

**DISCOVERING THE SOCIAL WORLD OF THE YOUNG ADOLESCENT:
A BIPOLAR MEASURE OF THE SOCIAL SKILLS
OF ELEVEN- AND TWELVE-YEAR-OLDS**

**Thesis submitted for the degree of
Doctor of Philosophy
at the University of Leicester**

by

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DEDICATION

To Iain, Andrew, Kirsty, Duncan and Catherine

Can this be a dedication?
Indeed, I just don't know
I've thought about it carefully
- perhaps the answer's 'No'

For to be a dedication
It must be mine to give
But you are the inspiration
The breath which made it live

You're all so much in and of me
The spark which fires the flame
You ignite my mind, my thinking
So 'I' cannot mean the same

You provide a clear perspective
Of priorities, I find
And we give and take so freely
Of each other's hearts, minds;

That though this present study
Is not, and cannot be,
'My' work in isolation
From the five of you, you see,

I still would like to bring it you
With all my thanks and love
To show you that in all I do,
I place your love above

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PREFACE

As I come to the end of this project, I have many people to thank for help and support along the way. First of all, I am grateful to Professor Martin Herbert for supervising the major part of the thesis; and to Dr. Peter Trower for his time, innovative ideas and encouragement in the initial stages. Secondly, thanks are due to those children from the youth clubs whose insight and openness enabled the questionnaires to take form; to the Family Consultation Clinic in Cambridge, and particularly to Glynis Parkinson for her encouragement, support and enthusiasm; and to the Cambridgeshire schools which participated in the pilot study. Thirdly, I am indebted to the educational psychologists, teachers and children who commented upon the several drafts of the questionnaires, and particularly to Pat Landeryou from the Education Department in Cambridge, who made considerable efforts to liaise between interested parties. I also have to thank the various statisticians who freely gave of their time and expertise, particularly Ralph Seelagh in Cambridge, Peter Milligan in London (King's College) and Ralph Gilett in Leicester. Mr. Welch of Leicester University promptly provided numerous references each time a computer search was requested. Fourthly, I am grateful to the head teachers, staff, parents and pupils in all the participating schools (Chatham Grammar School for Boys, Robert Napier Secondary School, and Upbury Manor Secondary School, in Kent; Ballymena Academy, in County Antrim; Friends' School Lisburn, in County Down; Johnstone High School, in Renfrewshire; and Commercial Primary School, Dunfermline, in Fife); and to the Directors of Education concerned, who granted permission for the questionnaires to be given.

Special thanks are due to my family - to my parents, for encouraging me to study as an adolescent, and for giving me the freedom to discover where my academic interests lay; to Iain, my husband, for his practical support, which included everything from acting as a user-friendly guide to the Macintosh computer, to providing a much-used sounding board for arguments, to hanging the washing on the line; and to my children, who have let me glimpse the world of the child, constantly inspiring new vision, and who have been the means of ensuring that my original perspective (that the children, and not the thesis itself, are what is important) has remained intact.

INTRODUCTION

As the title of this thesis makes clear, the primary aim of the research project presented here was to develop a bipolar measure of the social skills of the young adolescent. This aim is easily stated. It is not until the context in which it is stated is described that it becomes clear how many complexities were involved in seeking to achieve it. It is this context, in fact, which has necessitated the rather wide-ranging approach to the research area which is found in the dissertation, and which has, moreover, compelled its author to adopt a somewhat independent line in pursuing the specific project. Although it was not, therefore, a primary aim of the thesis that it should contribute explicitly to the philosophical and methodological debate within the area of social skills training (SST), it is hoped that much of the discussion of these more general issues, as well as the development of the measure itself, will be of value.

The broader context in which the present study has been undertaken is, of course, represented by recent and not-so-recent research touching on the social world of the young adolescent in general. The narrower context is represented by the many publications of the past two decades concerned with SST in particular, whether those proposing assessment and training strategies (Lieberman *et al.*, 1975; Trower *et al.*, 1978; Bellack and Hersen, 1979; Curran and Monti, 1982) or those describing and discussing the problems connected with these strategies (Hersen and Bellack, 1977; Bellack, 1979; Curran, 1979; Arkowitz, 1981; Curran and Mariotto, 1981). Both kinds of work make clear the extent to which researchers and practitioners alike have become aware of the confusion that exists with regard to terms, concepts and results. The last decade, indeed, has seen the emergence of a new and exciting debate regarding the conceptual issues which are relevant to SST, the study of behaviour generally, and our understanding of scientific method. Something of a consensus appears to exist among the best known of these researchers and practitioners in the field of social skills. They seem agreed that SST has been less successful than they had hoped, in that it has not produced the expected rich harvest of healthy, socially competent clients and patients. On the contrary, skills which have been learnt and mastered during training often fail to flourish when taken outside the environment where their growth was fostered, and over a period of time tend to "wilt", at best, and sometimes

to die. This acknowledgement has resulted in two general categories of response. Some argue that SST is now dry ground that needs to be left in the hope that time may render it fertile again. Others maintain, rather, that the ground is still rich, but that the tools for working it are not well-designed for the task, and that the prevailing atmospheric conditions are unfavourable.

Here is the first difficulty facing the researcher with the quite specific aim described in the first paragraph above. The state of uncertainty where these larger questions are concerned simply demands to a certain extent that any current project on SST must begin with these same questions, and offer both a description and critique of the current state of affairs and some justification of the philosophy and methodology adopted in the project itself. The specific project must be set within this much larger context. Such description, critique and justification the present study offers in chapters one, two and three.

In chapter one I offer a critical review of some of the relevant literature which makes up the broader context within which the present study was undertaken. I describe and discuss recent research on the "social behaviour and dynamics of children and adolescents in particular; and on theories of relevance to such a dissertation in particular (interpersonal theory, friendship formation). The main concern of this chapter is to demonstrate in very broad fashion the ways in which the literature which exists on the one hand fails or only partially succeeds in addressing the concerns which I wish to address, and therefore makes space for the new piece of research which I have undertaken; and on the other hand, provides a basis for the progress in the field to which the present study seeks to contribute.

In chapter two the conceptual issues relevant to the study of human behaviour are discussed in more detail. The chapter suggests that it is the traditional way in which psychologists have conceived of and studied the human person (the "organism" approach) which is at least partly to blame for the problems which SST has encountered. An alternative approach (the "agency" approach) which is considered involves, rather, adopting an anthropomorphic view of man and an ethogenic approach to the study of his behaviour - that is, discovering the generative processes from which sprouts specific behaviours, rather than studying the specific behaviours alone. Three models of man, embedded within a structuralist framework,

are discussed: Harré and Secord's two-dimensional model of the individual in relation to society; La Gaipa's three dimensional model for the structural analysis of the individual in relation to himself, the nuclear family, the extended family and friends and neighbours; and, finally, a feedback loop model by Carver and Scheier which describes how the individual monitors others and himself, and how (s)he behaves when goals are and are not attained. Although there are aspects of these three models which are unsatisfactory, it is argued that they represent a great improvement upon previous models and as such, they are taken as a basis for the present study.

Chapter three provides, first, a thoroughgoing, critical appraisal of assessment methods. It draws attention to the lack of agreement which exists with regard to the definition of that which is being assessed, i.e. "social skill"; it discusses problems with the media through which an individual's social behaviour is observed or measured - role-play strategies, direct observation in a natural setting, questionnaire and interview techniques (encompassing self-report and reports by others); and it critiques the means of measuring those skills or skill deficits which are observed using the aforementioned techniques, including sociometry. This appraisal leads on, secondly, to a description of the assessment method adopted in the present study, in terms of these same areas of definition, media and measurement. I explain in particular why the development of new self-report and teacher questionnaires was necessary; and how the methodology adopted in this study in my view overcomes to a very great extent the problems highlighted in the first part of the chapter, making possible new discoveries about the social world of the young adolescent.

Having thus placed the dissertation in its context, and outlined both the philosophical and methodological approach which I have in this context adopted, chapters four to six describe the development and validation of the bipolar measure itself. Chapter four recounts the history of the development of the new self-report and teacher questionnaires. Chapters five and six present the results of the study, the former discussing the statistical analyses and the latter the descriptive data. The concluding chapter, chapter seven, then draws some conclusions about the new questionnaire, and includes a discussion of the findings of the study in relation to the issues discussed in chapters two and three.

1. LITERATURE REVIEW

1.1 Introduction

The purpose of this chapter is to offer a critical review of some of the literature which makes up the broader context within which the present study was undertaken. I shall describe and discuss recent research on the social behaviour and dynamics of children and adolescents in particular (since young people of the age group relevant to this study in fact reside in a somewhat grey area between the two areas of development usually described as "childhood" and "adolescence"); and then the literature on interpersonal theory and friendship formation more generally. The literature on both areas is, of course, extensive, and a full review would take us well beyond the area of interest of this study. I shall therefore confine myself to picking out the highlights which are of general or specific relevance in terms of the subject matter of the dissertation itself. A particular concern of this chapter will be to demonstrate in very broad fashion the ways in which the literature which exists on the one hand fails or only partially succeeds in addressing the concerns which I wish to address, and therefore makes space for the new piece of research which I have undertaken; and on the other hand, provides a basis for the progress in the field to which the present study seeks to contribute. Chapter 1 thus prepares the way immediately for chapters 2 and 3, which will pick up this theme in more detail, offering a sustained critique of much of the philosophy and assessment method in the literature, and justifying the philosophical framework and method adopted in this study.

1.2 Literature on the social behaviour and dynamics of adolescents

The literature on the social behaviour and dynamics of adolescents is actually surprisingly sparse in respect of what we might call "normal" children, that is, children who are functioning reasonably well within society and not giving undue cause for concern. The bulk of the research has, rather, focussed upon the difficulties experienced by specific groups of adolescents (e.g. young offenders), who are said to deviate from a normal

pattern of social development which has more been assumed than described and examined. When this literature is examined closely, moreover, it reveals a variety of results whose precise significance is often not clear, and some of which are mutually contradictory. Connected with this variety of results is a variety of aims and methods, very often at cross-purposes with one another; and variety, also, in the degree of success which SST has had in treating the subjects concerned. The cumulative effect of all the literature cited, whether on "normal" or "abnormal children", is to suggest that our knowledge of the social behaviour and dynamics of adolescents is fragmentary at best, particularly in relation to the normal behaviour of specific age-groups within the adolescent range. It is further to suggest that serious attention must be given to the methodological issue in framing a new research proposal. We begin with the "abnormal literature", before moving on to review the "normal literature".

Spence's chapter on adolescent offenders in Spence and Shepherd (1983) reviews the literature in this field of interest. Both Braukmann *et al.* (1975) and Freedman *et al.* (1978) had emphasised the importance of skill deficits in the role of the development and maintenance of offending. Spence herself (1981) found, when comparing an offender group with a non-offender population, a significantly lower level of eye contact, head movement and total amount spoken, and a higher level of inappropriate responses, fiddling and gross motor movements. The significance of these correlations is, however, not clear, since these groups did not reveal social deficiency across the whole range of social skills. There was no difference between the two groups when use of gestures, smiling, speech dysfluencies, question asking, latency of response, initiations and friendliness ratings were measured.

Henderson and Hollin, in Hollin and Trower (1986), include a resume of twenty studies on social skills with young offenders. Of that twenty, eleven had 10 or fewer subjects, and only six included both females and males (though the number of subjects represented was fewer than 10 of either gender in all studies but two, one of which failed to report the number of each gender). The size of the sample in these cases makes it difficult to assess the significance of their findings in term of the debate about the efficacy of SST more generally. Of the nine studies including more than 10 subjects (Alexander and Parsons, 1973; Chandler, 1973; DeLange *et al.*, 1981b; Hazel *et al.*, 1981; Hazel *et al.*, 1982; Ostrom

et al., 1971; Sarason and Ganzer, 1973; Spence and Marzillier, 1981; and Spence and Spence, 1980), all but one showed improvements in the subjects after SST. Of the seven which included a follow-up programme to see if skills were maintained over time, however, only three reported maintenance of improvement over time (the time period being less than a year in all but one case). Three reported deterioration over time, and one found improvement in both the SST group and the discussion group, but not the control group. A variety of methods for assessing the baseline behaviour and the improvement are used in these studies, and these could be responsible for the differences in findings.

Two particular interests in the literature in terms of SST with abnormal children are modelling and positive reinforcement (cf., for example, Michelson and Mannarino in Strain et al., 1986). O'Connor (1969, 1972) is the name most readily associated with modelling. In both his studies children exposed to modelling showed improvements over control groups which lasted for some months in the first study and 6 weeks in the second. Keller and Carlson (1974) found similar results with socially isolated pre-school children. However, Gottman (1977) repeated O'Connor's studies and did not find significant differences between his groups.

Strain and Timm (1974) and Strain et al. (1977) used positive reinforcement of peer trainers to prompt interaction with withdrawn children, and proved to be successful at altering the behaviour of the withdrawn children. Todd et al. (1976) compared the effects of social reinforcement, token reinforcement, combined social and token reinforcement, differential reinforcement of another behaviour, and cost contingency. They found that social reinforcement plus token reinforcement did not effect a reduction in aggressive behaviour, but cost contingency was an essential pre-requisite for changing aggressive behaviour. A follow-up showed continued improvement in the classroom situation. In contrast a reinforcement procedure which involved positive experiences when withdrawn children initiated and continued in social interactions with peer groups was the method which worked best with that particular group. Studies which have included an SST programme have found increases in peer acceptance of isolated children (Ladd, 1979; Oden and Asher, 1977), although no measure of maintenance was included. Similarly, the Camp and Bash "Think Aloud" programme (1978b, reported more fully in Cartledge and Milburn, 1980), based on the work of Spivack and Shure (1974), which

suggested that learning to think of optional solutions to problems was essential to improving social behaviour has shown improved performance within various groups. For example, Camp et al., (1977) have found this programme to increase the social performance of children with social difficulties in the classroom and in cognitive tasks when compared with control groups. Aggressive children, however, were found to have improved no more than that evidenced by the control group. Watson and Hall (1977) also reported improvements with learning disabled children. It has to be said, however, that in many of these studies "improvement" is measured by a quantitative improvement in interaction and this, in the absence of a complementary qualitative measure, may mean nothing in terms of the child's actual ability to experience social ease and enjoyment in his/her relationships with others.

It is the limited success with generalisation of learnt individual skills to varying situations and over time which has led recently to growing interest in, and use of, a cognitive problem-solving approach to SST. In reviewing studies carried out using an essentially cognitive approach (called ICPS for "Interpersonal Cognitive Problem-Solving"), Michelson and Mannarino cite Spivack and Shure's work (1974) with pre-school children and pre-adolescents as encouraging in terms both of the improvement which the programme produced in problem-solving ability and acquisition of new skills, and perhaps most crucially, the consistency over time of the improvement. Unfortunately, however, no control groups were used, so it is impossible to compare other forms of social stimulation. Chinsky et al. (1976) adopted a similar programme for older children, experiencing less encouraging results. Whether this was due to an older group being more established in undesirable patterns or to the programme itself is impossible to say, since once again there was an absence of comparable groups. McClure et al. (1978) included four comparison conditions in their experiment: videotape modelling only; videotape plus discussion; videotape plus role-play practices; and a no-treatment group. Children were also assessed for their internal/external locus of control. The results indicated that children in the first three conditions all improved in their ability to solve problems and developed a more internal locus of control. The crucial assessment of how their behaviour in spontaneous real-life situations improved, however, was omitted and therefore it is difficult to compare this study with those that assess

baseline and improvement in real situations. Weissberg *et al.* (1981) constructed an ICPS programme which included five categories of problem-solving social skills and four measures of behavioural adjustment. They found that the children in the ICPS programme made significantly more gains in giving alternative suggestions and more effective solutions, identified interpersonal difficulties more readily, and predicting consequences more accurately than the control group. However, ICPS did not affect self-esteem, peer status or self-report measures of anxiety. Teacher ratings improved in the suburban group but not the urban one - a result which is contrary to that of Elardo and Cladwell (1979), who found teacher ratings improved for inner-city children who were in both ICPS and role-taking groups. One particularly encouraging study by Mannarino *et al.* (1982), using an ICPS programme with 64 high-risk children, showed the programme children to have made substantial progress in behavioural adjustment as measured by teachers compared with controls. More importantly, there was a significant increase in the peer acceptance of the programme group. investigation. One final study of importance here is that of Richard and Dodge (1982), which included aggressive, isolated and popular boys as subjects. They found that popular children generated more alternative solutions to social situations than either of the other two groups (both of which scored similarly). The initial solutions suggested by each group were all regarded by raters as equally effective, however, which leads one to suppose that the social difficulty of the isolated and aggressive groups lies in the ability to generate a number of different options. Richard and Dodge also point out that the solutions chosen by the boys in those two groups are often characteristic of the behaviour which they most commonly express (i.e. aggressive or ineffective).

Other studies should be listed here which are difficult to describe under any one particular heading, but which are clearly of importance in general. Foster (1983) cites studies linking poor social skill and ability to relate to one's peer group with hyperactivity (Pelham and Bender, 1981), conduct disorders (Cox *et al.*, 1976) and academic and mental health problems (Cowen *et al.*, 1973; Kohn and Rosman, 1972). Retrospective studies with alcoholics, antisocial individuals and psychiatric patients apparently show a high level of social difficulty which was recorded in childhood (Roins, 1966; Morris, 1956; Lovaas *et al.*, 1972; Lewine *et al.*, 1978). Camp (1977) and Camp *et al.* (1977) have found that aggressive boys

differed from normal ones in both behaviour and cognitive skills. Reviews by Asher *et al.* (1977) and Hartup (1970) indicate that those children who experience peer acceptance show better social knowledge, more complex reasoning and more positive behaviour when interacting with others. Social isolation has been found by Ladd (1979) and Oden and Asher (1977) to be an enduring state of existence by the time a child is only nine or ten years old. Ladd and Oden (1979) found socially isolated children to be less aware of peer values and norms, suggesting social strategies which peers would have regarded as unhelpful or inappropriate; and Gottman *et al.*, (1975) found a positive correlation between social knowledge and peer acceptance. However, other studies would encourage caution before too naively accepting this last correlation at face value. Singleton and Asher (1977) found race to be an important factor in determining social acceptance amongst peers; McDavid and Harari (1966) found possession of an unusual or strange sounding name to be of significance; while Dion and Berscheid (1974) correlated physical unattractiveness with social rejection. Such studies remind one of the need to consider intermediary variables when investigating a possible correlation between social skills and peer acceptance, since these children may not even have been afforded an initial opportunity by peers to make social advances.

