engrossed in trying to make their research empirically and methodologically watertight (with proper samples, adequate statistics etc.) ....that problems are not faced at all" (p.177).

The researcher has noted that such criticisms are applicable to many of the studies of locus of control. In contrast, the present study has endeavoured to recognise the problematic relationship between psychological constructs and the ways by which these are measured. In this respect, the researcher would wish to echo the views of Bulmer and Burgess (1986) who point out that where progress is best made:

> "....there is a healthy dialectic back and forth between attempts to measure concepts and attempts to clarify the meaning of concepts. Measurement can pinpoint ambiguities in definition to be resolved. Conceptual clarification can lead to better measurement" (p.249).

The validity of the above observation is highlighted in the analysis of the interviews outlined in chapter 6. The researcher's attempts to measure the children's locus of control demonstrated the immense difficulty of operationalising a construct which is, at face value, relatively straight-forward. The interviews threw into relief the many different control-related constructs which, although related, are not synonymous. Although this researcher had already noted that such confusion was a feature of many locus of control scales, including the CNSIE, the tautological argument that locus of control is what locus of control scales measure, (implicitly accepted, it would seem, by many researchers in this field), becomes far less acceptable once a qualitative approach is adopted.

A fascinating finding from the analysis of interview data was that although, prior to the data gathering stage, the researcher believed that he had a thorough understanding of what was meant by the term, locus of control, the construct's complexity and difficulty of operationalisation only became clearly manifest when he began to try to make sense of the data.

The qualitative analysis, therefore, demonstrated the complexity of the construct and inherent measurement difficulties. To what extent, however, despite these difficulties, did the analysis provide useful insights into the locus of control of the children in the study?

The case of Karl S., described by Phares (1976) presents us with a clinical picture of a highly external individual. Workers in this field, excited by the therapeutic implications and opportunities provided by this very appealing notion, eagerly developed scales to provide quick and reliable measures of locus of control. Having found a tendency for populations with emotional and/or behavioural difficulties to score more externally on these measures, researchers and clinicians strove to find therapeutic techniques to increase internality, as measured by such scales.

This series of developments begs a number of questions:

a) to what extent do individuals, in interview, provide accounts of their lives which clearly indicate internal/external positions? In other words, was Karl S. a one-off?

b) to what extent can one assume that responses to a locus of control questionnaire will bear any resemblance to that individual's interview responses?

c) if there is no resemblance between results from two different measures, which approach, if any, is the more valuable?

a) to what extent do individuals, in interview, provide accounts of their lives which clearly

indicate internal/external positions?

Chapters 6 and 7, together with appendix 9, highlighted the complexity of ascertaining an individual's generalised locus of control during the course of a one-off interview. In addition to the considerable conceptual difficulties noted above, assessment was made problematic because of:

- the tendency of the respondents to provide contradictory answers to questions
- the considerable differences in an individual's responses to questions about different aspects of his or her life,
- the particular difficulties associated with interviewing the present sample (e.g. poor communication skills, defensiveness, mistrust of authority figures).

The difficulty of making valid judgements was not merely a feature of an over-sensitive researcher seeking extreme rigour; it was also clearly manifested in the responses to a selection of transcripts, by a group of professionals with significant experience of work with children with emotional and behavioural difficulties. Chapter 7 demonstrated how the same transcript often led to very different judgements about an individual's locus of control.

There are, of course, a number of factors which may help to explain these findings. Firstly, unlike that of Karl S., the interview analyses were based upon only one interview. Opportunities to increase a sense of trust and willingness to express one's true feelings and thoughts, to return to certain themes and explore issues in greater depth and to challenge inconsistencies of response, may have enabled clearer pictures to emerge. The value of revisiting and exploring issues with subjects in follow-up interviews (Reason and Rowan, 1981b) is duly accepted by the researcher, although it was recognised that limitations upon access to the children and the desire not to stretch the goodwill of children and staff, ruled out the possibility of employing follow-up interviews.