All this literature on "abnormal" children is, of course, important in its own right. What is already clear, however, from this brief review of the literature is there exists very great diversity among researchers in terms of their methodology and their precise areas of interest, and consequently, that our knowledge even of these abnormal adolescents is somewhat fragmentary and, indeed, contradictory. Clearly there needs to be some discussion within the field of SST particularly about method, and about how diverse results may better be related to each other within a coherent methodological framework. Moreover, the mere fact that most of the work on the social behaviour and dynamics of adolescents has been carried out with respect to these specific groups of "abnormal" children is itself problematic, as has been noted by several recent researchers (cf., for example, Furnham's chapter on adolescence in Trower and Hollin, 1986). The consequence is that we have little detailed knowledge of what constitutes normal social functioning within this age-range, against which to compare abnormal behaviour. This is particularly the case in regard to

11 and 12-year-olds, the age group of interest to this study. Such work as has been carried out may be described, and its limitations from the point of view of this study stated, fairly briefly.

The first area of importance which has been researched in relation to adolescence is that of identity. The importance of identity was long ago recognized by Erikson (1958, 1963 and 1968) who, with Piaget, is usually immediately associated with development in adolescence. It has been further explored more recently by others (e.g. Waterman (1985); Herbert (1987)), who have been particularly concerned to give the kind of succinct definition to the concept of identity which is lacking in Erikson's writing. Herbert sees adolescence as a period of transition between childhood and adulthood in which the person is moving from a state of dependence on his/her parents for love, nurturance and guidance towards a state of independence. The main characteristic of the adolescent stage is the individual's need to shape and consolidate his or her own identity as a unique and mature person - a development which is a vital precursor to true intimacy and depth in personal relationships. Waterman explains identity in terms of having a clearly delineated self-definition comprised of those goals, values and beliefs which the person finds personally expressive, and to which he or she is unequivocally committed. Such commitments evolve over time and are made because the chosen goals, values and beliefs are deemed worthy of giving a direction, purpose and meaning to life. He goes on to consider the concept as both a process and a content variable, the latter referring to the strategies used by the person as the means of identifying and evaluating goals, values and beliefs which are potential identity commitments. The areas considered by Waterman as being of major developmental concern to the adolescent and of particular relevance to Erikson's theory are: selecting and preparing for a future career; re-evaluating religious and moral beliefs; working out a political ideology; and adopting a set of social roles, including a social gender role. Crises of identity are experienced most commonly in only one area at any one time. Crises occurring in more than one area at a time could lead to "overload" within the individual. These findings do not seem to fit in with the idea of adolescence being a period of persistent turbulence - the impression one tends to come away with from Erikson's accounts of this stage. Further study of identity is clearly required.

A second area of importance in the discussion about adolescence is that of assertiveness. Various studies have been undertaken particularly with regard to the lack of assertiveness in some individuals. Furnham (in Trower and Hollin (1986)) outlines three explanations which have been offered. Lack of assertiveness has been explained in terms, first, of high levels of conditioned anxiety which block the assertion of assertive behaviour (the "anxiety" approach); secondly, of straightforward absence of the appropriate skills (the "skills deficit" approach); and thirdly, of negative self-statements, irrational beliefs, faulty decision-making and problem-solving skills (the "cognitive deficit" approach). Three studies in the seventies examined the matter of adolescent assertiveness/lack of assertiveness using children within the age group of interest to the present study. The first (Bornstein, Bellack and Hersen, 1977) used 4 subjects. All 4 were deficient in both verbal and non-verbal behaviour, and did show ability after training to generalise what they had learnt over a period of time and in different situations. The second (Buell and Snyder, 1981) used a greater number of subjects (44), but included a very wide age range (8 to 18 years). While the effects of assertion training were shown to generalise over time and situation, this was illustrated by using a behavioural role-play test, not a real-life situation, and the self-reports revealed no difference between the control groups and the training group. This would suggest that change was located only in the expression of behaviour and not the belief system. The third study (Groves, 1979) reported individual case studies in which a 7 step programme was utilized. Whether improvement occurred over time and situation is unknown. It is clear, therefore, that much work requires to be done in this area as well. It is, in fact, astonishing just how great is the dearth of studies in this area of adolescent assertiveness (Connor, Dann and Twentyman, 1982), in comparison with the huge body of literature on adults (Furnham and Henderson, 1981, 1984). There is in particular a lack of systematic documentation describing when and how assertive skills develop - Furnham and Henderson (1984) and Henderson and Furnham (1983) have suggested that there are different dimensions of assertiveness and that they do not develop at the same time or the same rate. This interesting pioneering work does not seem, however, to have been built upon to any great extent.

The situation is no different in relation to other areas which are by general consensus important in the study of adolescent development: dating and job interview training; relationships with authority figures; and loneliness. Such studies on dating and job interview training as have been carried out (see Furnham in Trower and Hollin (1986) for details), for example, are all well outside the age range of this study. Again, little work has been done on adolescent social skills in relation to authority figures. Tuma and Livson (1960) showed a correlation between attitudes to parental authority and school authority with 14-16 year olds, while Vener, Zaengler and Stewart (1977) showed a general decline of respect of authority with increasing age. A study which throws more light on these two findings is that of Rigby and Rump (1981) who, in an Australian analysis of 157 schoolchildren aged 13-17 years, found moderate correlations between attitudes to parental authority and outside authorities (police, teachers, the army and the law). One of the most important findings of this study was the difference between the attitudes of the 13-15 and 16-17 year old groups, the latter being more favourable in their attitude to outside authorities than that of their parents. This finding was confirmed by Jones and Ray (1984), who produced a scale measuring schoolchildren's attitudes towards authority. These results taken together illustrate the importance of treating groups of adolescents in their own terms, rather than taking a very wide age-range (even five years) as the sample and generalizing across this range. Finally, Coleman and Coleman (1984) interviewed 43 British adolescents and found that they desired a greater degree of adult authority in the school environment than at home. Again, however, this leaves more questions unanswered than it resolves: was it because the school environment was more threatening, parental restrictions too stringent, or for some other reason? Much more work is required.

Lastly, there is the question of loneliness, which has been shown by Jones *et al.* (1981) to be correlated with anxiety, depression, boredom, self-depreciation and interpersonal hostility, as well as involving a deficit in social skills. They compared very lonely and not lonely students in their conversational ability with regard to the opposite sex, and found the former group gave their partner less attention. They attributed this to the lonely students' beliefs that they would be given little attention and ultimately be rejected and therefore they themselves

are defensive and rejecting of others. This result fits in with the finding of Solano et al. (1982) that loneliness was related to a self-perceived lack of intimate disclosure to friends of the opposite sex. Analysis of conversations showed that lonely people were not able to see that a lack of intimacy existed in their conversations, but the non-lonely partner was easily able to identify this characteristic. Anderson et al. (1983) have linked loneliness to attributional style and have found a high positive correlation between loneliness and depression. Lonely people believed failure in relationships to be attributable to fairly permanent deficits within themselves, while non-lonely people attributed such failure to less stable causes such as effort. These studies are, of course, once again not directly applicable to the age group under consideration in this study here, although in illustrating the important influence of the individual's belief system and cognitive processes in both the source and presumably the cure of his/her problem, they perhaps point the way ahead for future studies of adolescent loneliness in particular.

Not only has most of the emphasis in research on the social behaviour and dynamics of adolescents fallen upon children who are perceived as being "abnormal", then, but the literature which exists on normal development is sparse and frequently quite broad in its treatment of the age-range involved. The consequence is that we still know very little at the present time either about the development of the adolescent in general or about particular sub-stages within this broader stage of human development.

1.3 Literature on Relevant Theories

In this section I turn to literature on two theories which more generally are of relevance to this dissertation: interpersonal theory and friendship formation. The studies which I include are of interest particularly because of the light which they throw on the questions of which specific skills or abilities are crucial to healthy social functioning; at which age or stage these skills emerge; and which criteria are necessary for their acquisition. They are also there because of the comparison of research methods which they provide.

Interpersonal awareness skills have been considered important in social development because of the belief that egocentrism decreases with age and the ability to recognise differences between one's own experiences compared with others increases (Kendall et al., 1981). Foster (in Ellis and Whittingdon, 1983) describes studies which focus upon the child's ability to take another's perspective, ability to empathise and their peer relationships. She categorises role-taking into three groups: spatial role-taking (the ability to understand someone else's literal physical view of the world); cognitive role-taking (understanding another's perceptions, opinions and thoughts); and affective role-taking (understanding someone else's emotions). In terms of methodology the latter two categories measure the individual's understanding of another's reactions in a social situation. Chandler (1973) and Feffer and Gourevitch (1960) have measured cognitive role-taking by asking a child to explain a story by adopting the perspective of each of the characters within the story. Affective role-taking has been measured by Borke (1973) and Rothenberg (1970). A story about a child was read to subjects who were then asked to describe how the child probably felt. At present the research indicates that both cognitive and affective role-taking skills develop with age: Rubin (1978) and Rothenberg (1970) found older children produced better results than younger. Other investigators have focussed upon empathy as a measurement of social sophistication. Here the child needs not only to be able to identify the emotions experienced by another but to respond with a similar emotion. Feshbach and Roe (1968) found that the child's ability to ascribe a correct label or description to the other's emotion did not imply that the child also reported experiencing the same emotion.

When compared with a child's actual social acceptance by the peer group, Pellegrini (1980) has found a correlation between acceptance and cognitive role-taking with 8-12 year olds. Waterman et al. (1981) also found that children who were placed in a special class for "emotionally disturbed" children showed a lack of ability to perform well on cognitive role-taking tasks. Reardon et al. (1979) found that cognitive role-taking tasks correlated with teacher ratings of social sensitivity and observers' global ratings of assertiveness in role play scenarios with boys of 8 to 15 years. Affective role-taking, however, has produced more confusing results when compared with peer acceptance. Waterman et al. (1981) found differences on an affect-recognition task between emotionally disturbed

children and children assigned to normal classrooms. When they controlled for intelligence, however, these differences ceased to exist. In contrast, Rothenberg found modest correlations between affective role-taking and peer ratings of leadership, gregariousness, friendliness and sensitivity with children aged 7 -10 years. The 10-12 age group positive relationships were only found with the leadership and gregariousness categories. On the basis of peer nominations, children were then grouped into high and low adjustment groups, and the low-adjusted group showed poorer role-taking abilities in scenarios involving the expression of negative emotions than their better adjusted peers. Scenes for expression of positive emotions showed no differences between the two groups.

Very few studies exist which have isolated knowledge of social skills from the expression of the behaviour. Selman (1976, to be found in Kendall and Hollon, 1981) found a negative correlation between peer rejection and maturity of social concepts. Gottman *et al.* (1975) found that popular children aged from 9 to 11 years showed a greater number of social strategies in a role-play task which necessitated making friends with a new child. No difference existed, however, between the two groups of children on a role-play task involving academic helping, nor in the ability to label emotions from photographs.

A couple of final studies which should be mentioned here are included by Foster under the heading of "interpersonal problem-solving", which she differentiates from interpersonal awareness and social knowledge on the basis of the specificity of resolving conflict in the situations provided by the researcher. Kendall and Hollon (1981) review studies in this area. The steps involved in investigations require recognising a problem situation, generating a variety of possible responses, choosing the most effective, and attaining that identified goal. Problem-solving style has been a focus of some of these studies, which indicate that "impulsive" styles tend to be correlated with poor problem-solving and disruptive behaviour in the classroom. Other correlations with poor interpersonal problem-solving include maladjustment, inhibition, delinquency and aggression but only one (Richard and Dodge, 1982) has looked at poor interpersonal problem-solving and peer acceptance. Here aggressive, isolated and popular boys of between 8 and 12 years had to generate as many suggestions as possible to resolve conflict situations involving peers and also friendship initiation situations. They then had to choose one of

three solutions presented by the researcher as being the most effective - one aggressive, one passive and one skilful. Popular children generated more solutions. The three groups did not differ dramatically on the efficacy of the initial solutions suggested to the problem situations, but the popular group were better at offering additional effective solutions. Finally, the three groups did not differ in their ability to identify the best solution to a problem situation.

Interpersonal theory is of particular relevance to our discussion of SST because of the increasingly recognized possibility, already mentioned in 1.2, that cognitive ability is important in successful social functioning, whether this be measured in terms of cognitive role-taking skills, knowledge of social skills, or interpersonal problem-solving skills. I shall return to this question in detail in chapter 2.

In the literature on friendship formation, the importance of cognitive skills also becomes apparent. Friends are individuals who spend time interacting with each other. As Berndt points out (in Higgins *et al.*, 1983), this is something of a consensus in the literature on friendship, even where there were differences in the manner of testing (e.g. Damon, 1977, compared with Selman, 1981); where the manner of coding of children's responses to questions about it ("What is a friend?"; "Is it nice to have friends?"; "How can you tell if someone is a best friend?"; cf. Reisman and Shorr, 1978; Youniss, 1980; Berndt, 1981) was quite different (after obtaining information from the children, as in Gamer, 1977 and Berndt, 1981; or prior to investigation and based on previous work as in Bigelow, 1977 and Riesman and Shorr, 1978); or where the age range across studies was vast (compare Berndt, 1981; Bigelow and LaGaipa, 1980; Hayes, 1978; and Riesman and Shorr, 1978). Young children will describe this interaction more as "play", and older children as "common activities", but the fundamental concept is the same. Ability to adopt the perspective of the other is therefore a vital skill in friendship formation. Three main approaches are described below, all of which include a cognitive component in the ability of the child to choose, make and maintain friendships.

In two studies by Berndt himself in 1981, he found intimacy in conversation to increase dramatically as the child grew older. Young children rarely talked about problems or secrets, loyalty, talking "behind backs" or "sticking up" for each other. In all studies, these considerations increased dramatically as adolescence approached, and the

only gender difference showed girls to be more concerned with intimacy than boys. Young children often described a friend as someone they knew or liked, but older children (probably assuming these characteristics would be pre-requisite for a friendship) tended to omit saying such things. Children also tended to mention the characteristics of a friend ("nice", "faithful"), but no significant differences seemed to exist according to age. Some researchers have found faithfulness and attributes of a friend to be more significant but Berndt points out that this could be a result of faithfulness being classified as a component of loyalty and attributes are often coded into different categories.

The best known model of friendship is probably that of Selman (1981) where he argues that there are stages in the development of friendship concepts and that these correspond to levels of social perspective-taking ability. In stage 0, the child is unable to distinguish his/her perspective from another's, and a friend is someone being played with at that moment. Stage 1 is when children understand that others think and feel differently from themselves, but cannot take two perspectives into account at the same time, or see themselves from the perspective of the other child. A friend is thus someone who does things for the child or helps them, but they do not recognize the need for reciprocation. Stage 2 children can understand another's view of them and can reciprocate. Co-operation exists because the children are trying to take account of the other's preferences, but an enduring relationship does not exist. Conflict or lack of co-operation would end the friendship. Stage 3 involves taking the view of a third party in relation to an interaction between two others. Friendships are then defined as mutually supportive and intimate, even if minor conflicts occur. At this stage possessiveness may also become evident. Stage 4 is located by Selman only in adolescence and adulthood, where the view of a wider body (society) is acknowledged, and variation of perspectives within that wider body is recognized. An understanding that friends are there for support is balanced with an awareness that a measure of independence must be retained and that other interpersonal relationships are important.

Selman's fairly complex model stands in contrast with Berndt's approach, where the information is gathered first and then categorised. A third, middle, approach also exists, represented by Youniss (1980) and Bigelow (1977). The former classifies responses under general headings

such as "sharing, helping, mutual understanding". The latter proposes three stages which are more general than Selman's: first, the rewards and costs of friendship; second, the friend's character compared with others; and third, concern for the psychological elements of friendship, such as empathy and intimacy.

A broad sweep of the literature on children's friendships reveals a situation similar to that which is evident in the literature on those other aspects of children's social behaviour I have discussed already. First, very little has been written on the adolescent group, when compared with the various younger age groups. Secondly, the research which has been carried out on age differences and on the significance of pro-social behaviour is scarce and inconsistent, and the research involving actual behaviour of friends confusing. Fincham (1978), and earlier Wright (1942), found children shared more with a stranger than a close friend because they perceived the stranger's need to be greater. Staub and Sherk (1970) found children shared more with a close friend than a classmate; but no difference was found in a similar study by Floyd (1964). Benton (1971), and Morgan and Sawyer (1967), found that in bargaining studies close friends were comparable with neutral pairs, or decided upon less equal distribution of rewards than other children. Foot *et al.* (1977), Newcombe and Brady (1982) and Newcombe *et al.* (1979) found friends to have more frequent and more harmonious interactions with each other than did other classmates when working on a task or watching a film. In one study which included children from 6-14 years (Bigelow and LaGaipa, in Foot *et al.*, 1980), children were asked to write an essay on their expectations of best friends, which were then coded along 21 friendship dimensions in terms of the importance ascribed by the child to each one. Rank ordering resulted in the emergence of a developmental scale with 9 dimensions. Both the children and adolescents chose common activities most often as the dimension descriptive of ideal and actual friends, but in adolescence loyalty and commitment were viewed as essential qualities in a best friend. Decay of friendship is also described in terms of disloyalty. Gender differences were significant for the adolescent group alone - girls being more concerned with loyalty and commitment than boys, and to a lesser extent were more concerned with intimacy.

Gender differences emerged in Berndt's studies and in those by Feshback (1969) and Feshback and Sones (1971). In Berndt's study girls said that they would help and share with a friend more than with others in everyday, non-competitive situations. Boys said they would help and share with a friend less than the girls did, and also said they would treat a close friend similarly to a classmate whom they liked moderately. Unfortunately, their actual behaviour in the classroom was not measured: a comparison would have proved most interesting. The other two studies found that girls did differentiate between friends and non-friends more than boys. Girls were also found by Berndt and Hoyle (1981), Eder and Hallinan (1978), Savin-Williams (1980) and Waldrop and Halverson (1975) to have fewer close friends than boys, to make new friends less quickly, and to favour interaction with a single other more. How balance is achieved and maintained by an individual between the smaller close friendship group and the wider peer group is unknown and would be invaluable in attempting a portrait of the social world of the adolescent in its entirety. Rizzo's study (1989) of friendship development in school, although outside the age range of interest in this study, is noteworthy in that, of the 34 friendships which he observed in a real-life situation over several months, only 8 lasted for the full period of the study; 14 lasted less than one week; and 26 less than one month. He records in his report the details of the various real-life conflict situations or disputes which arose during the study - a rich a source of data, and one which is clearly important in studying behaviour.

1.4 Conclusion

From the literature described above it is apparent that our knowledge of which skills or characteristics are necessary to ensure good social development in the young adolescent is, at best, fragmented. There are two reasons in particular why this is so.

First of all, there is some degree of confusion over methodology. For example, some researchers adopt a cognitive, some a non-cognitive approach; some are measuring social knowledge rather than expressed behaviour. Yet terms are often not adequately defined, approaches often not described in sufficient detail, to enable inter-study comparison. Where definition and

description is clearly given, the reader can often begin to ascertain why a comparison between particular studies would prove difficult. Studies which in practice have measured social knowledge using role-play, for example, could not be readily compared with those measuring actuality of social responses in a real-life situation. This methodological confusion is a serious hindrance to consolidated and coherent progress in the field.

Secondly, there has been on the whole a focussing upon problem groups of adolescents, rather than upon their normal development in social ability. There is, in fact, very little literature on the normal social behaviour and dynamics of adolescents in general; and there is even less of direct applicability to the specific age group in which I am interested, namely 11 and 12-year-olds. A coherent, non-fragmentary picture of adolescence as a whole stage of human development requires accurate description of these quite narrow sub-stages within the whole, and will not be attained unless the more detailed work is carried out. And indeed, a fuller understanding of the problems of the "abnormal" children will only be possible when we more fully understand the development of the "normal".

This is the broader context in which the present study was carried out. It seeks, on the one hand, to break new ground in developing a questionnaire which measures the normal social ability of the specific age group cited. Chapters 4-6 describe this process in some detail. It seeks, on the other hand, to confront the methodological difficulties at the heart of the discipline of psychology at the present time, both generally in respect of the study of human behaviour, and specifically in respect of social skill assessment methods, and to offer a way ahead. It is to such important prolegomena to the study that we now turn, in chapters 2-3.

2. THE CONCEPTUAL ISSUES

2.1 Introduction

In this chapter, the conceptual issues relevant to the study of human behaviour will be discussed. The possibility that the traditional way in which psychologists have conceived of and studied the human person is at least partly to blame for the problems which SST has encountered will be considered, and an alternative approach presented which builds upon other recent contributions in this area of study. An historical resumé will first be attempted to illustrate that concepts of man are historically conditioned rather than absolute "truths", and as such need to be critically appraised. To give order to the material which will be presented, the resume will appear under two general headings adopted from Trower (1984). We shall discuss under the heading "organism approach" concepts of man which are traditional in psychology, and methodologies which embrace the principle of verification. More recent ideas found in the work of Trower, Harré and others will be discussed under the heading "agency approach". A summary of my position on such matters then follows, which includes an outline of where and why the approach adopted here differs from those found in this recent work.

2.2 The Organism Approach

2.2.1 Introduction

Social scientists in general, following the standard approach of physical scientists, subscribe to a deterministic relationship between psychological and physical events. It is one of the basic presuppositions of modern science that there exist "... two quite independent types of phenomena, the mental and the physical/behavioural" (quoting Trower, 1984, p. 55). This dichotomy between mental and physical events has its origins in Plato, was developed largely for religious reasons by Christian philosophy, and came to completion in Descartes. The "scientific approach", perhaps better known as empiricism, has accepted such a

distinction since Descartes' time. Its proponents argue that while both physical and mental events are in accordance with, or are determined by, laws of nature, only physical phenomena can be studied and measured objectively, as mental behaviours are unavailable to us. Only they, therefore, can legitimately be of interest to science.

The organism approach of traditional psychology proceeds from this assumption. It has three principle aspects: a mechanistic model of man, a "billiard ball" model of causality and "... a related methodology based upon the logical and epistemological theories of logical positivism" (Harré and Secord, 1972, p. 29). These will be considered in more detail in the two sections below.

2.2.2 Man and Causality

Accepting the first law of motion ("a body left to itself will move with constant velocity in a straight line"), Descartes viewed all processes and movement, except in the case of the human soul, as purely mechanical: hence the "mechanical model" of man. In this model, man is viewed as totally passive, simply "responding to the push and pull of forces exerted by the environment" and governed, as much as the material world, by physical laws. In behaviourist terminology, these "laws" are described in terms of classical conditioning theory (S-R) - a stimulus occurs which elicits a predictable response in the organism - or more commonly, following the later Humean "billiard ball" model of causality, in terms of Skinner's S-O-R, where changes in the organism produce responses which could not have been predicted from the stimulus alone. The assumption in both cases is that the stimulus in some sense causes the response, and for the behaviourist the cause of any behaviour is located in the environment rather than in the person him/herself. The consequences for "treatment" of persons deemed to be behaving abnormally are clear enough. Since the environment produces behaviour, it is changes in the environment which will produce changes in behaviour, and it is only those who have the power to effect the former who have the means to produce the latter. The onus falls on the therapist or doctor, rather than the client or patient (one's choice of term will largely depend on the philosophical position one adopts), to change or cure the abnormal behaviour. The extensive use of drugs in

psychiatry, as well as electric shocks and sometimes brain surgery, is entirely consistent with this view of man: if the cause of one's behaviour is physical, then logically the "cure" must be too. Even where therapy or counselling is used in preference to or in conjunction with these physical options, the therapist is often still presented as the one in control - "powerful", as Harré describes him/her. The client or patient's role in assessing the problem, setting goals and bringing about change in his/her own behaviour will typically be minimal. To quote Trower (1982) again: "The patient/ subject may, in the parametric model, be regarded as a passive, more or less powerless organism who does not process information and choose actions but who is controlled either by external reinforcing contingencies or internal dispositions, which in turn implies a powerful therapist who assesses the patient's dysfunction on external cues, signs and responses, who decides upon the appropriate training and 'dispenses' it".

A modern expression of this type of understanding of man is that found in "central-state materialism" or "mind-brain identity theory". In this philosophy the mind is viewed, not as anything hidden or mysterious, but only as the physical brain. The chemical exchanges and reactions which occur therein are seen as responsible for conscious events and emotions, the latter being explained by the discovery of "pain" and "pleasure" centres in the brain which have been demonstrated to produce such emotions as fear, anger, aggression, and sexual arousal. Introspection is acknowledged but explained in the same way: the individual is observing the changes taking place in his/her brain states, and even though this may be expressed by an individual in terms of what is occurring in the mind, this is simply a difference in terminology. The individual is just unaware that the mind and the brain are the one entity. In this philosophy, it is brain physiologists who are believed to hold the key to discovering explanations for various forms of behaviour. It is a world-view which has been described by philosophers as "mechanomorphic": that is, "thinking" is a machine-like process. Thus, brain physiology and cybernetics look to each other increasingly to illuminate their particular interest. Computer models are of interest to the brain physiologist because (s)he believes such models are comparable with thought processes, and the computer expert believes that the brain's functions can aid the design of more complex and powerful computer systems. The social consequences will not be discussed

here, but we will only note that in this world view the control of undesirable behaviour (for example, aggression, rebellion against society or the state) would be dealt with physiologically.

2.2.3 Logical Positivism

Allied to such views of man and causality has been a methodology based upon the theories of logical positivism. Logical positivism is a type of philosophy which belongs to the empiricist tradition, but distinguishes itself by its condemnation of all things metaphysical. Historically, it had two sources, one in England and one in Vienna. The English source can be traced back to Hume's empirical scepticism; the following century then saw Auguste Comte, the French philosopher, building on Hume's empirical basis. He believed that there were three stages of progression towards enlightenment: the theological, where the mind "supposes all phenomena to be produced by the immediate action of supernatural beings"; the metaphysical, where the mind seeks "abstract forces" behind the phenomena; and the positive, where the mind abandons speculation and gives itself to the scientific study of laws. The other source comprised a series of informal debates amongst a group of students and teachers at the university of Vienna who were critical of the Idealism which held sway in the German universities at that time. They were searching for a dynamic new empirical philosophy which would eradicate the problems of philosophy based on argument alone. In 1921, when Moritz Schlick became professor of philosophy at Vienna, the group acquired a leader and the movement gradually began to become better known. In brief, they believed that knowledge could be increased only by observation and experience, not by "speculative argument". A first step was to test whether statements or propositions were meaningful or not, thus distinguishing between those problems deserving investigation and those which had arisen from misuse of language. They insisted that a statement was factually meaningful only if it could be verified in the same way in which scientific hypotheses were tested. A. J. Ayer subsequently modified the beliefs of the original "Vienna Circle", rendering them less extreme. Like his Austrian

counterparts, however, Ayer believed that this new philosophy had devastated metaphysics and theology, since neither could be subjected to the verification principle.

The most obvious influence of logical positivism on psychology was in the emphasis which began to be placed upon observation (rather than the speculation which Freud's work, for example, was regarded as being by many post-war psychologists) and upon testing to determine whether a statement or proposition was meaningful and worthy of further investigation. Psychologists attempted to subject psychological investigation to the same stringent and rigorous methodology as that of physical science. The same steps were followed (observation; preliminary hypothesis; attempt to verify hypothesis; result which would prove or disprove the hypothesis; and finally, an acceptance or rejection of the hypothesis) and an attempt was made strictly to control variables by eliminating those possibly extraneous and reducing behaviour to the minimum elements under consideration. Good science entailed stripping human behaviour of its complexity and variety to ensure that those specific characteristics under consideration were not "contaminated", and the success of a particular investigation was determined by the "objective" criterion of statistical analysis. Psychology seemed dedicated to apeing physical science in an attempt to overcome the pre-war problems of studying an entity - the human mind - which was unobservable. Looking through the index of any book recommended as a general psychology text for undergraduates, one can see the influence of logical positivism on the range of topics which are standard elements of study - perception, learning, language, the brain, memory, genetics, physiology, intelligence testing and personality, to name but a few. All but personality are entities which are relatively easy to subject to logical analysis, and though it may be more difficult to submit personality to minimal variables for testing, this has not prevented persistent attempts to do so during the last fifty years.

2.2.4 An Assessment of the Organism Approach

Several recent writers have questioned whether it is not the organism approach itself which lies at the heart of the problems which have confronted SST. Is the organism paradigm, they ask, really appropriate in this context?

It is not clear, for example, that the understanding of human behaviour can really be advanced using this paradigm. In the organism approach, a consistency or stability within the variables is assumed in the attempt to verify a relationship between them. As Trower (1984, p. 56) puts it, "... logically independent entities or variables are ... examined for their Humean causal relations. Elements of behaviour and stimuli are 'torn' from their contexts to prevent contamination from these other 'variables', and manipulated on the assumption that they retain their identities and meaning and of course subjects supposedly remain totally compliant on the assumption that there are no internal, generative sources of control". Within the study of behaviour, on the other hand, the context in which the behaviour occurs is vitally important. In the area of social skills, to assess or train an individual in certain behaviours without placing those behaviours in context makes nonsense of what we are trying to achieve, since any given behaviour occurs in response to, and initiates, another behaviour, and the interpretation of that behaviour depends on the circumstances preceding it and the context within which it occurs.

It is similarly not clear that the notions that the patient is passive and only the therapist "powerful" are particularly helpful in the treatment of those with behavioural problems. If the patient is treated as, or thinks him/herself to be passive, then (s)he may well behave in a manner which (s)he believes appropriate to that role, accepting the therapist's assessment of his/her behaviour and recommendations for training uncritically and even without discussion. It is commonly the case that the patient is thereafter unable to extrapolate from what (s)he has learned in therapy when presented with novel situations, and unable to put what (s)he has learned in therapy into practice when functioning in the real world. The aim of the therapist functioning with an organism paradigm is to provide the patient or subject with specific skills, "target behaviours": but this does not provide the subject with the ability to generate new or related skills, or to adapt those skills into new situations. Reliance on

the therapist may, in fact, be absolute, and the individual may be unable to face any crisis or decision without the direction of the therapist. This seems to be a common pattern in the U.S.A., where some people see their analyst once or twice weekly for years and others rely on a therapy group for guidance on even minor decisions.

It is not clear, then, that the organism paradigm "works" in relation to the assessment of human behaviour and the treatment of behaviour problems;¹ and the possibility arises that some other paradigm might be of more use. Here we confront a problem, however. For the organism approach to the study of human behaviour has often been regarded by psychologists as resting upon tenets which are self-evidently and objectively "true" and as representing the only possible "scientific" approach. Before considering other possible paradigms, then, it is necessary to consider briefly whether such assertions are correct. The position adopted here will be that they are not. On the contrary, like all paradigms upon which research and practice is based, the organism paradigm rests upon unproveable assumptions rather than bare "facts".

There are in the first place assumptions about the nature of man and of causality. The Cartesian proposition that mental and physical phenomena are logically independent cannot be proved to be true, and has, indeed, been abandoned by most philosophers. It is no less of an unproveable assumption that man is a machine. With regard to causality, Trower (1984, p. 58) points out that there is no factual evidence and no factual evidence can be obtained to show any more than a correlation between events and behaviour. No amount of experimenting will show more than this, that is, will reveal a cause or a direction of cause. For as Hume himself long ago demonstrated over against Descartes and the Scholastics, causes are ideas,

1 It should be noted, in fairness, that for the sake of space the organism approach has been treated in a general way here, and only a summary of its essence provided. Individual investigators will naturally differ in their emphasis upon the various aspects of the approach, as occurs within any philosophy or methodology (cf. the useful recent reconceptualisation of SST within the organism framework by Curran *et al.*, 1984).

not facts: "There is no object which implies the existence of any other if we consider these objects in themselves, and never look beyond the ideas which we form of them". When we say A causes B, argued Hume, we mean only that these two events have been constantly linked when they have in fact occurred. Consequently, all we can say in terms of logic when we say A causes B is that in past experience A and B have always occurred together and no instance has occurred where A has not been followed by B. No matter how many times A has been followed by B in the past, logically we have no reason to expect A to follow B in the future, although that conjunction is what causes our expectation. The inductive process, whereby the number of times A can be demonstrated to follow B is thought to increase the "truth" of general statements and to enable us to not only make statements but also to predict future events on the basis of observations of past events, therefore clearly rests on an unproveable assumption, though it is regarded as the hallmark of science and is considered to be that which divides science from non-science.

Logical positivism, of course, also rests on an unproveable assumption: that the verification principle, which cannot itself be verified, is "true". That scientific method should be based on such a philosophy is itself not self-evident. This has, in fact, been questioned most famously by Sir Karl Popper (e.g. 1972). Picking up on the weaknesses of induction as outlined by Hume, Popper suggests that instead of attempting to verify statements, which increases the amount of confirming instances of a given expectation but fails to introduce anything new into the statement, attempts to falsify a hypothesis would be much more illuminating. For whereas it is the case that, regardless of how many affirming instances there may be of an event, we can never derive a universal statement of "truth" on that basis, as we cannot know, logically, whether the next instance will also affirm the statement; if an event were to negate our statement, then in terms of logic we would be able to make a general statement with confidence. The implications of this for scientific method in psychology will be considered below.

The organism approach to the study of human behaviour rests ultimately, then, upon philosophical presuppositions which in the nature of things cannot be proved to be "true". Some of them might be thought to have a high level of probability: but still, they remain presuppositions, not "facts". Moreover, they are presuppositions which have their roots in

history, and which are thus historically relative rather than absolute. There cannot be anything sacrosanct about the organism paradigm, then: it cannot be regarded as the only possible "scientific" paradigm. Hence we should not be afraid to question and even to reject it, adopting a different one, if it is felt that progress will be made by so doing. One paradigm which does seem to offer such hope of progress is the "agency" paradigm, in which the rationality of the individual and his/her ability to make choices and have power over actions is assumed. There is some evidence, in the work of Karl Rogers, for example, that in practice this type of approach works better than the orthodox approach. He has reportedly had considerable success with his "client centered" therapy where the individual actively identifies and works through his/her problems. The therapist plays a supportive role in Rogers' method, helping the individual to identify the problems in his/her behaviour and deciding what to do about them. Responsibility for identification of the problem and for changing behaviour patterns is thus placed in the hands of the client, rather than the therapist. Other work along the same lines has been carried out by Martin Seligman (e.g. 1975), with his theory of "learned helplessness". If an individual believes that he/she is in control of his/her life and is able to change old behaviour patterns by choosing to do so (with support when necessary), then the role of the therapist can be a supportive one. If, however, the person perceives him/herself as passive or helpless, then reliance on the therapist may be absolute and the individual may be unable to face any crisis or decision without the direction of the therapist.² In what follows below, some recent work from an agency perspective will be described, before the model and method adopted by this study is outlined in the conclusion.

2 In this study, it was originally intended to include a measure of learned helplessness, in order to investigate the hypothesis that children who were "helpless" would also be less skilled socially and less able to generate new skills after training. This approach had to be abandoned when it proved impossible to obtain Seligman's fairly new measure of children's helplessness.