Secondly, it has already been noted that children with emotional and behavioural difficulties

tend to experience a range of difficulties in communicating with others. Not only are the children's communication skills often poor, their motivation to discuss problematic aspects of their lives may be limited. In addition, the abstract nature of the present exercise placed significant demands upon many of the children. It has also been noted that many of the children may be unused to reflecting upon themselves and their actions.

Thirdly, judgements were made on the basis of transcripts which could only provide limited data about the child's affect and demeanour. It is important to recognise that:

> "In actual human communication a single and simple message never occurs.....communication always and necessarily involves a multiplicity of messages, on different levels, at once. These may be conveyed via various channels such as words, tone and facial expression, or by the variety of meanings and references of any verbal message in relation to its possible contexts" (Jackson and Weakland, 1961, p.32).

Unlike judgements made in clinical settings, therefore, the process of scrutinising written transcripts resulted in a considerable reliance upon the child's oral responses without the complementary benefit of non-verbal, paralinguistic (tone, rhythm, gestures) cues.

Fourthly, despite the attempts of this researcher to ensure that blind raters had a sound grasp of the locus of control construct, it is possible that differences in ratings reflected varying theoretical understanding. (It has already been noted that the use of a volunteer network precluded systematic debriefing which may have helped resolve this issue.)

Finally, it should be stressed that these interviews were for the purposes of research and were not therapeutic exercises for the children. It is not clear whether this would have increased or decreased the children's candidness in interview. (The difference between a research and a clinical exercise is one which has rarely been commented upon in the locus of control literature and it is arguable that research findings which lead to claims for the efficacy of particular interventions, may require very close scrutiny.)

Of course, it should be recognised that researcher effects may also influence, to a significant

extent, children's scale responses. The race or sex of the researcher can influence the nature and extent of respondent self-disclosure (Hill and Stull, 1987). In addition, respondents may perceive (correctly or incorrectly) that the researcher considers a given response as more desirable. Although, in a traditional positivist paradigm, the researcher would generally adopt a stance of neutral impartiality, this may not always be the case in practice. Despite an adherence to such a tradition, many locus of control studies, by their design, are likely to influence significantly the subjects' responses. This may be particularly the case in those studies which have attempted to explore techniques to increase internality. In one such study (Perrotti, 1979), for example, the writer comments:

> "One factor which may have been conducive to increased locus of control was that the researcher stressed in the groups that the subjects should not become overly dependent on the staff members. Specifically, the subjects were told that they should assume increasing responsibility for their behavior" (p. 107).

Perrotti does not appear to consider, however, that the subjects' subsequent shift towards internality (as measured by the Rotter scale) might be more likely to reflect such strongly suggested responses than a true shift of perception.

Unlike naturalistic enquiry, which has long recognised the reflexivity of the research process where detailed consideration is given to the influence of the researcher upon the researched, work in locus of control, operating within a positivist paradigm, has tended to consider that such influences are minimised by heavily standardised procedures.

Many of the children in the present study knew the researcher personally and/or were likely to have considered him to have an influential position within the Education Department. It was recognised, therefore, that despite his endeavours to appear neutral with respect to locus of control, his mere presence may have affected the children's responses. This is equally true for both interview and scale responses (the latter being undertaken by others also personally known to the children).

In summary, the children in the study did not offer positions which could clearly (and

conveniently) be labelled internal or external. The researcher's difficulty in making judgements was borne out by the highly varied responses of blind raters. It is noted that the difficulty of making clear judgements may be partly explained by the one-off nature of the interviews, the particular communication difficulties of a special group of children, the fact that judgements were made on the basis of written transcripts, possible differences in theoretical understanding on the part of blind raters, and the effect that the researcher may have had upon the children.

b) to what extent can one assume that responses to a locus of control questionnaire will bear any resemblance to an individual's interview responses?

It has been noted in chapter 7, and above, that blind raters (unknowingly presented with the transcripts of extreme scorers (both internal and external) on the CNSIE, provided ratings of internality/externality which failed to differentiate between these two groups. Even accepting the conceptual and methodological difficulties noted above, this finding is somewhat striking. The lack of any observed relationship between extreme scores on a locus of control scale and statements made in interviews (deliberately focussing upon very similar issues) was not predicted by the researcher.

c) if there is no resemblance between findings from two different measures, which approach, if any, is the more valuable?