2.3 The Agency Approach

The agency approach is an alternative to the organism approach to human behaviour. The influences which have resulted in its formulation are outlined below, as are the distinctions between it and other comparable approaches. As a starting point, it is best described briefly as a cognitive approach to the study of behaviour. It is interested in reasoning processes, the ability to generalize, to choose options and to change those options. The view of man which it implies is an anthropomorphic one.

2.3.1 The Anthropomorphic Model of Man

In the anthropomorphic model of man, man is regarded as unique. That is, man is not the same as the lower animals, nor can he be regarded only as a machine which has been programmed and cannot act outside that programme, though an information processing analogy is useful in describing certain processes. It is a model of man which has been discussed within philosophy for some time and has gained increasing respectability as dualism has become proportionately unfashionable. Indeed, over thirty years ago the philosopher P.F. Strawson (1959) was arguing that dualism was a nonsensical concept and that one's mind and body were logically inseparable. Philosophers since then have largely been convinced by the logic of his argument, though most modern psychologists still, either overtly or covertly, adopt a dualist position.

A helpful discussion of the anthropomorphic model is found in Harré and Secord (1972). They begin by rejecting the model of man outlined above, in which people are conceived of as "... passive entities whose behaviour is the product of 'impressed forces', and whose own contribution to social action is the latent product of earlier impressed experience", and the resulting methodology "... in which the typical investigation is recommended to be the manipulation of 'variables' and the typical result a correlation in the manner of Boyle's Law" (p. 1). Their alternatives are an anthropomorphic view of man and a structural approach to the study of personal relationships.

The starting point for the anthropomorphic model is the assumption that the use of language is what distinguishes us from other creatures. We are, it is true, like other creatures in that we have powers to initiate action and to monitor our performances. Unlike other creatures, however, we also have the power to monitor our monitorings, be aware of being aware, and so on, and to commentate upon ourselves. In other words, we can stand outside ourselves and commentate upon our own behaviour, which includes knowing what we are about to do, are doing, and have done. We are thus able to choose a particular social self from a range of possible personae appropriate to a given social situation.³

As a result of accepting the anthropomorphic model of man, Harré and Secord see the role of social psychology as understanding the conditions under which the individual chooses a particular social self out of the options available to him or her. Abnormal behaviour is viewed either as failure by a normally organized person to understand and utilize the rules of social behaviour correctly, or as a neurological malfunction of the monitoring functions. Harré and Secord support this position by asserting that recent work in the origins of neurotic behaviour suggests that there exist both pathological and ethogenic causes, i.e. physical or chemical and learning causes. The individual, within this model, is viewed (to use the popular terminology) as "rational agent": that is, (s)he actively chooses means or strategies from a number available to him/her, and does so according to social rules which provide meaning and legitimacy to the actions. This is, of course, in contrast to the organism approach, in which man is viewed as passive, an organism simply responding to external forces. There an empirical approach to studying behaviour is usual. In the agency approach, however, it is accepted, since man is active rather than passive and capable of choosing from a variety of actions, and

3 This is contrary to the "trait" idea of personality, where the physical or biological individual is viewed as being in total correspondence with the social being. Harré and Secord replace this idea with that of the biological individual, who possesses many internally consistent but contradictory clusters of dispositions, each cluster being evoked by a different type of social episode.

monitoring and changing chosen behaviour, that the individual's accounts of his or her own behaviour, far from being "unscientific" because there is no means of assessing the accuracy of the reports, are crucially important. They are the means by which we can collate and study the social rules governing our everyday life, and by which we can monitor change in the individual's knowledge and beliefs and observe the consequences of that change.

The basis of this model is described by Harré (1984, p. 94) as lying in "... the unqualified denial of the viability of any form of a Cartesian distinction between inner and outer processes, particularly when that distinction is mapped onto that between the subjective and the objective, conceived as opposed points of view from which human beings' actions can be observed". He states that he is not attempting to solve "the traditional problems" created by the acceptance of Descartes' polarization of thought and behaviour, but is rather rejecting this one-dimension model in favour of a two-dimensional model incorporating an individual-collective axis and a public-private axis (p. 95).

Harré's argument rests on the premise that many cognitive processes (which he defines as "... modes of reasoning, assembling premises and drawing conclusions, making judgments of likeness and difference, identifying a particular instance as falling under a generalization and so on", 1984, p. 92), rather than being individualistic, are the result of group, or "public-collective", modes of reasoning, and are expressed publicly through conversation and debate. Harré thus regards cognition as being firmly rooted in the social realm. The implication of this with regard to clinical treatment is very important. "Treatment", presumably, would involve an analysis of general collective cognitive patterns, identification of the consequences of particular cognitive processes on individuals (for example, within the family) and a "re-learning" of the particular problem process. Harré does acknowledge the existence of private cognitive processes, but sees these not as "... the growing power to construct private individual cognitive properties, such as some alleged personal rationality, but rather in the skilful appropriation for private use of public and collective, that is social, attributes of discourse" (1984, p. 93). Having allowed that there are individual and private psychological processes, he regards these as the least important aspect of

our psychological functioning. For this reason, Harré deals here only with the public-collective, private-collective and individual-public aspects of the above representation.

In the public-collective quadrant he places "ordinary, everyday thought". He argues that private forms of talk which include reason, contradiction, consistency, knowledge, and so on, have a primary public-collective application, and he regards the philosophical problems surrounding the personal application of these concepts as a result of accepting the Cartesian premise regarding "inner" processes. Descartes suggested that the individual possesses a body of personal knowledge, which implies the inclusion of "facts" rather than opinions. This, of course, causes us to ask why individuals' knowledge (used in the Cartesian sense) should result in such widely differing "facts", i.e. inconsistencies across individuals and societies. One answer to this question, suggested by Popper's work, is that the "facts" of history or any other organized body of information whether personal or private, should be viewed as interpretations. Societies choose to interpret information in accordance with present political and social aims, and individuals choose to interpret information in accordance with their personal aims and convictions. Harré regards the individual's personal collection of "knowledge" to be best described as beliefs, and argues that if seen as individual applications of public-collective concepts, they are then legitimate targets of investigation: the individual's belief system can be studied by examining the conditions under which persons have legitimate authority in the assertion of matters of fact. By "matters of fact" Harré means the public-collective right to "issue authoritative pronouncements".

It may well be asked at this stage how one can study and identify these "conditions"; and it is to this that we now turn. Three approaches will be considered in detail because of their great influence on the present study.

We shall look first of all at Harré and Secord's ethogenic approach; then at a systems method suggested by La Gaipa; and finally at the cybernetic model described by Carver and Scheier.⁴

2.3.2 Studying the Individual : An Ethogenic Approach

Harré and Secord (1972) describe ethogeny as the identification of "... the generative 'mechanisms' that give rise to ... behaviour" (p. 9). The main process involved in these mechanisms is "self-direction according to the meaning ascribed to the situation. At the heart of the explanation of social behaviour is the identification of the meanings that underlie it." This involves obtaining the individual's own accounts of why (s)he behaved in a certain way and what meanings (s)he attributed to that behaviour. Thus ordinary language is an important tool in uncovering these meanings. Analyses of accumulated accounts would hopefully lead to discovery of the rules which underlie our behaviour. Harré and Secord argue that the first step is to identify formal models of interaction between people before going on to study informal ones. The individual's account of any episode would be checked empirically by consensus, given that Harré's position is that "reality" is intersubjective rather than objective. Thus, by observing and analysing different subjects' actions during social situations and their accounts of such situations, one might, for example, achieve a consensus among individuals functioning happily in the community which would contrast with those experiencing difficulty in so doing.

4 There are alternative approaches, a particularly well argued one being the model of Mischel (1973) and Bandura (1977), the social learning theory of social behaviour. Mischel's critique of trait theories is useful and stimulating, having both similarities to, and differences with, Harré and Secord's approach (cf. Trower, 1982, for an excellent introduction to the difference in emphasis of the two approaches).

Harré places great emphasis on the cognitive processes involved in identifying social situations, choosing the appropriate social behaviour out of possible options, and acting out that behaviour. He thinks the knowledge of which behaviour is appropriate is resident in a cognitive "template", and postulates that individuals who are not competent socially may lack these publicly shared templates or have ones which are different in some respects. The origin of these templates Harré locates in the public realm, which, if I understand his argument correctly, can apply to an individual (for example, a mother) or a group (for example, the peers of a 12 year-old boy). He borrows the concept of psychological symbiosis from Shotter (e.g. 1974) and others. Their work was with mothers and infants, and their thesis that the mother supplemented the psychology of the child, supplying him/her with his/her wishes, needs, intentions, desires and so on in order to display "... completeness with respect to the criteria of personhood in day to day use in a particular society in this or that specific social milieu" (1984, p. 103). Harré expands this premise to argue that "supplementation" can be carried out by several people in the life of the individual and its purpose is to maintain the "moral order", i.e. a "collectively maintained system of public demonstrations of respect and contempt in terms of which the moral value of persons and their actions are publicly displayed". In this context, the psychiatric patient would be viewed as having been exposed to a powerful other, or others, who have supplemented the individual's psychology in an unhelpful way. It is not clear if he would also allow that a faulty template might derive from physical or chemical origins.

2.3.3 A Systems Approach to Studying Relationships: John J. La Gaipa

Like Harré and Secord, La Gaipa's approach (1981) to the study of social behaviour is based on an anthropomorphic model of man. Both view man as active rather than passive, changing and changeable, actively resolving internal and external contradictions, La Gaipa referring to this description as a dialectic perspective. Like Harré and Secord, a structural or systems approach to methodology is adopted: Harré and Secord call their approach an ethogenic one, but the content is the same. That is, both are interested in uncovering the mechanisms which give rise to

behaviour and the meanings which underlie it. In so doing, individual processes or states are always considered in reference to the individual and his/her social context as a whole. As La Gaipa puts it, "In a systems approach, the parts of a system cannot be identified except with reference to the whole which functions as a whole by virtue of the interdependence of its parts, and is called a system" (p. 67). The terminology used by Harré and Secord differs from La Gaipa, therefore, but their philosophical position and approach to methodology seem to be the same. Both reject a mechanistic world view and are committed to "critical-idealistic" philosophical tradition, rather than a "rational-empirical" one, and both utilise models as representations of the framework within which the area of study is to be understood. We have already looked at Harré's two-dimensional representation of psychological properties and processes: we will now consider La Gaipa's three dimensional model for understanding relationships.

La Gaipa uses a systems approach to function on two levels: descriptively, to illustrate his conceptualisation of the processes and other elements involved when an individual engages in social behaviour; and methodologically, to study the complexity of the inter-relations involved "... so that the largest possible number of interdependent factors can be included in the analysis" (p. 67). The attraction of this model lies in its attempt to allow the integration of findings from different disciplines - structuralism as a general method is, indeed, interdisciplinary - and in allowing the area of focus in a given study to be placed conceptually within a larger context. One could also use it in identifying areas relevant to the specific one under scrutiny which need further study. It would demand too much time and space at this juncture to describe the model in great detail, so a concise resumé of the salient features and their relevance to the present study will have to suffice.

Briefly, the three dimensions described in the model are as follows:

- (i) Levels of reality
 - (a) cultural-normative
 - (b) interpersonal-behaviour
 - (c) individual-psychological

- (ii) Psychosocial resources
 - (a) identity: the search for self-confirmation, self-evaluation, and self-definition
 - (b) affective: loving and being loved, feeling needed and needing the other
 - (c) expressive: understanding, emotional support, intimate disclosure
 - (d) sociability: companionship, conversation, leisure, and common interests
 - (e) instrumental aid: psychological, economic and material services
- (iii) Support systems
 - (a) nuclear family
 - (b) extended family
 - (c) friends and neighbours

(i) Levels of Reality

The cultural-normative level refers to the norms, values and rules which in the first instance usually the family, as the primary socializing agent, passes on to the individual. The family obtains these norms from the value structure of the larger community, and conflicts arise when the family attempts to imbue the individual with values or norms which are impossible for him/her, or to prevent the individual from adhering to norms not acceptable. La Gaipa suggests that over-conformity, for example, results when the family's adaptive functions are inadequate. Other families will respond to conflicts between the community's values and their own by becoming a closed system, making it difficult for individuals to adapt to other social systems.

The interpersonal-behavioural level includes different types of interpersonal relationships, particularly those which occur in "face-to-face" groups like the family. This can include specific behaviours: La Gaipa cites nagging, temper displays, withdrawals or sulking as examples. Given that the other levels in the model are essentially interpersonal behaviour in differing settings or contexts, this is all that La Gaipa says about interpersonal behaviour at this stage.

The individual-psychological level focuses on the individual's psychological states and processes. La Gaipa focuses on the importance of "organizing tendencies within the individual that are involved in the perception and interpretation of interpersonal events related to social exchange and personal relationships in general" (pp. 74-75).

(ii) Psychosocial Resources

La Gaipa's taxonomy of "goals, needs and relevant resources" are described briefly above and little need be added here except to point out that in La Gaipa's model, relationships are not only influenced by these needs and goals individually but also by the structural relationships between each of them and the other psychosocial dimensions.

(iii) Support Systems

La Gaipa defines support as "... any action or behaviour that functions to assist the person in meeting his personal goals or in dealing with the demands of any particular situation". Support may be tangible in the form of assistance, or intangible in the form of warmth, love etc., and consists of social, emotional and instrumental services. Support systems are two-way, the individual receiving support from the system and providing input to the other individual's or group's system. It is not absolutely clear whether La Gaipa is referring to nuclear family, extended family and friends as the three aspects of this part of his model, or whether he is talking about family, friends and neighbours. The former is assumed to be correct here, as he does not discuss neighbour relationships in detail but does consider marriage (independently of relations) in some depth. He describes the interrelation of support systems with the other dimensions (e.g. male working class friendships rely more heavily on sociability than expressivity probably because the need for emotional support conflict with the image of masculinity).

La Gaipa also discusses the importance of a cognitive orientation for the study of the individual within his/her social context. He describes man as looking for a good match between his psychosocial requirements and the availability of support systems, and is interested in the organizing tendencies of the individual which are responsible for the perception and

interpretation of interpersonal events. He posits an "implicit resource theory", which is the individual's construction of a social reality, containing concepts relating to support systems, psychological resources and the relationships between them. He postulates what might be included in the organizing principles underlying implicit resource theory. Psychologically, it might include cognitive orientations towards people, i.e. images or models of man, and towards others, i.e. family, friends etc; behaviourally, it might include means-end strategies for obtaining resources; and at a normative level it might contain references to social rules and evaluations, e.g. the idea of "justice". He postulates that a socially incompetent person is one who possesses an implicit resource theory which generates poor predictions and thus results in limited understanding and control of his/her social world.

La Gaipa also suggests that tension and cognitive arousal play an important role in understanding the social world, occurring when an implicit resource theory is not working properly, i.e. when the theory does not fit the data. He sees tension and conflict as essential because they provide stability to the system as a whole and increase flexibility to changing conditions. An effective system has to limit, control and resolve conflicts. In La Gaipa's model, tensions are seen in terms of systems requirements (i.e. boundary and maintenance problems of the support systems); task demands (i.e. meeting psychosocial requirements which are sometimes contradictory); cultural demands (i.e. normative constraints on personal choice); and cognitive demands (i.e. understanding, prediction and control necessary for competence in interpersonal relationships).

La Gaipa's suggestions are of particular interest for present purposes because of our interest in why taught social skills are difficult to transfer to situations outside the controlled environment, and why generalisation of such skills also seems difficult. These problems will be described in chapter two and discussed in the light of La Gaipa's model in the concluding chapter.

2.3.4 Carver and Scheier's Cybernetic Model Encompassing Social Skills

Carver and Scheier (1984) have recently developed a feedback loop theory which encompasses a social skills model. Like the two above, this model also adopts a view of man as active agent, monitoring internal and external systems and adjusting his behaviour accordingly. Utilizing a cybernetic model, however, it focusses specifically on the possible processes by which matching and identification of situations occur and by which conflicts are resolved. It should be clarified at this stage that this model does not view man as a machine (a philosophy which was criticised earlier because such a comparison rests on the assumption that man is passive, controlled by external forces rather than actively making choices), but rather uses an information-processing model to explore and exemplify possible mechanisms by which man, as active agent, seeks out and acts out suitable behaviour chosen out of a repertoire of possibilities and to examine how conflicts are resolved within these processes.

Carver and Scheier's feedback loop model (cf. 1984. p. 147 for their diagram) derives from two sources - self-awareness theory (Duval and Wicklund, 1972), where the individual compares his/her present behaviour with whatever standard of comparison is appropriate, and may "... alter the present behaviour so that it conforms more closely to the comparison value" (p. 145); and control theory or cybernetics, which is based on the principle of self-regulating systems. Carver and Scheier postulate a negative feedback loop - "negative" because its function is to "... negate or minimize any sensed difference between two values" (p. 146). Perception of a state or quality (input function) is transferred to a comparator where the sensed value is compared with a reference value. If a match is obtained, no further action is taken; if there is a difference between the two values, control is transferred to an output function (i.e. behaviour, in the sense of anything external to the system itself). The output function represents an attempt to bring the existing state closer to that of the reference value. This is achieved by influencing the environment - as the present state changes, so does the perception which is described as the input function in the model. This perception is again compared with the reference value until a match has been obtained. Carver and Scheier

liken this process to the action of a room thermostat, comparing room temperature with its setting and activating a furnace to bring the air temperature to a state which matches that of the setting.

If, however, control is transferred out of the loop, where does it go? Carver and Scheier's answer is: to another loop. Indeed, they point out, using the analogy of digital computers, that one can have an extremely complex network of loops interconnecting with each other as in the form of a "decision tree" - if each step reveals nothing amiss, then we proceed to the next one. Another way in which feedback systems can be connected is in a hierarchy - goal attainment is monitored at each level by the comparator. The higher levels involve more abstract goals or reference values, the lower levels more concrete ones. To illustrate what they mean, Carver and Scheier give an example of a man who has unexpected guests to whom he serves coffee. He will regulate his behaviour according to his concept of his self image - his ideal self, referred to as a "system concept" in the terminology of the model. Conformity to that self-image is adhered to by operating according to guiding rules or "principles" in behaviour, which are realized in practice by specific "programs of activity". Thus, in Carver and Scheier's example, the man's concept of himself is as a civilised person, and a principle to which he adheres is graciousness. This abstract quality is realized by the programme of activity, serving coffee. This particular aspect of the model will be considered again in a moment when looking at maladaptive behaviour.