If one accepts that interview responses may not reflect scores on a generalised locus of control scale, how would a clinician proceed? Which source of data would be more useful, the scale with its reliability, apparent objectivity and standard procedure of administration, or the interview with all its richness yet its inherent methodological difficulties? If, in such a situation, one argues that the scale data are more valid, how could one proceed with any form of counselling without continually challenging the child's stated position in interview?

It is, perhaps, surprising that nowhere in the literature is this dilemma addressed, particularly

given the repeated suggestion (Walters and Klein, 1981; Hisama, 1976, 1979) that scales such as the CNSIE are useful screening and/or diagnostic devices for teachers and clinicians.

Some of these claims appear rather sweeping. Hisama (1976), for example, argues that prior to devising programmes for children with learning and behaviour disorders, teachers should know what kind of locus of control the child has. Others (e.g.Foon, 1987; 1988b; Trice, 1990) have argued that the construct may have a value in helping the therapist to utilise appropriate therapeutic techniques. These should be matched to clients' assessed locus of control as:

> "...externals generally prefer directive behavioral techniques, while internals prefer non-directive, analytic techniques" (Foon, 1987, p. 101).

Other claims appear downright implausible. Hisama (1979), for example, states that clinicians should note that children with an external locus of control are likely to become more motivated if they are initially presented with non-verbal teaching materials.

The vast majority of studies which stress the value of the construct do not, however, explicitly state the means by which it should be assessed. As these recommendations are generally derived from statistical studies employing locus of control scales, one might conclude that it is these measures which are deemed appropriate. Some studies, however, appear to suggest mixed approaches. Drummond, Barnard and Mehnert (1985), for example, argue that counsellors might be advised to use locus of control measures, such as the CNSIE, when delinquents are first admitted into correctional facilities:

> "When the staff are assessing a youth to design treatment strategies and individual educational plans, knowing the locus of control of the offender can be valuable.....Counsellors and teachers need to develop listening skills... to identify expectancies of external locus of control in youths" (p.14).

This extract appears to suggest that the authors would advocate going beyond a simple scale test-retest procedure, preferring to base their conclusions on a wider range of sources.

Even when the type of assessment device is explicitly stated, the literature is often unclear about how to use the derived scores. Schroeder and Gordon (1991), for example, recommend the CNSIE as an important element in the assessment of a child's adjustment to sexual abuse. They offer no indication as to how a clinician might use the derived scores other than to present the means and standard deviations obtained by Nowicki and Strickland (1973). Should one, therefore, see a score as problematic if it is a given number of standard deviations from the mean? Would this apply only to the external pole? It is not clear that such questions have ever been adequately addressed.

In the light of the present investigation, it is the writer's opinion that the value of a locus of control scale lies not in its ability to generate a score indicative of internality/externality but, rather, in its use as an heuristic device in an exploratory interview.

An attractive model for teachers and counsellors wishing to consider locus of control in their work is presented by Connolly (1980). Connolly argues that external locus of control expectancies can be assessed by monitoring the individual's communication of feelings, thoughts and behaviour characterised by a variety of expressions of blaming others, personal weakness, rigidity of behaviour, belief in fate or chance and of wishful thinking. It is important to note, however, that these overlap into other control-related areas.

Connolly outlines a number of counselling strategies (facilitating self-awareness, responsibility, understanding of the nature of one's problems and selecting a plan of action) which are appropriate for helping the client to move in an internal direction. Interestingly, these reflect more generic views of the process of helping (Egan, 1982). Perhaps then, acceptance of the locus of control construct merely serves to highlight one aspect of human functioning which is served by strategies found widely in the counselling literature.