The assumption upon which Carver and Scheier's model is based is that the behaviour-regulating process can be interrupted, and this in turn leads to an appraisal of how likely a successful outcome is, given the individual's resources and the difficulty of the situation (cf. the helpful flow diagram in 1984, p. 156). If expectancy of success is high, then attempts at discrepancy reduction will continue; if it is low, the individual may withdraw from further attempts, either physically or mentally. Carver and Scheier suggest that interruption can occur before a task (if the task is known to be difficult), or during a task (an environmental or internal frustration); or it can be the result of an emotion like fear or anxiety which causes the person to re-evaluate whether the behaviour should be pursued. One other factor which Carver and Scheier regard as important in influencing behaviour choices is the distinction, which has long been recognized in psychology, between the public and "the

private self - how one would like to be and how one would like others to see him/her. The goals of the public and private selves can be the same or they can differ, and thus the distinction between the two is an important one. In terms of control theory, the individual can regulate his/her behaviour according to either the reference values inherent in the goal of maintaining one's personal image of oneself, or the reference values stemming from the maintainance of the desired public image. Both types of goals "... imply hierarchical organizations of behavior, entailing the specification of principles, programs of action, etc., and the matching of behavior to those reference values" (pp. 158-159).

The implications of this model for the study of social skills fall, according to Carver and Scheier, into three main categories. First, to return to the hierarchical organization of control which we looked at earlier, they see maladaptive behaviour within the context of this model as behavioural disruption which "... stems from an inability to specify reference values from the level of system concepts (or principles) down to - and through - the program level" (p. 167). In other words, individuals may have an image of what they want to be like or how they would like others to view them, but have no idea at all what specific concrete behaviour is involved in manifesting that image. "Indeed", say Carver and Scheier, "they may even lack guides as to how to go about determining what concrete steps will help to match reference values at the more abstract levels. This can be quite distressing, of course, when the abstract goals are highly valued" (p. 167). If specific behaviours which cause the problem (talking too loudly, not listening to others) can be identified, instead of a generalisation ("people don't like me") simply accepted, those specific behaviours can be dealt with positively, hopefully easing the general problem. These specific or component behaviours are important in the area of social skill because, once mastered, they can be used to generate new strategies and may even be abandoned in favour of better alternative components at a later stage, when the person has compared and contrasted the level of success using different combinations of specific components. Carver and Scheier point out that at this stage a person has learnt a general approach to a class of problems. In therapy this is important because individuals need to identify and solve their problems across a variety of situations and circumstances. One other relevant implication of the control hierarchy for social skills is the observation

that some individuals may be failing to monitor their behaviour or actively monitoring inaccurately. Hence the example of the man who thinks he is being friendly and extrovert when in fact he is perceived as loud and domineering. If he is not shown the error in his perception, he will continue to take the same inappropriate measures to attain his goal of popularity.

The second implication of this model for social skills is derived from the observation that expectancy of outcome can be positive or negative. If positive, the person will continue to persevere until successful completion is attained; if negative, the person will end the attempt and withdraw. The relationship of this observation to that of "self-fulfilling prophecy" is immediately apparent. If the person believes in advance of the attempt that (s)he is likely to fail, then (s)he is more likely to withdraw from the attempt, thus confirming the original belief. Carver and Scheier emphasise the importance of realistic goal setting and a realistic appraisal of the probable difficulty involved - a lack of awareness of the latter might also lead to "disillusionment, discouragement and disengagement".

The third implication is in relation to the distinction made earlier between public and private selves. Social skill deficits evoke the image of a problem in the public sphere, since that is where social skills occur. However, an interrelationship with the private self is described here in exploring the mechanisms for failure which might explain why training in specific social skills is only modestly successful. Carver and Scheier posit two types of person: the one who is aware that (s)he is lacking in some specific skill, expects failure and is anxious about social events; and the one who is unaware that (s)he lacks a skill or skills - the deficit might in fact be the inability to recognize appropriate or inappropriate behaviour - and is unaware of failure in social encounters. The first person has already been described in the two points above and all we will say here is that anxiety may be worsened by the individual focusing on the private self and becoming aware of the anxiety itself. More needs to be said about the second person, however. There may be two reasons for his/her unawareness of inappropriate behaviour. There may, firstly, be an abnormally low level of focus on the public self - the person may be unaware (or perhaps uncaring) of the effect that his/her behaviour has on others. (S)he would need to be shown the importance of presenting oneself

well to be acceptable socially, and/or the benefits and consequences of social contact pointed out. There may, secondly, be an abnormally high level of focus on the public self. That is, the person may use behaviour "... as a tool to manipulate others. Disruptive behaviour receives attention; it can be used to bully one's peers: ... The sort of person who uses such tactics regularly would seem to have an unusually strong overlap between public and private self-aspects, in terms of the component goals that they incorporate. That is, such a person is using the public self and its goal specifications in the furtherance of very personal, private ends" (p. 172). This is an important distinction, because the "training" of this individual would most probably differ from that of the one described formerly.

2.4 Conclusion: The Model and Method of the Present Study

In the Introduction the question was postulated as to why social skills training has been so disappointing in terms of easing the interpersonal and social problems of individuals experiencing social difficulty. In this chapter, we have explored the implications of the orthodox model of man and the related methodology, suggesting that this view of man gives rise to a false understanding of how an individual functions socially and also leads to a method of studying the individual which is inappropriate. An alternative approach, the agency approach, has been presented: and it is this approach which will be adopted in the present study. One welcomes the move away from the traditional uni-directional concept of man's behaviour as occurring along a continuum (with subjectivity at one extreme and objectivity at the other), to a two dimensional one comprising, in the Harré and Secord model, an individual-collective axis and a public-private axis. The view of man as an active agent, constantly in the process of forming, monitoring, testing and changing his own constructs is also a welcome alternative to the concept of man as passive, without free will, merely responding to forces (be they genetic, chemical, environmental or religious) which pre-determine his thinking and behaviour. The subject in the agency approach is treated as a whole person with his/her complexity and contradictions intact, not dismantled into specific attributes for examination (as is the practice if a logical positivist methodology is

adhered to). (S)he is therefore a valuable - indeed crucial - source of information. The agency approach also recognizes the importance of the subject's environment, the familiar everyday milieu where (s)he interacts with other human beings. This is in contrast to the "orthodox" scientific method.

For our purposes, La Gaipa's model is particularly useful for conceptualising where, in the many and varied approaches to the study of man as an individual within a social framework, the present study fits. We are interested in both the "individual-psychological level" (how the child perceives him/herself in relation to others and possible tendencies to view him/herself too optimistically or too pessimistically in social interchanges) and the "cultural-normative" level (which responses are agreed by the group to be appropriate social ones); the expressive and sociability needs of the individual; and his/her peer support system. In terms of Harré and Secord's model, we are interested in ascertaining which social skills the collective regards as appropriate - i.e. we are interested in the location and display of social skills in the social realm - and in uncovering idiosyncratically located and displayed social skills. An attempt will then be made to observe the consequences of possessing a knowledge of what is believed to be skilful behaviour (located in the individual) which is at odds with that of the collective; and to observe the consequences of the individual displaying attributes which are not regarded as skilful by the collective. Finally, Carver and Scheier's model is particularly useful for focusing on possible reasons for failure in those processes (identification of situation and choice of appropriate behaviour; acting out the chosen behaviour; monitoring the effect of the behaviour and making changes where necessary; and incorporating resulting new knowledge into the system which can be generalized for use in other situations) which cause the individual to experience difficulty in relationships with others. The results of the present study will be discussed within the framework of these three models.

This is not to say, of course, that the study takes over the whole philosophical and methodological package which these models imply. Its emphasis is, on the contrary, different in several respects. For one thing, all the authors mentioned either explicitly, like La Gaipa, or implicitly, like Harré and Secord and Carver and Scheier, appear to adopt a structuralist stance. I would happily concur with describing the

philosophical position of the present study also as a structuralist one, in the sense that it is interested in the underlying laws which govern behaviour and enable specific interpretations and actions to be selected from a wide range of options. A strict structuralist, however, while allowing for the wholeness of the individual, will be concerned not with the individual nor the content of the individual's behaviour but only with the laws which govern behaviour. Harré and Secord, for example, explicitly accept a structuralist view of language, and from this presupposition Harré (1984) goes on to introduce the idea of psychological symbiosis, developed from the work of Shotter (1974) and others on mothers talking to their offspring. Harré argues that the mothers, rather than talking about their child's wishes, needs and intentions, supply the child with wishes, needs and intentions, talking with the child as if (s)he had them. He believes that this "supplementation" occurs not only with mothers but also with other individuals, and that the purpose is to maintain "moral orders which are defined and sustained in particular collectives". The lack of importance attached to the possibility of individually formed cognitive processes in Harré's paper is typical of a structuralist approach, whether it is applied to literature, sociology or politics. In each case it is only the set of laws inherent in the subject under consideration which are of interest. At this point I would diverge from a strict structuralist viewpoint and give more credence than does Harré to the individual's private psychological processes. I would be led to do so by observation of individuals who do not fit in with the expected pattern which their social milieu and family background would seemingly dictate, and of children of all ages in general. I would want to allow at least for the possibility that the individual can independently generate his own psychological functioning in order to criticise and work against the "psychologies" which are being or have been supplied by the powerful others in his/her life. In other words, although I agree with Harré that cognition is part of the social realm (because cognitive processes like discussion, reasoning, etc. occur in the public sector), I would also want to allow that the individual's cognitive processes can operate independently of social influences.

Another way in which the present study differs in general from other recent work which uses an "agency approach" is in its emphasis upon falsification. As was mentioned briefly above, orthodox scientific

procedure has been to move from an hypothesis to a law, "proving", or raising the probability of a statement being "true" by repeating the experiment several times. If the result is always the same, then the hypothesis is verified and eventually a "law" is formulated. Popper was the first to provide an alternative to this principle of verification. Following Hume (see above), he argued that in terms of logic, it did not matter how many times an hypothesis was confirmed - one could never say it would always be confirmed in the future. In terms of logic, one could only make a statement with meaning if the hypothesis was shown not to be true, i.e. by falsifying the hypothesis rather than verifying it. This does not mean, of course, that we can "prove" statements using falsification principles any more than we can "prove" contentions using verification principles, because the concept of "proof" presupposes absolutes. Although we may choose to believe that absolutes exist (by absolutes I mean entities which are beyond interpretation, that exist independently of how they are viewed - these might include Laws of Nature, God, Truth, History, Evil, Good), their existence is not self-evident, and we interpret such concepts individualistically. To Popper, the idea of scientific proof is redundant. He offers in its place a view of knowledge perhaps more limited in its aims, but more realistic in its attainments. He sees knowledge as an ever-increasing, gradual enrichening of what we can and cannot say about our world. Believing that we cannot prove a theory, he suggests instead that what we can do is to demonstrate why we prefer theory A over theory B, assume a given hypothesis is valid for working purposes in that it is the least problematic of those available, rigorously test it by attempts to refute it and as a result then reformulate a subsequent richer hypothesis. The focus, then, is upon results which are not in accordance with the original hypothesis, over against the prevailing tendency to view results which are not statistically significant as unimportant. Such results are, indeed, rarely repeated by subsequent researchers - most seem only interested in verifying findings where the hypothesis was "proved".

The principle of falsification does clearly have limitations. In relation to areas of physical science, medicine and mathematics it would, I think, be of limited value. Dollard and Millar, for example, would have been unable to discover the RNA double helix using falsification. They arrived at the molecular structure by inductive reasoning given the existing knowledge available regarding the behaviour of certain

combinations of molecules. Advances in surgery are often a result of observing the consequences of injuries and subsequent surgery - falsification in such circumstances would be impossible ethically. Similarly, our knowledge of memory and brain function is largely based on observations made in cases of head injuries. If Popper wanted to argue that falsification was the only valid scientific method in practice as well as in logic, then one would have to disagree. As a means of preventing us regarding only verification data as significant and encouraging creativity in assimilating and testing hypotheses, however, it is a method worthy of exploration. This is particularly so in psychological studies, where those individuals falling outside a given pattern may be of most interest. Some attempt has therefore been made in the present study to incorporate the principle into the scientific method in conjunction with, rather as an alternative to, the principle of verification. The extent to which that has been possible will be discussed in the concluding chapter.

To summarise, then: in the present study, the individual is viewed as a whole entity - a social being who is studied as a whole, rather than in fragments. (S)he is viewed as active, not passive, in control of his/her social functioning, able to monitor, choose and alter options. His/her cognitions are thought to be located socially and personally, and individuals who experience difficulty in relating to others are viewed as having either faulty templates or faulty mechanisms for monitoring and assessing what is appropriate. Those individuals who do not fit in with the general statistical pattern are regarded, in terms of interpreting the data and drawing conclusions, as of equal importance to those who do.

3. ASSESSMENT STRATEGIES

3.1 Introduction

In chapter 2 we discussed the extent to which the limited success of SST might be attributable to philosophical problems with the concept of social skill and/or the orthodox scientific framework within which the concept is located and studied. In this chapter we consider the problems of assessing social skills (or, as is more usual in scientific practice, of assessing social skill deficits). The question we are attempting to answer is, "Could our assessment methods be wholly or partially responsible for the confusing and somewhat disappointing results of SST?". The chapter thus functions as the second part (with chapter two as the first part) of our attempt to provide both a critique of the current state of affairs within SST and also a justification of the philosophy and methodology adopted in the present study. In chapters four to six, we shall turn to a description the specific project undertaken within this philosophical and methodological framework: the development of a bipolar measure of the social skills of the young adolescent.

There are, in my view, three major problems with regard to the assessment of social skills as we find it described in the literature. Firstly, there appears to be no consensus about what constitutes skilled or unskilled behaviour; secondly, the medium through which an individual's behaviour is observed seems to result in widely differing appraisals; and thirdly, there seems to be confusion about how to measure characteristics. These three areas will be given consideration in turn.

3.2 Defining Social Skill

Perhaps we should not be surprised at the plethora of labels utilised when describing social skills or deficits, nor at the inconsistencies which are often evident when descriptions of human behaviour are offered by different investigators. We have to contend, after all, with both the limitations and excesses of our language and the rich complexity of what we call, with deceptive succinctness, human behaviour.

While the novelist delights in the range and wealth of words available to him/her when describing the vast complexity of human thoughts, motivations and feelings, the social scientist, it seems, flounders in a sea of ill-defined confusion, for (s)he has the unenviable task of specifying what (s)he means when using each of a seemingly infinite number of descriptive words. Perhaps it is the social scientist's inability or lack of discipline in rigorously defining these words which has resulted in the present confusion; for confusion there certainly is. Trower (1982) is exceptional in offering as an important first step in clarifying the terms used a distinction between social skill (as a generative process) and social skills (the myriad of minor characteristics and abilities which are encompassed by the term social skill), which are the specific component parts of the generative process. We are then enabled to give a name (social skill) to that behaviour which we all know causes a person to be well-liked, while simultaneously acknowledging that the component factors which go to make up a skilful person are still something of a mystery. Glancing through the literature in general, however, especially at those accepted assessment measures which are used extensively, one is confronted with terms which may be descriptive of those behaviours which constitute social skill, but which have not been established as such. If we are not sure that these constituent behaviours do indeed make up social skill, then we cannot begin to make an assessment of what is skilled or unskilled behaviour. One wonders, in fact, whether many of the terms used to describe constituent behaviours in the numerous articles on the subject of social skill are interchangeable; and, further, whether we should have an exhaustive list of social skills even if all the terms were included. Such terms vary from those which encompass quite wide concepts, such as "inappropriate assertiveness", "aggressiveness", "submissiveness", "assertiveness" and "hyperactivity", to very specific ones such as "eye contact", "loudness", "head movements" and "smiling".

The debate about molar and molecular targets has highlighted this general variance, some researchers opting for global qualitative ratings and others for specific elements like eye contact. Though both types of measurement have been commended (Bellack, 1979 and 1983; Curran, 1979), both have limitations. Molecular measures have, in fact, become unfashionable. Bellack gives as possible reasons for this that they have not been useful in validating assessment methods of social behaviour

problems, and have shown neither consistent response deficits among particular groups (e.g. American male students with "low dating scores"), nor much correlation across situations (e.g. naturalistic observation compared with role-play situations). This might be due to evaluation methods which are ineffective, and Bellack suggests an intermediary approach between the two measures (e.g. a qualitative scale). This suggestion should be followed up, since we need to know which specific behavioural elements are associated with social skill and which with unskilled behaviour. For in the real world these component behaviours provide important cues to others: take, for example, the "mating ritual"! While we cannot conclude that training in molecular behaviours where deficits have existed will result in a skilled individual, nevertheless we do need to know what messages these behaviours give out, so that we and the individuals who are failing socially can comprehend why this failure is occurring.

While much debate has taken place about global as opposed to specific labels, and the measurement of global as opposed to specific behaviours, little has been said about the more subtle differences between concepts like aggression and assertiveness. Quite obvious problems emerge when we consider such labels in depth. For example, the term "inappropriate assertiveness" is measured in the Matson scale (1983a) by the child's response to statements like "I threaten people or act like a bully"; "I speak too loudly"; "I think that winning is everything"; "I want to get even with someone who hurts me". It is at this point that the importance of the assertion in chapter 1 that the orthodox empirical aim of disembedding the stimulus from its context destroys the meaning of the behaviour is beautifully illustrated. Taken at face value, none of the above statements actually means something in a universal sense. It is impossible to respond to any of the above statements without knowing the context in which the statement occurs. For example, a positive response to the first statement would be reasonable if the "people" referred to are other boys in the class, all of whom are aggressive in stance. In that context, aggressive behaviour could be perfectly appropriate. The final statement in the list might express a universal feeling (thereby making it "normal"?) of desire for vengeance or justice, depending on one's perspective, and in itself cannot be indicative of skilfulness or the lack of it. The acting out or expression of the feeling might, however,

indicate whether the behaviour is appropriate or not. What we are describing here are the limitations placed upon communication by the necessity of using language - words which can convey varying meanings and feelings to different individuals. For the purposes of the social scientist, perhaps all we can hope to achieve is to define as precisely as possible what we mean by a word and then clearly outline our means of measuring that characteristic. The problems inherent in the measurement of target behaviours will be discussed below. By defining carefully what a term refers to, at least a comparison with other findings becomes possible. At present, inter-study comparisons are very difficult because of the variety and ambiguity of terms used in targeting skilled or unskilled behaviour.