In the light of the above, it is highly seductive to argue that this study supports the notion that a combination of a self-report scale and one or more exploratory interviews is appropriate. Eclecticism often appears to be a reasonable and measured approach, particularly

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in situations where a full understanding of underlying issues has yet to be achieved (cf. the teaching of reading). In actuality, it is the opinion of this researcher that neither technique, whether in isolation or in combination, has been demonstrated to be of significant value in assessing the locus of control of children with emotional and behavioural difficulties. This finding does not invalidate these methods, however, for it would appear to be the construct and its operationalisation, rather than the methods employed which have proven to be most problematic.

Final conclusions and recommendations

In concluding this study, the researcher would argue that his findings do not support the somewhat grandiose claims made for the construct. Despite the production of a vast literature, a number of conceptual and assessment difficulties persist.

This study cannot support the argument that locus of control is an important variable to consider when working with children with emotional and behavioural difficulties. The construct is difficult to operationalise, scale scores do not appear to be meaningfully related to other potentially important variables such as problem behaviours, and they fail to reflect children's responses in initial interviews. (It is important to note that further and more detailed interviews may have produced rather different findings.) It should also be noted that while some studies have shown that internality (as measured by scale scores) can be increased, there is little attempt to explore whether this is reflected by changed behaviour. While the limited relationship between many personality measures and observed behaviour has long been recognised (Mischel, 1968), many researchers have continued to place a greater premium upon seeking the means to effect a change in measured attitudes / personality traits, while neglecting to examine whether any such shifts actually lead to changes in behaviour.

Conceptual and methodological difficulties are thrown into particular relief by a study of children with emotional and behavioural difficulties, as such children may tend to be

relatively taciturn in the presence of perceived authority figures. In addition, many of the children in the present study had learning difficulties, were unreflective and unused to self-assessment, and these factors rendered discussion and elaboration of abstract ideas rather problematic. It is also possible that the nature and extent of self-disclosure may be very different for those perceived as being psychologically disordered (although little research has been undertaken in this area - see Carpenter (1987) for a review).

Chapter 2 has highlighted the many diverse theoretical positions which are all related to perceptions of control. The analysis of the interviews in chapter 6 and the case study in appendix 9 has further demonstrated the complexity and inter-relatedness of these constructs and the findings would suggest that any consideration of one particular construct, in isolation from the others, could result in a failure to grasp a coherent picture of an individual's control-related cognitions. This point is exemplified by the words of Grant, a boy of fifteen whose relationships at home had resulted in his placement in residential education. Grant suggested to this researcher that a catalyst for trouble was his father's bad mood which:

> "...is nearly all the time. (long pause). Say, like the fire's down, he says, "Grant, get a shovel of coal up." Like you're that interested in the telly, you canna hear 'cause you're, like, interested in the telly, like watching it; so what does he gan and do, "Hey monkey face! Put the coal on!" You could feel like picking the shovel up and battering him over the head with it!

When asked how he should best handle such a situation, Grant paused before replying that he didn't know. The researcher allowed the issue to be distanced from the boy by asking:

> "When I was younger, people used to call me names to get me mad. What do you think I should have done when I was called names?"

Grant paused for a while before responding:

> "Take nae notice. But how can you take nae notice when it's your own dad calling you, like?

Grant had scored highly internally on the CNSIE and this had been reflected by his

interview. His words, above, suggested, however, that he felt that he had little control over his circumstances, either over others or of himself. Issues to explore subsequently might be the means by which he could attempt to shape his father's behaviour or, perhaps more realistically, exert self-control in provocative circumstances.

The richness of interview and case study data, such as that contained in the very brief extract above, adds to our understanding of complex psychological constructs. As Coffield, Robinson and Sarsby (1980) point out, the bare bones of statistical evidence are made more more comprehensible by the flesh of qualitative accounts of daily life. In support of this claim, these authors cite Hess and Handel (1974):

> "Case analysis...translates abstractions into the concrete components of actual lives. The social scientist loses touch with his subject matter if he confines his work to disembodied responses and acts grouped into categories. Learning in social science must have a sensory base; tables of data must have some connection with people who can be seen or heard in action" (p. xi).