The first problem in arriving at a consensus as to what constitutes skilled and unskilled behaviour is thus a result of the richness of our language. The second problem is due to the richness of human behaviour itself. Investigators engaged in the study of human behaviour, attempting to arrive at statements of truth about the nature and expression of that behaviour, are forced constantly to revise and add conditional clauses to those statements. Longitudinal studies often reveal surprising, unpredictable results. Sexually abused children can grow into abusive parents or perfectly competent ones, and work as prostitutes or psychologists; monozygotic twins sometimes both develop schizophrenia, but sometimes only one suffers from the condition; children of alcoholic parents sometimes become alcoholics themselves, sometimes teetotallers or social drinkers. The patterns of human behaviour which social scientists attempt to formulate are at best tentative. The philosophical reasons for this, and potential working solutions, have already been described and discussed in the first chapter, so at this stage it is enough just to make the observation. Human behaviour is unpredictable and variable - "unstable" in the jargon of physical science - and hence our attempts to uncover skilled and unskilled individuals are easily frustrated. What is regarded as skilled behaviour may differ markedly between groups or across situations; an individual can act totally "out of character" for reasons which may not be accessible even to him/herself; and an individual can emerge with two very different assessments depending on whether (s)he is

feeling happy with life or not on the day of the assessment. These observations will be discussed again in more detail when we consider the problems of measurement.

We thus have two major problems which make a definition of socially skilled or unskilled behaviour extremely difficult. The first is the use by investigators of varying, ill-defined words or phrases to describe skilled or unskilled behaviour, often used without a context so that one cannot tell whether a behaviour, assumed by the investigator to be unskilful, might possibly be appropriate, skilful behaviour in a different situation. The second is that human behaviour is so unpredictable and varies so much across individuals and groups, and even within individuals, that a consensus as to what is skilful or unskilful behaviour per se may not be possible at all. The first step along the road to arriving at some agreed criteria in the context of which discussion among investigators and inter-study comparison can occur is to define clearly what is meant, within specified contexts, of terms used to describe skilled and unskilled behaviour.

3.3 The Medium of Assessment

The second major problem in the assessment of social skill is the medium through which the individual is observed and assessed. The literature yields somewhat contradictory and confusing results. The four most commonly used settings for obtaining an assessment of an individual's skilfulness, or lack of it, are role-play tests, direct observation, questionnaires and sociometric ratings. All four media are standard, respected modes of assessment, but have come increasingly under scrutiny throughout the eighties, and the most recent studies have raised serious doubts as to the validity of assessment using only one of the four media.

3.3.1 Role-play Tests

The most common of the four strategies is the role-play test. Recently, questions about the validity of role-play have been asked (Edleson et al., 1982), and these are particularly relevant to the present

study, since role-play has been generally assumed to be a valid measurement of social skill (La Greca, 1981). Van Hasselt et al. (1981) examined the reliability and validity of role-play tests for assessing social skills in 8-10 year olds. They compared observations of behaviour from naturalistic settings, sociometric ratings and teacher ratings to role-play scenes, and found low correlations between the role-play tests and each of the other measures. Similar results have been obtained when looking at different populations, such as students and psychiatric inpatients (Bellack et al., 1976; Twentyman and McFall, 1975). Matson et al. (1983b) found role-play to be the only measure out of four (peer nominations, questionnaire and structured interview being the others) which did not correlate with the other measures of popularity and social skills. In contrast, Beck et al. (1982), when comparing social skills evoked by role-play to skills emitted in a naturalistic setting, found that more skills occurred in the role-play situations. The reasons for this are not clear, but it is possible that role-play may be measuring knowledge of social skills in this instance, rather than how the subject would normally behave. The instructions given are not recorded in the report, so we cannot know how they may have been interpreted. In an important review paper, Bellack (1983) outlines the limitations of the role-play test, criticizing three main areas: instructional set, situational content and confederate behaviour. These will now be discussed, in addition to two other areas of relevance to this study: pre-assessment experiences and assessment conditions.

3.3.1.1 Instructional Set

As with the terms used to describe skilful or unskilful behaviour, the instructions given to subjects have often been random and without an overall coherent strategy in mind. They include asking the individual to perform "as (s)he usually would"; "as well as they can"; "as they believe would be appropriate"; or "as they believe skilful people would behave". The importance of instructional set is illustrated in a study by Kazdin et al. (1983a). They asked 34 psychiatric inpatient children to complete behavioural and self-report measures of social skills, firstly under standard instruction conditions, then under two different assessment conditions, instructing them to convey highly appropriate social behaviour

and then highly inappropriate social behaviour. The results indicated significant changes in behavioural role-play performance as a function of instructional set. Performance was consistently higher and lower respectively than pre-test performance. In addition, the pre-test performance was above the mid-point in the range for each measure, which may indicate that even without specific instructions to perform in a socially desirable manner, the children were already doing so to some extent. This study highlights the importance and difficulty of obtaining a true picture of the individual's social ability before training, in order to assess accurately the effect of training.

One other problem with the instructions given to role-play subjects is that they usually lack flexibility. If a subject were to ask for contextual information in order to imagine him/herself in a particular situation, this would probably not be provided for fear of "contaminating" the results. The problem then arises that the situation may have little or no meaning for the individual, and the initial purpose of the role-play (to create a situation as close to a real-life encounter as possible) is lost. Bellack (1983) seems to have overcome this problem by ensuring that subjects preview each scene and are asked if they can imagine themselves in that situation. Slight variations are then made to allow for relevancy, until the subject feels at ease with the scenario. Bellack has found that fewer subjects report unnatural responses using this method and fewer subjects find themselves unable to produce a response. His justification for this rehearsal is that in the real world we normally think about our behaviour and rehearse what we will do or say in anticipated situations. Seldom, he argues, are we thrust into situations in the real world of which we have had no warning. Such an approach warrants consideration, because the problems that it may cause may be more manageable than the very serious one of failing to create a simulation which approximates to the real world.

3.3.1.2 Pre-assessment Experiences

In addition to the effect of instructional set on assessment of individuals, Kazdin *et al.* (1982) have also looked at the effect of pre-assessment experiences on social skills performance. 32 psychiatric inpatient children completed behavioural and self-report measures of social

skills on two occasions. Before the second occasion, half of the children were given a task designed to provide a positive experience. Those children showed significantly higher levels of social skills during role-play (i.e. in terms of the number of words spoken, motor responses, formulating requests, responding to provocation), and in addition had higher levels of reported self-confidence in their social behaviour. Again this illustrates the instability of the facet of behaviour which we are attempting to measure. The results of this study suggest that if a subject has had an unexpectedly pleasant encounter with a shop assistant on the way to the test venue, the assessment result of that individual could differ markedly from that which it would otherwise have been.

3.3.1.3 Assessment Conditions

In a 1981 study, Kazdin *et al.* asked 60 children to complete behavioural and self-report measures on two separate occasions. On the second occasion, half of the children received feed-back and incentives for performance, and showed significantly higher levels of social skills during role-play as a result. Again this illustrates the instability of a measure like social skill, and shows how radically results can differ given a particular set of conditions - in this instance under the control of the behavioural scientist. One wonders to what extent factors outside the control, and indeed the imagination, of the investigators have affected our attempts to measure social skill, and may have contributed to the present confusion about "the state of the art".

3.3.1.4 Situational Content

The situation with which an individual is presented in real life or in role-play will determine the particular skills appropriate to that situation. Characteristics which will obviously affect the necessary skills (e.g. a romantic encounter rather than meeting a friend of the same sex) are usually controlled. Bellack (1983), however, outlines three less obvious factors which investigators may not control: the relevance of the role-play scene to the subject; item difficulty; and the descriptions

provided to the subject. To illustrate the importance of the first, Bellack takes the Behavioural Assertiveness Test - Revised (in Eisler et al., 1975) as an example. It was designed for use with male psychiatric patients, and therefore does not include many assertion problems which would be relevant to other groups; while items are included that would be inappropriate for other groups. With regard to item difficulty, Bellack argues that role-play scenarios should be consistently of intermediate difficulty appropriate to the skill level of the population under consideration, thus resulting in a range of responses for that population. In addition, if established test items were used across studies, assuming that the items were valid and reliable, comparisons and conclusions amongst studies would be possible. Descriptions provided to subjects often lack the information necessary for deciding which response would be the most appropriate in the circumstances. Fiedler and Beach (1978) found the consequences of a chosen action to be vital in deciding upon a response - for instance, could one be fired or physically abused? Given the immense life-long knowledge with which one enters a social encounter in the real world, it is not surprising that role-play scenarios are increasingly criticised as a means of assessing social skill. The more skilful the individual, indeed, the more difficulty (s)he may have in responding to such problem scenarios, because (s)he will be aware of the range of permutations available dependent upon the context of the situation, the personality of the other person(s), and so on.

3.3.1.5 Confederate Behaviour

The idea of involving a confederate in a role-play scene is to make the situation more real or natural, but this assumption has to be questioned. In a real-life situation there will almost certainly be cues which will aid our prediction of likely responses to our own choice of behaviour - does the person look aggressive, feeble, angry, old or young etc? In a laboratory study the confederate will usually be actively trying not to provide such cues unless the scenario has been so well drawn that such information is included consistently. As we have already discussed, this is rarely the case. Bellack (1983) makes an important related point, that often encounters are "single prompt" role-plays, ending after the

confederate has delivered the prompt and the subject has responded once. This type of interchange is certainly not comparable to a real-life situation, neither does it allow scorers to judge subject behaviour in any real sense. This is especially true when one considers that the opening gambit of an interchange may be well practised and therefore skilful, but tell us nothing about the subjects range of follow-up skills. For example, Bellack found depressed woman to be assertive initially, but submissive if resisted. Some investigators might argue that allowing confederates the flexibility of response to the subjects verbal and non-verbal communication as in a real situation makes measurement across subjects impossible, but a compromise strategy might be to allow for flexibility within a specified range. It would be possible to develop criteria for measuring the skilfulness of responses in role-play scenes with inbuilt allowances for general factors such as cultural and age differences, then more specifically for individual variations. Confederates would, of course, have to be experienced to make such a venture feasible, but training should make this possible. Indeed, Bellack advocates systematic analysis and assessment of confederates because of changes in style which seem to develop in them over a period of time. Given that the subject's behaviour will be in response to his/her monitoring of the confederate, and prediction of the outcome of the social situation, training and assessment of the confederate's behaviour seem essential.

Before leaving the subject of confederates, one point should be made with specific reference to using an adult confederate in place of a child, where the subject is also a child. It may be that a child subject is unable to pretend or imagine that an adult confederate is in fact another child. From my experience of children from pre-school to eighteen years old, my intuition would be that the behavioural responses evoked by the presentation of an adult could be so ingrained and so different from those evoked by a child that we could be asking the child to imagine the impossible. It is only an intuition, but one which warrants consideration.

3.3.2 Direct Observation in a Real Setting

This is a most attractive medium of assessment because here the individual is viewed within the setting appropriate to purposes of the investigation. The "as if" element of role-play is removed, and the subject is assessed in the actual setting under consideration - for example, the immediacy and security of his/her familiar environment, if that is the context in which the investigator wishes to view the behaviour. In addition, one is more confident that the behaviour which is being assessed is spontaneous and real. It is difficult to imagine the astounding findings of Milgram's famous experiments (1974) on obedience being produced in a role-play situation. The problem still exists, however, that observed behaviour is not the same as unobserved behaviour, unless the subject is unaware that there is an observer - but that constitutes an invasion of privacy. Thus even in the natural setting we cannot be sure we are measuring a subject's spontaneous reaction to a social situation. In addition, there is the problem of measuring responses which are unstructured and potentially so varied that standardizing measurement across subjects could prove impossible. The problem of measurement can be addressed by using semi-structured criteria for assessment which would allow for spontaneity of response within broad situational contexts and flexible guidelines for scoring. Indeed, some studies have retained the natural setting while introducing a controlled stimulus provided by a confederate. The problems outlined with reference to the confederate in the section on role-play still exist, however, so this option is not entirely satisfactory either. More will be said about the problem of measurement in 3.4 below. Certainly the difficulties of using this method of assessment seem to me to be outweighed by the major advantage, which is to look at the subject in situ, thereby ensuring that the context and social cues which evoke the subject's responses are meaningful to the subject. The problem that observed behaviour is different from unobserved behaviour of course remains, and therefore our conclusions must be drawn with this qualification in mind.

If the investigator opts for assessment of the individual in the natural setting, (s)he must then decide whether to observe the individual "live" or to videotape interactions. Given the availability of video cameras, the latter would normally now be chosen, as accurate assessment

of social encounters is extremely difficult should one be trying to observe and to record simultaneously. Even if one is merely observing it is impossible accurately to monitor both the responses of the subject and the cues which (s)he is receiving. Videotaping provides an intact representation of the cues and responses which occur and, further, can be assessed and re-assessed by as many observers as desired. This provides excellent opportunities for measuring the reliability of the data. There are difficulties with videotaping behaviour, however, and these need to be addressed. Firstly, Bellack (1983) points out that subtle responses such as postural rigidity or muscle tension, which are available to live observers, are usually lost in videotapes. If hands are folded, are they comfortably relaxed or grasping each other tensely? It is not always possible to tell. Secondly, there is the problem of molar over against molecular assessment. One would not usually have the luxury of obtaining at the same time both close up pictures of molecular ratings of a subject (e.g. eye movements, muscle tension of the face) and an overall molar picture, much less the simultaneous molar and molecular picture of both the subject and his/her friend or friends which, given the importance of cues, it would be best to have. This severely limits our assessment of the individual. We have to sacrifice detailed ratings of facial expression to obtain a rating of overall posture and gestures. Most commonly one is forced to opt for a combination of the two, moving in for close-ups and then widening again for a picture of the whole person. This works reasonably well, but one wonders how many subtle, unnoticed cues are lost as a result. The best option might be for the videotape to be supplemented, with the investigator making notes from live observations of those cues or responses which (s)he believes might be missed by the videotape. This would, of course, be a skilful operation which would require much practice and a good working relationship with the camera operator, for one would need to be able to predict which cues the camera and the camera operator would be likely to miss.

The final problem to be discussed here is that of judges. There is evidence (Trower, 1980) that judges base their ratings on the most noticeable and easily categorised response characteristic. There is no evidence as yet to suggest that trained judges are more likely to do this than untrained ones, but this is something which needs to be looked at more closely. Some judges are inconsistent and/or have idiosyncratic criteria,

others produce ratings which agree with some colleagues but not others. Experienced judges develop internal norms for ranking subjects by selecting particular reference points which are primarily content orientated - one reason, postulates Bellack, why reliability ratings are lower for overall anxiety ratings than for overall skill ratings (i.e. anxiety is not characterised by specific verbal content, unlike social skill). The further problems of specifying what is to be measured and how to measure will be discussed in 3.4 below.

3.3.3 Questionnaires and Interviews: Self-report and Other Reports

This section will be discussed in some detail, as the present study involves developing a self-report and teacher report questionnaire. The discussion at this stage will be confined, however, to the general advantages and disadvantages of questionnaires.

In obtaining reports from the individual about his/her own feelings and behaviour, or from someone who is in a position to observe the individuals behaviour closely and report on it, the normal procedure is to elicit the information in the form of a questionnaire. It cannot be doubted that questionnaires are an excellent way of obtaining large amounts of information in a structured way, thereby facilitating statistical analysis. Shepherd (1984) points out that those which have been developed for looking at the cognitive aspects of social difficulty are generally well standardized, have good internal consistency and have high test-retest reliability. Self-report questionnaires and interviews are indeed the only way we can obtain important information directly about what the subject thinks and feels. There are, however, problems with their use, which we shall consider here in conjunction with the evidence available on the correspondence of ratings obtained by this means from the subject and significant others (e.g. parents and clinicians). Problems to do with the measurement of questionnaires will be discussed in 3.4 below.

The obvious assumption when using a questionnaire, if it is not going to be read aloud by the investigator, is that the subject(s) can read well, and understands the words used. From my experience, however, this is an assumption which should not be made (even when the sample is comprised of university students), because of the effect it could have on the results.

This is not a serious problem, as it can be easily remedied by reading the questionnaire aloud, but it does need to be carefully controlled. With very young children or educationally subnormal persons it might also be desirable to supplement the questionnaire with visual scenes (similar to those used by Asher and Renshaw, 1981 in assessing young children's knowledge of social skills), which could be adjusted in collaboration with the subject to be as relevant to the individual as possible. It seems good practice to supplement the questionnaire with a semi-structured interview where possible, in order to obtain clarification of how the subject is interpreting the questions. In a small sample both can be easily used, but in large samples the interview would probably have to be forfeited.

Many of the problems of role-play also apply to questionnaires. Instructional set ("would you normally?"; "would a skilful person?"), pre-assessment experiences, assessment conditions and situational content (the relevance of the questions, item difficulty and the description of the scenario to which one is being asked to respond) all need to be carefully examined, and items need to be balanced (in the area of social skills this would mean including both positive and negative aspects of behaviour) and controlled, to ensure that the information elicited is that which we are attempting to measure. In addition to these problems, however, there are others more specific to the use of questionnaires.