Despite the fact that the present research has not produced evidence to support the widespread use of locus of control measures with children with emotional and behavioural difficulties, it is considered that there is scope for further work in the broader area of personal control. It is recommended that such future research should firstly, identify essential sub-areas of personal control, one of which may be locus of control. (Chapter 2 has outlined in some detail what the writer considers to be other key areas.) Secondly, techniques of assessing each of these, individually and in combination, should be developed. This might involve the employment of self-report scales at the initial stage of the assessment process.

It is argued that scale responses obtained in this way should not be summated to obtain an index of personal control, as this could mask the most valuable details. Rather, a profile of each sub-area could be produced in order that one might be able to ascertain areas requiring further investigation. Although it would be possible to provide profile norms for research purposes, it is considered that, for clinical work, it would be more advantageous to consider the subject's profile in the light of his or her present circumstances. It may be appropriate,

for example, to consider whether a low score on personal competence reflects, to a significant extent, a valid or misplaced judgement about oneself, or, whether a 'pawn' orientation (cf. personal causation) accurately reflects an individual's inability to operate autonomously.

As is the case with other self-report scales of perceived problems such as the Mooney problem checklist (Mooney and Gordon, 1950), the data obtained may serve, not as ends in themselves, but as a means of bringing problems into the open.

In the opinion of the writer, the value of such a procedure would be emphasised not by demonstrating the profiles' statistical relationship with demographic variables, but by illustrating how their use can provide insights into an individual's cognitions and behaviour. Thus, further research in this area might utilise a case study approach (cf. Zaffrann, 1983) in which self-report scales, interviews and behavioural data may be used in combination to explore the inter-relationships of control-related constructs and their relevance to an individual's psychological functioning. More specifically, research could consider how such constructs may best be assessed, how derived profiles and interview data may be understood and related to other relevant information, and, in the light of this information it could consider the implications of findings for intervention. In addition, this researcher would wish to endorse the observation that longitudinal studies may be the most effective means of observing how various control-related beliefs interact (Peterson and Stunkard, 1992).

The researcher recognises a paradox in this section. Despite producing findings which lend little or no support to those who advocate the importance of locus of control in work with children with emotional and behavioural difficulties, the researcher suggests that further work in this area is desirable. This suggestion is not offered because a call for further research is considered de rigeur in a doctoral thesis. Rather, it is argued that the major weakness of work in this area is over-simplification, both theoretically and methodologically. Surely this should indicate a need for better research and theoretical development not for

the discarding of the construct on the grounds, so common in psychology, that it has failed to live up to expectations?

A belief in fate, a conception that our lives are in the grip of powerful forces beyond our control, is a universal theme, as prevalent in the writings of Ancient Greece as it is today. An excessive belief in one's inability to influence one's future may arguably have been maladaptive in past cultures; it would certainly appear to be undesirable in contemporary Britain. Perhaps this is most clearly illustrated by reference to the present Aids epidemic (Heaven, Connors and Kellehear, 1992). The response, "It's got nothing to do with me. It's all down to luck. If my number's up, it's just tough!" is a response that is not only recognisable to those who work with young people; it also one with a potentially fatal outcome.

Locus of control has now reached 'classic' status in contemporary psychology. Rotter (1990) points out that his 1966 monograph, outlining the construct is the most widely cited article in the psychological and social science literature over the past two decades. Lefcourt (1992) attempts to explain why his own 1966 paper on the same topic, is one of the ten most cited articles in the history of the <u>Psychological Bulletin</u>.

Rotter (op. cit.) believes that part of the success of the locus of control construct lies in the precision of its definition and the means by which this has enabled acceptable measurement. The present study has, however, indicated how this definition becomes problematic in a clinical context and has questioned the extent to which accurate measurement is possible and meaningful. Lefcourt (op. cit.), also attempts to explain the success of the construct and argues that locus of control emerged at a time when clinical/personality psychology was shifting its emphasis from the consideration of relatively fixed, intractable personality structures to those elements of the psyche which could be modified:

> "In a sense, constructs like locus of control encourage those whose purposes are
> to facilitate change in individuals or groups. Where traits, values and needs have
> usually been regarded as more intractable, expectancies have been considered

as more amenable to change and, therefore, a more convenient target when encouraging seemingly defeated people to exert themselves in the pursuit of valued ends" (p.412).