The major problem is knowing whether the area of behaviour under consideration is being accurately measured by the specific component or target behaviours included in the questionnaire, and whether these component behaviours are being accurately assessed by the questions. This problem can at least be alleviated by ensuring that the area of behaviour is clearly defined and the target behaviours thought to comprise this area specified. Then the component behaviours and the questions thought to measure these behaviours can be changed or added to in the light of new research findings.

The crucial, underlying assumption in interview and questionnaire measurement is that the patient is being truthful. It has long been established, however, that subjects often try to please the experimenter by giving the responses deemed to be the desired ones. In certain circumstances, indeed (e.g. a clinical setting), the patient may well want deliberately to manipulate the clinician. Quite apart from deliberate attempts to mislead the investigator, however, the subject might not give

an accurate account of his/her behaviour simply because of lack of orientation. This has been discussed under role-play (3.3.1 above), and no more will be said here, except to add that I have on occasion wondered to what extent the novelty of the investigation situation itself affects results. When helping with the administration of experiments as a final year undergraduate, I noticed that students often asked for clarification of even very simple instructions from the final year helpers when the staff member organizing the experiment was not present, but rarely did so when the staff member was there. To what extent this affected the results, if at all, is impossible to say. It did lead me to the conclusion, however, that finding oneself in a new situation, such as helping in an investigation (especially if it is about how one behaves in certain situations), and having to orientate oneself to that new experience, might disrupt the normal ability to concentrate on listening to or reading and answering even simple questions about oneself. This is particularly important in questionnaire and interview measurement, where no additional cues exist, as they do, for instance, in role-play, and the subject's answer is wholly dependent on his/her ability to concentrate, absorb and respond to a considerable amount of information.

To tackle the problem of lack of truth due to deliberate deception, a "lie scale", measured by including selected questions twice and noting any variability, might be included. To tackle the problem of lack of truth due to disorientation, we could ensure that the setting and administration of the questionnaire and/or interview are carried out in a place and manner which would be familiar to the subjects. Checks (in addition to the earlier suggestions in 3.3.1 above of making scenarios as appropriate to the individual subject as possible) could also be incorporated into the measurement. For instance, the subject might be asked if each question is meaningful and given free space to expand on each question and contextualise it if necessary. These comments also apply to interviews, which are valuable for obtaining immediate clarification of any point and result in a wealth of material from the subject. One does need to be even more cautious, however, about providing external cues which could influence the assessment of the subject, given the effect of pre-assessment experiences and assessment conditions outlined in 3.3.1.

One other problem with questionnaires is described by Shepherd (1984), though first noted by Anastasi in 1968. It is the problem of "response sets", the biases which can influence the subject's choice independently of the item content. For example, subjects can choose "yes" answers in preference to "no" answers, right hand rather than left hand answers, or, as we have already mentioned, responses could be biased towards social desirability answers. This problem can be tackled by randomizing scoring direction and, as discussed above, interviewing in addition to the questionnaire.

The validation of the questionnaire also requires some thought. The presence in an experimental group, compared to a control group, of the characteristic being studied would suggest that a particular questionnaire has some merit. In their study of depression, Kazdin and Petti (1982) accept this, and in addition suggest that interview and self-report measures be correlated with similar measures of other conditions (e.g. hyperactivity and aggression) and with different measures such as peer nomination and rating scales. The difficulty about correlation with similar measures of other conditions is that the underlying assumption is that those measures are accurate assessments of the behaviour which they set out to measure. There are two problems which might arise here. The first is that if the scale which we are attempting to use as a validation measure does not measure what we hope it does (and reviewing the social skills literature, this seems a serious possibility, which will be discussed again later), then even if the new measure correlates with it, this may only mean that our measure is similar but equally inaccurate. The second problem, which has been discussed earlier in relation to social skills specifically, is that of defining target areas. Before comparisons can be made of different measures, or different conditions with the same measures, the conditions themselves have to be clearly identified as to individual component parts, and decisions have to be made about how to treat those areas which overlap each other. Only then could an appraisal of measures be meaningful. All we can do is to introduce as many checks as possible, and remain flexible in changing questions to ensure meaning for individual subjects and in the light of new research findings. If it is possible to include an interview in addition to the self-report, then this is an excellent idea. Expansion of responses can thus be obtained and

clarification sought where necessary. An impression of the likely truthfulness of the individual can also be obtained, though this is, of course, extremely subjective and has to be acknowledged as such.

As well as being used as self-report measures by subjects, questionnaires are also commonly used with significant others in the subject's life - most commonly spouse, clinical staff, teacher or parent. Normally care is taken to ensure that the questionnaire is filled in after a period of close observation of the subject. It is also common in an institutional setting for the same person to be asked to fill in the questionnaire if more than one questionnaire on one occasion is required, because different people behave in different ways with different others. While it is good practice to ensure that the same individual fills in different questionnaires on a subject, it seems to me that asking different individuals to fill in copies of each questionnaire is even better practice and could provide us with crucial information. If an individual behaves differently with different people, then the discovery of the reasons why one person should evoke certain responses and another alternative behavioural responses in the subject could lead to the discovery of the underlying causes or faulty cognitions which result in unacceptable or bizarre behaviour. In addition, it is possible that the person filling in the questionnaire (e.g. the nurse in a psychiatric hospital or a parent) is the one with the behavioural problems, and an assessment by that individual alone could lead us along a false trail with regard to enhancing the social skill of the subject. It would therefore be my contention that it is desirable to have two questionnaire reports by two different assessors on an individual. As mentioned earlier, it is also normal for an interview to be conducted when the questionnaire is being used for clinical purposes, and this practice is a sensible one, both for the purposes of clarification and to assess the credibility (as far as one can judge) of the assessor.

The extent to which self-report questionnaires and reports by others correspond to other measures (e.g. sociometry), or to the reports of different or further evaluators, is an important issue. The literature on this subject is, however, limited and somewhat confusing. Some of the information available has come from studies with specialised samples. For example, the Western Psychiatric Institute and Clinic of the University of Pittsburgh School of Medicine has carried out research with inpatient children, mostly diagnosed as depressed. The control groups in the studies

published by members attached to the clinic may have been drawn from the population at large, but this is unclear from the reports, and it is possible that they were children who were referred to the unit but were found to be 'normal'. If this should be the case, then they could not be regarded as a normal sample and the results would have to be considered with this in mind. Some studies have been done with samples from the population at large, however.

Of the five best known and recent questionnaires specifically designed to measure social skills (Connor *et al.*, 1982; Lindsay and Lindsay, 1982; Matson *et al.*, 1983a; Michelson and Wood, 1982; Spence, 1980: see further below, 3.4.2 and 3.5), three were compared by their authors with other measures or different evaluators. These are obviously of particular importance to this study. Connor *et al.* (1982), firstly, have compared their self-report questionnaire with teacher ratings and behavioural role-play tests and found positive correlations. Secondly, Michelson and Wood (1982) have compared their self-report questionnaire with peer, parent and teacher ratings and found positive correlations. Thirdly, Matson *et al.* (1983b) have compared their self-report questionnaire with a behavioural role-play test, peer nominations and a structured interview in which children were asked what they would do in six situations involving peer interactions. Teachers completed a popularity ranking and a questionnaire which gave a social skills rating. The only measure which did not consistently correlate with measures of popularity and social skills was the behavioural role-play test. Child and teacher measures correlated with each other, the highest correlation among child and teacher measures being peer nominations and teacher popularity ratings. There was significant correlation between both the peer nominations and the questionnaire and each of the three teacher measures, but peer nominations correlated more highly than the questionnaire with two of the three teacher measures. It has to be said, however, that we cannot conclude very much from these studies alone about the efficacy or validity of questionnaires in measuring an area of behaviour like social skill, since the target behaviours differ, the samples are relatively small and the subjects differ in age and, presumably, culture, residing in different parts of the U.S.A. They must be taken in conjunction with wider work on correspondence, such as that by Puig-Antich and Chambers (1978), who have suggested that discrepancies between child and parent reports may be a result of the subjective nature

of the child's feelings of hopelessness or guilt - only the child him/herself could divulge these experiences; Poznanski et al. (1979), who have found that children are reluctant to talk about behaviour (e.g. eating problems) which has resulted in criticism of them by others; and Kazdin and Petti (1982); Kazdin et al. (1983b, 1983c)

Kazdin and his colleagues have carried out some interesting work on the correspondence of child and parent ratings in the field of children's depression, in response to reports that parent/clinician and child reports of the child's depression, which was measured by interview or self-report questionnaires, were discrepant (Carlson and Cantwell, 1980; Cytryn et al., 1980; McKnew et al., 1979; Orvaschel et al., 1981; Robbins et al., 1979). In their 1982 review paper, Kazdin and Petti cite a report by Weissman et al. (1980) in which several rating scales of children's depression were administered. It was found that the children's measures correlated with each other and the mothers' reports correlated significantly with each other, but that a correlation between the children's and mothers' reports did not exist. Two other studies indicated that there was little correspondence amongst scorers in evaluating a characteristic but high correlation across different measures by the same scorer.

Kazdin et al. (1983c) looked at 104 hospitalised children, 101 mothers and 47 fathers. They found that different measures of depression completed by the same scorer (child, mother or father) were highly inter-correlated. There was little or no relationship, however, between mother-child and father-child reports of the children's depression for the same or different measures of depression. The comparison between mother and father reports was statistically significant. In a different study Kazdin et al. (1983b) looked at 48 children and their mothers and fathers (this included stepmothers/fathers, foster parents and paramours). As with the first study, different measures completed by the same scorer were highly inter-correlated, but there was little or no relationship between mother-child and father-child ratings of the children's depression for the same or related measures of depression. There was consistent statistical agreement between fathers and mothers, but children consistently rated themselves as less depressed than did their parents. Parent ratings of the children's depression and the correspondence of child-parent ratings varied as a function of child gender, race and whether the family was receiving welfare or not. Specifically, girls rated themselves more depressed than boys;

white children were rated more depressed by both their mothers and fathers than black children; and mothers and fathers on welfare rated their children as less depressed than those from non-welfare families. In addition, biological mothers rated their children as more depressed than other maternal figures; fathers living away from home rated their children as less depressed than those living at home; and fathers' ratings of their children's depression was generally lower than mothers. On the basis of these last three observations, Kazdin et al. said that it was tempting to suggest that less contact between parent and child might lead to an underestimation of the child's depression. One certainly could not, however, draw such a conclusion on the basis of the limited information obtained from one study. What this study does illustrate is that there may be a myriad of factors which affect the self-report or rating-by-others measures, and therefore that these have to be used with caution.

These last two studies and others have resulted in some interesting observations which could direct future research on the reliability and validity of self-report and rating-by-others as assessment measures, and which necessitate further investigation. The results offered, however, are conflicting, or at least difficult to compare. For example, relatively high agreement has been found when children and parents are providing factual information, like the presence or absence of specific symptoms (Herjanic et al., 1975; Orvaschel et al., 1982); and when self-report and clinician ratings reflect similar item content, then correspondence of the measures has also been relatively high (Carroll et al., 1981). Other studies indicate, in contrast, that parent or clinician views may be discrepant with those of the child (Leon et al., 1980; Cytryn et al., 1980; McKnew et al., 1979; Orvaschel et al., 1981; Weissman et al., 1980), children consistently rating themselves as less depressed than did their parents (Kazdin et al., 1983b, 1983c). This may either be because children underestimate their symptoms (Orvaschel et al., 1982) or because children identify their symptoms accurately while parents rate them as more severe (Piers, 1972; Schopler and Reichler, 1972). Mother and father reports have been shown to correspond in assessing both depression (Kazdin et al., 1983c) and other characteristics of personality (Guerney et al., 1968; Piers, 1972), although father ratings and child ratings approximated more closely than did mother ratings in Kazdin et al. (1983c). This latter observation might suggest the fathers' assessment of the children is more

accurate, but in two other studies (Guerney et al., 1968, and Schopler and Reichler, 1972) mother evaluations have correlated more highly than those of fathers with independent assessments. The influence of I.Q., age, sex, race and social status of the child, the parent and the clinician, plus the setting (e.g. hospital, home, school) for the assessment, the reason for the assessment (e.g. screening, diagnosis) and the assessment target (social skill, depression, aggression) all have to be considered in deciding how valid are self-report and reports by others. The literature is thus at present somewhat confusing, and until more stringent criteria are agreed for administering both self- and other-report questionnaires, this confusion is bound to remain. There is, nevertheless, some evidence, albeit not conclusive, that questionnaires, both self-report and by others, could provide a valid means of assessing social skills, providing that the target behaviours are specified clearly to allow for inter-study comparisons and flexibility to change items, and that the criteria outlined earlier to ensure that the questions are meaningful to the subject are adopted. More work remains to be done on this assessment measure to ascertain just how useful it is.

3.3.4 Sociometric Ratings

The fourth assessment measure which we are considering under this heading is sociometric assessment. The term "sociometry" in fact encompasses a number of different methodologies, and is difficult to pin down. That this has been the case for some time is evident from work of Bjerstedt (1956), who, in reviewing the literature on sociometry, found the term defined in 13 different ways. Having collected from psychologists and sociologists 131 responses on the question of which of these 13 categories were closest to their own understanding of sociometry, his own attempt at a definition was "measurement of interhuman relations ... with the primary focus at this time on research into human preferential situations by means of more or less specific subject report methods". The debate about definition, however, continues. Some recent researchers have, for example, questioned whether it is not necessary to make a distinction between peer assessment and sociometric assessment for the sake of clarity. In Strain et al. (1986) McConnell and Odom define sociometric assessments as "tests

in which children make preferential statements about peers in their social group." Peer assessment is defined (after Kane and Lawler, 1978) as "the process of having members of a group judge the extent to which each fellow member has exhibited specific traits, behaviours or achievements". Peer assessment is thus different from sociometry, in that the child is required to make a relatively objective judgement rather than a preferential selection. The difference is illustrated practically by phrasing a question "with whom do you play the most?" (peer assessment) compared with "with whom would you like to play the most?" (sociometric assessment).

The debate about precise definition continues, then; and there can be no question but that differences in usage of the term "sociometry" are leading to some confusion when studies are compared with each other (so, rightly, McConnell and Odom in Strain *et al.*, 1986). What binds the various approaches together, however, is clearly a commitment to "subject report methods" of one kind or another. Sometimes in the recent literature this has involved paired comparisons (e.g. Burns, 1974; Cohen and Van Tassel, 1978; Vaughan and Waters, 1981; Hops and Finch, 1983): presenting each child in a class with every possible pairing of all the others in the class, and asking the child to choose one of the pair on each occasion as the more desired partner for a specific activity. The number of choices are then summed for every child. More often, sociometric rating has involved peer nomination (positive and negative) and peer rating or peer assessment (usually along a Likert type scale) in a variety of permutations, but mainly:

- (i) asking every child in the class to place every other child in the class in order of preference;
- (ii) asking every child in the class to choose one other child for specific activities (e.g. who would you most like to sit beside in assembly/play football with/take home to tea?);
- (iii) asking every child to choose a limited number of best liked, and disliked, peers.

Such sociometric rating methods are generally regarded highly as measures of children's social competence, and are argued by many, indeed, to be the best measure of competence in children (e.g. Asher *et al.*, 1981; Gresham, 1983b). They are regarded in this way for several reasons.

First, they are said to offer "face validity". Since classmates are those most frequently interacting with their peers, their reports of whom they prefer to work or play with should provide important information about the social attitudes or behaviour of the children under study. Secondly, it is claimed, sociometry offers "social validity". A comparison of popular and unpopular peers should enable desirable behaviours to be targeted and taught, thus eliminating adult presuppositions about appropriate behaviours. Finally, they are said to offer "predictive validity". Various studies have demonstrated a long-term relationship between peer status and skill deficits. The three types of experimental design which have been used are retrospective studies (where information about the earlier history of adults manifesting social difficulty in the present is gathered); ex post facto designs (where past records of the individual as child and adult are used to determine whether a link between the two is apparent); and longitudinal designs (where children are tested and then followed up over a lengthy period of time).

The popularity of sociometric rating among researchers has not, however, blinded them to certain difficulties which arise in relation to it. Aside from the evident problem of the often time-consuming nature of the procedures (e.g. in the case of paired comparisons and peer rating), the first major difficulty has to do with ethics. There are various ethical problems bound up with the process of peer review. The most reliable of the rating scales mentioned above, for example, seems to be paired comparisons, with test-retest reliability sometimes reaching as high as 0.90 and above, which is very impressive. This makes it a very attractive measure, statistically speaking. There is, however, clearly an ethical problem involved in constantly asking children to reject one child in choosing the preferred peer, given that children can be very cruel to those peers who are identified as disliked, and given further that asking them to keep their responses to themselves would, in my experience, be futile. This same ethical difficulty surfaces wherever the identification of disliked peers is involved in rating. In peer rating, for example, obtaining a score for each child which gives a true indication of his/her popularity in the class is sometimes done by providing each child with a typed class list and asking him/her to place the names in order of preference; sometimes by giving each subject (usually younger children) pictures of the peers in his/her class and asking the child to rate each

one along a scale of preference (cf. Dunnington, 1957; Moore and Updegraff, 1964; Roistacher, 1974; Hallinan, 1974; Bruininks et al., 1974; Asher et al., 1979; Odom and DuBose 1981). In peer assessment, children are asked to nominate or rate others according to a variety of positive and negative criteria (cf. Bower, 1960; Bower et al., 1960; Hartshorne et al., 1929; Shapiro and Sobel, 1981), the negative criteria singling out individual children who are not liked. Such ethical considerations cannot be ignored by the responsible researcher. Yet it is clear that taking them seriously brings statistical limitations. We may note here by way of example the method in which a child is simply asked for a limited number of best friends. This is ethically preferable to asking for a limited number of disliked peers, but by the same token makes it difficult to identify any clearly unpopular or middle group. If the sample under consideration were schoolchildren, for example, small clusters of friends would be quite typical. One would therefore expect to find each cluster of children choosing the others in the cluster as those (s)he likes best. There might be one or two children chosen by members of several clusters who would emerge as very popular and there might be one or two children whom no other child chooses who would emerge as very unpopular, but each child would not have a clear popularity rating. The advantage from the point of view of ethics is clearly associated with a disadvantage in terms of statistical limitations.