This study, however, has suggested that an enthusiasm to effect change may have led to a failure to consider sufficiently exactly what true gains have been made.

In his rebuttal of the heuristic and clinical value of the locus of control construct as it is presently conceived and measured, the writer recognises that his position runs counter to that of a vast number of researchers. Locus of control is a highly attractive construct which as Rotter (1990) points out, taps into issues of fate and causality which have fascinated humankind since prerecorded history. Grafting a quasi-scientific framework, with all its attractions for Western psychologists (see, for example, Lefcourt, above) upon an essentially existential issue with universal appeal, is likely to result in an attractive and potent formulation. Unfortunately, it can then so easily be simplified and trivialised (see page 7). It is hoped that this study will result in a more critical consideration of the control literature and a greater recognition of the gulf between much empirical research and clinical practice.

What research knowledge, skills and attitudes has the researcher gained as a result of this study?

One view of the production of a doctoral thesis is that, while the product should be a work of scholarship, the process should be considered to be a research training exercise (Brown and Atkins, 1988). This researcher considers that during the course of the present study, he has developed a number of research skills, both with respect to practical procedures, which are relatively easy to recognise and articulate, and to intellectual growth, which, in the main, is not.

It is possible to list a number of procedural skills which have been acquired. Some have been developed from scratch and include:

- the undertaking of relatively complex statistical analyses such as analysis of variance and factor analysis

- the use of computer programmes to process and analyse data (Statistical Package for the Social Sciences)

- the development of desktop publishing skills (Aldus Pagemaker)

- the analysis of extensive qualitative material

The research also involved the enhancement of existing skills such as:

- the use of computer-based graphics packages (Harvard Graphics)

- data retrieval from CD-Rom (e.g. Dissertation Abstracts International, Psychological Abstracts), fiche and paper-based systems

- skills involving indexing and cross-referencing the literature

- and, perhaps most importantly, skills of interviewing children. A major lesson learned during the course of this study was that the researcher's interviewing skills were not as advanced as he had first thought (e.g. his use of leading questions). As a both a researcher and a professional child psychologist, this finding, although unwelcome, was considered both salutary and beneficial.

It is considered that the development of abilities of description, analysis, synthesis and evaluation was a necessary consequence of the study. Unlike the more technical skills, it is very difficult to gauge their accretion, particularly the extent to which the research exercise offers unique opportunities for intellectual growth to an individual who is simultaneously engaged in a variety of other unrelated academic exercises. Nevertheless, the opportunity to engage and grapple with a vast literature, and to gain some sense of mastery, was particularly valued at a time when rapid changes in educational theory, policy and practice have led to the writer's perception that he is constantly striving to acquire a broad, rather than deep, knowledge base which, too often, is superficial, uncritical and marked by limited understanding.

Finally, the process of undertaking a lengthy research project has sensitised the writer to the

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needs and difficulties of others engaged in similar enterprises. It is considered that his ability to supervise others engaged in research has increased, not merely his ability to advise on procedural matters relating to the production of a thesis or dissertation, but also the formulation of a suitable research question, the selection of appropriate methodologies and the production of a reasoned, balanced and coherent position. Paradoxically, perhaps, growing awareness and understanding has also led to a greater appreciation of the writer's continuing limitations in all these areas.

The writer is particularly sensitised to the tendency of beginning researchers to have over-optimistic goals. Reflecting back a period of six years, the writer is aware of the immense naivety of a project which, it was considered, would offer a clear, if not definitive, answer to the question of what value the locus of control construct has for work with children with emotional and behavioural difficulties. It is hoped that the tentative conclusions of the present study will appear to reflect, not intellectual obfuscation, but a more considered and mature grasp of the realities of the research process and of the concepts under examination.