There are in addition to these ethical difficulties and their consequences certain other problems. Some of these have to do with the various claims to validity which have been made. McConnell and Odom (Strain et al., 1986), for example, reviewed over 20 studies of longitudinal designs, concluding that the predictive validity rationale was the weakest of the three just mentioned above: "a rationale more directly supported by the data reported in these studies would be that peer relationship difficulties in childhood, assessed by a variety of methods, are associated with social adjustment problems as adults." One must also be aware with regard to face and social validity, of course, that an individual's preferences may tell us as much or more about that person as about the subject; and that factors which determine social status amongst peers are probably multi-determined (i.e. factors which are not necessarily social in nature and of ambiguous relationship to social competence, like

gender, race, physical attractiveness, may affect social behaviour amongst peers). All of this suggests in general that caution is required when sociometric assessment is being carried out.

And indeed, further reflection upon the individual rating methods in the light of such general comments confirms that this is so, even where these methods have evident strengths. The peer rating method, for example, is obviously very attractive in terms of the richness of the data it provides. Every child is rated by every classmate, so much information is derived about individual children and about friendship patterns. Furthermore, as Van Hasselt *et al.* (1979) point out, rating methods are highly correlated with nomination methods and with naturalistic observations of behaviour, which suggests (even when the caveat entered above about validity is taken seriously) that the information obtained is valid. It is arguable, however, that it fails to distinguish between those children who are actively disliked and rejected, and those who are isolated but not actively disliked.

The peer nomination method has certain advantages here over the peer rating method, particularly in its more ethically acceptable form (and the form more commonly taken as well, cf. Moreno, 1934; Northway, 1942; McCandless and Marshall, 1957; Busk *et al.*, 1973), where children nominate only liked peers. It is easier to carry out; it makes identification of cliques easy; and it has been shown to identify two sorts of children with peer problems - isolated children (Hymel, 1977), who have received no positive or negative nominations, and rejected children (Combs and Slaby, 1978), who have received many negative nominations. Asher *et al.* (1979) have pointed out that the method shows low stability over time. This, however, seems to me not a fault of the method, but more probably an accurate assessment of the changing pattern of children's friendships. This method is, however, fraught with other problems. The motivation for choosing a peer to engage in a specific activity could be made on any number of criteria, none of which might include the peer's likeability or popularity. One might choose a peer to sit beside in assembly because that person is less likely to get you into trouble when you are on a final warning from the head teacher; a peer who is good at football might help enhance one's own skills and provide prestige in the eyes of other peers; and a peer one invites home to meet the family might be chosen on the basis of how civilised his/her behaviour is likely to be and therefore how likely

it is that (s)he will be invited back. Circumstances on a given day could also affect the child's choice of peer: is the head teacher in a particularly bad mood, does the child feel up to having his/her ego dented today by playing with someone much better at football, and are Mum and Dad on the warpath because of a weekend in which the child has fought with siblings? These events would be unknown to the investigator, of course, and yet could considerably determine the child's choice of peers, so this particular method has to be carefully controlled. For example, questions could be worded in more concrete terms: "whom have you sat beside this past week in assembly and why?"; "whom did you play football with at lunchtime and why?"; "have you invited someone home for tea ?" or "whom would you like to invite home for tea and why?". This makes scoring the response much more difficult, but the additional information is necessary in determining popularity rather than the "usefulness" of the peer.

One final option, not already mentioned, is to ask the investigator, clinician or teacher to assess the children along the criteria of peer popularity. This could be done by using either an open system, where individual children would be observed, and probably videotaped as well, and then a score ascribed either for overall popularity or for specific interactions; or a closed system which is highly structured, perhaps using an interaction analysis chart that lists categories of behaviour which are then scored (e.g. for frequency of occurrence). The latter method may mean that valuable information is lost because it is not listed in the categories or because the observer is not sufficiently skilful. Videotaping would make analysis easier, but there are the problems of losing subtle cues and having to choose between molar and molecular behaviour. The other more serious problem is that an adult observer may perceive and score a child as popular or unpopular when another child would respond differently. Glimpses into the world of children and adolescents would suggest that the organisation of their social world may be too complex and too radically different from that of the adult to enable adult assessors to make valid judgement of how a child is viewed by his/her peers. Asking a child of the same age, however, to assess the social behaviour (in this instance popularity) of another child might circumvent this difficulty. This would certainly be an area worthy of urgent investigation.

3.4 Measurement of Social Skill

Measurement of social skill is intrinsically linked with the medium of observation, and this section will therefore consider the problems of measurement inherent in the four media of observation which have just been described. Role-play and observation in a naturalistic setting will be considered together because the problems in scoring the behaviour observed, whether the scene is contrived or natural, apply to both.

3.4.1 Role-play and Direct Observation in a Natural Setting

Scoring behaviour observed in role-play situations or real life settings presents us with the difficulty of deciding and defining which behaviours will be scored and how. The literature already published in this area may not be helpful. Labels used by investigators often seem to refer to the same behaviour, but actually measure different aspects of that behaviour. Alternatively, two different labels can be used without the specific difference between them being defined. For example, Bellack makes some interesting observations in his important 1983 review paper about the term "eye contact":

- (i) It is impossible, whether observing "live" or through the medium of a videotape, to determine whether a subject and confederate/respondent are actually looking into each other's eyes or not, especially if they are viewed from the side. At best, an observer could only say if the subject was looking at the companion's face or head, and this would be better described as "gaze".
- (ii) "Gaze" is usually scored, following the recommendations of Eisler et al. (1975), as the number of seconds for which the subject looks while speaking. Trower (1980), however, has pointed out that in normal social interaction the speaker looks away from the listener. Thus it is essential that "gaze" should be scored separately during listening and speaking.
- (iii) The manner of the gaze is also important. A normal gaze is intermittent; a fixed gaze might be interpreted as hostile. Scoring would have to be done with this in mind, scoring cumulative gaze time, number of gazes or duration of each gaze.

Bellack's observations about the complexity of defining a label such as "eye contact" and distinguishing it from other labels gives us a taste of the arduous task facing investigators involved in social skill assessment. Firstly, careful documentation of what is normal skilful behaviour needs to be undertaken. Secondly, detailed definitions of the labels ascribed to that behaviour need to be achieved: this would probably involve placing the behaviour in specific contexts. Thirdly, a scoring system which is objective, reliable and able to assess the range of complex variations of response is necessary. The first two requirements might be achieved in two ways. Firstly, more research could be directed towards observing what is common practice in social situations among children and adults, and within specific groups like offenders or psychiatric patients. These observations would be in conjunction with the subject's reports of how (s)he had interpreted the behaviour of the other participants, and with an explanation of his/her own behaviour. Secondly, collaboration of researchers in the area of social skill while studies are in progress (rather than when research is published), and collation of findings in regular seminar groups, might facilitate distinction between labels, and could provide a useful starting point for a more structured assessment of skilled and unskilled behaviour. Without such standardisation of labels, it is difficult to make inter-study comparisons and to achieve any advance in determining if social skill is a concept worth continuing with. The third requirement, that of a valid and reliable scoring system, will now be considered in more detail.

Typically, behavioural responses are scored along attractively objective measures - frequency, duration and determination of occurrence or non-occurrence (after Eisler *et al.*, 1975). It has been noted by several researchers (e.g. Trower *et al.*, 1978; Green *et al.*, 1980), however, that these measures are not appropriate for measuring social skill. Bellack's review paper of 1983 highlights the reasons for this:

- (i) Most responses occur along a continuum, e.g. gaze can be too long or too short; voice volume can be too loud or too soft; a child can demand attention too much or too infrequently. If the orthodox uni-directional frequency and duration measures are used, subjects at one

extreme will be assessed as highly unskilled and those at the other extreme as highly skilled, when in real life neither extreme of social behaviour is appropriate.

- (ii) Occurrence and non-occurrence scoring of behaviour (usually verbal, e.g. compliance, refusal) also fails to distinguish the type of behaviour which has occurred. The occurrence of a refusal to an unreasonable request, for example, tells us nothing about the nature of the refusal: was it aggressive, apologetic, or polite but firm?

Bellack cites recent studies which have noted the need for modification of response assessment (Pitcher and Meikle, 1980; Romano and Bellack, 1980; Woolfolk and Dever, 1979) and suggested additional response categories. He objects to this on the grounds, firstly, that statistical problems would result from having a series of highly intercorrelated variables, and, secondly, that some categories would occur with such low frequency that they would not be significant in overall analyses. Instead, he commends the bi-directional scoring system of Trower et al. (1978). This seems to me an excellent system. It is simple to administer, and yet results in a wealth of information hitherto lost in uni-directional scales, as the scorer is able to make qualitative judgements. Two parallel scales are built into each characteristic which is being rated, and for the purposes of data analysis the alternative options are collapsed and the single score registered. For example, a score of 2 is given whether the individual is "too quiet and difficult to hear" or "too loud and rather unpleasant", for both would be equally inappropriate. The qualitative description of the subject is retained, however, by referring to the subject's score of "a" or "b". It is possible that a bi-directional scale might be too unstructured to allow reliable ratings, but this is a problem more easily overcome than those resulting from uni-directional scales.

Bellack also makes some other recommendations which are relevant to this discussion of scoring, and apply to questionnaires and interviews as well as role-play and direct observation in a natural setting. Firstly, a scoring system should use items from a large segment of the possible range, to ensure an adequate range of responses. Raw data should, secondly, be examined and non-normal distributions explained and/or corrected. Descriptive statistics, thirdly, should be included (means, standard deviations) to reflect distributions and levels; and, finally, any measures

which have been dropped, perhaps because of range problems, should be reported. These recommendations are really part and parcel of good scientific reporting, and it is surprising that they are not included automatically in published papers.

3.4.2 Questionnaires and Interviews

Measuring "socially skilled" responses obtained through the medium of questionnaire and interview strategies has proved difficult because of the factors already outlined in 3.3.3 above. There is no agreement about what constitutes normal behaviour; specific labels are not clearly defined; and scoring systems are inadequate. To avoid repetition, these problems and suggested strategies for attempting to rectify them will not be discussed again here, except to clarify that the bi-directional scoring system is viewed as being particularly appropriate for use with the questionnaire strategy, whether self-report or report-by-other formats are employed.

One other problem which arises with the use of questionnaires is that it is now almost standard practice to carry out factor analysis as a means of identifying broader dimensions within the measure. A variety of dimensions has emerged as a result of these statistical analyses. For example, the five questionnaires summarised by Furnham (1986) which are designed to measure social skills, social difficulty or assertiveness¹ have yielded a wide range of dimensions. Connor *et al.*'s measure of assertiveness (1982) showed three dimensions or characteristics: submissive, assertive, aggressive, plus a total score. Michelson and Wood's measure (1982) showed two: passive, aggressive, plus a total score. Matson *et al.*'s measure (1983a) showed five: appropriate social skill, impulsive / recalcitrant, overconfident, jealousy / withdrawal, inappropriate assertiveness. Lindsay and Lindsay's measure (1982) showed

1 More recent scales, notice of which appeared too late for consideration in this study, are Connolly (1989) and Loranger and Arsenault (1989).

three: social difficulty with peers, adults, general difficulty. Finally, Spence's measure (1980) has five dimensions: meeting people, parental arguments, dating, embarrassment, and making friends.

It has already been said that this kind of variation makes inter-study comparisons almost impossible. The impreciseness of the skills or skill deficits actually being measured by the questionnaire also makes conclusions even from the individual studies difficult. Factors which emerge from analysis of the individual items are likely to be ascribed a label which may mean something different to another investigator, or may overlap with other terms. Perhaps at this stage of our knowledge, it is too early to be engaging in factor analysis, since there is no agreement on what specific behaviour is encompassed by any given factor. For example, what is "assertive" or "passive" behaviour? And when is a certain factor a negative characteristic and when a positive one? When using the Cattell 16 Personality Factor questionnaire a few years ago, I found that women, all of whom had degrees and were competing in the job market, came out as highly aggressive when compared with the average scores for women. As I have been arguing throughout this chapter, the label means nothing without a context.

One other word needs to be said about the social desirability or "lie" scale which is built in to what is thought to be the "best" questionnaires. These are often in the form of items which are considered by the investigator to ensure measurement of lying if a particular response is given. For example, "if you were going through customs and knew you could definitely get through without declaring the excess goods in your possession, would you do so?" A negative response to this question and other similar ones built into the questionnaire gave the subject a "lie score". This is a good example of how an investigator's presuppositions can influence measurement and findings. When this scale was used on first year undergraduates when I was a student, those with fairly strict religious upbringings seemed to have higher "lie scores" than the rest of our group. However, this might well have been because acting honestly is an important moral principle in strict religious upbringings: people in this group might have behaved "rightly" regardless of whether they would be found out or not. It seemed to me doubtful that the "lie scale" measured lying. One possible means of measuring inconsistency of response (which

may or may not entail deliberate deception) would be to include selected questions twice, spaced apart, and then to compare them to ascertain how reliable and consistent was the subject's response.

With regard to measuring social skills, it also seems desirable to obtain an overall general rating value in addition to the scores from the more specific bi-directional questionnaire, in order to gauge whether the questionnaire is either omitting skills which are necessary for social skill or including skills which might not be relevant. One would expect to find an extremely high correlation between the two, and if such a correlation does not exist, then we would have to look at the causes for the discrepancy more closely.

A final word needs to be said about measuring the information derived from an interview. It gives the investigator an opportunity to clarify various aspects of the subject's behaviour, if used to supplement role-play, or to clarify and expand upon answers given in a questionnaire. It is usually semi-structured, however, and therefore difficult to score without losing a lot of the material given by the subject. The information collected using this strategy should therefore be regarded as largely descriptive.

3.4.3 Sociometric Ratings

Furnham (1986) has said that both peer nominations and peer rating scales have provided a major means of identifying socially competent and incompetent children, and have been shown to be both reliable and valid. He also points out that they have not been used extensively with adolescents or young adults, even though these groups are based in institutional settings and this method would be most easily used in such a setting. It is, however, precisely because they have not been used extensively, and because the format of peer nominations varies considerably, that it is difficult to determine the extent to which these measures are in fact reliable and valid, and they have to be used with this consideration in mind. The measurement of peer popularity is itself relatively straightforward once the format has been decided upon: the difficulties of the various options here are outlined in 3.3.4 above.

There is one serious consideration with regard to measurement which does not appear to have been reported in any of the studies under review here, namely the effect of nominating peers from a small group or class. If it is true that adolescents and children typically have a small group of friends, then in a large sample of subjects (a class of 30 for example) one would anticipate a pattern of several small groups, with very few unattached individuals and very few individuals belonging to more than one or two groups. In a sample where subjects are confined to small groups, however, it might be difficult to obtain a picture of the popularity of any one individual, and it will be even more difficult to determine the unpopularity of an individual, if we are excluding, on ethical grounds, asking directly for unpopular peers' names. In certain groups (e.g. classes attended by young offenders, or social skill training groups with educationally sub-normal adolescents) there would most probably be fewer than a dozen subjects. The temptation would then be to ask subjects to draw from a wider range (the rest of the first form, for example). Unless the whole group is participating in the experiment, however, we might then have even fewer popularity groupings, because there will be no information available to assess the reciprocity of these nominated individuals. Unevenness of groups will not itself be a problem, because the number of nominations can simply be divided by the total number in the group. Again we have a very useful measure which elicits valuable information, but which has to be used with its limitations firmly in mind.

3.5 Conclusion

We have looked in this chapter at the practical (as opposed to the philosophical) problems of assessing social skill. We have discussed the absence of a working definition; the widely differing appraisals which have resulted from the observation of behaviour through the various media available (role-play strategies, direct observation in a natural setting, questionnaire and interview techniques, including self-report and reports-by-others, and sociometry); and the problems of measuring behaviour using

the aforementioned media. It is hardly surprising in the light of all these difficulties that so many of the attempts at assessing social skill over the past decade have proved inadequate.² It now remains to describe how the present study proceeded in the light of these problems.

The first decision to be made was which definition of social skill was to be adopted and which behaviours targeted as representative of social skill. Since it seems to me important to distinguish between skilful behaviour and the component behaviours which result in skilful behaviour, Trower's terminology of "social skill as a generative process" and "social skills as the constituent behaviours" was used. The social skills which were measured were those identified by the group being assessed - in this instance, young adolescents. Further detail on this is given in chapter 4.

The next decision was which medium was to be used to measure the social skills when they were identified. As no one medium is sufficiently reliable and valid to assess social skill, the present study adopted several of the aforementioned options. Role-play was not included because of the mounting evidence questioning its validity and the number of very serious problems outlined above. The problems and limitations raised by the other assessment measures are fewer in number and are potentially controllable. It would have been interesting to include role-play to see how it compared with the other mediums in terms of results, but this was not possible given the constraints of time and resources.

If it is true that social skill deficits are a result of faulty cognitions, then it is important to obtain information directly from the subject: a self-report questionnaire is therefore essential. Those self-report questionnaires already available which are designed to measure social skills were noted in the course of the discussion under 3.3.3 above. For various reasons none of these proved suitable. Connor *et al.* (1982) and Matson *et al.* (1983a) measure assertiveness specifically, rather than social skills generally. The first has no reliability rating, the second an average of only plus or minus 0.50. Michelson and Wood (1982) has a

2 Apart from the studies already mentioned, which offer critiques of such recent work, we may note here, for example, Asher *et al.* (1981); Begin (1983); and Demers and Skell (1981).

better rating (0.66 to 0.86), but it shares the disadvantage with the other two of not being British.³ Both the British scales (Lindsay and Lindsay, 1982; Spence, 1980) have good ratings (0.90). The emphasis of Lindsay and Lindsay is on general social difficulty, however, rather than on social skills; and in common with the first three studies, the scale is unidirectional rather than bipolar. I have used the Spence measure, and consider it to be good. Again, however, the "Yes/No" format which it adopts encourages a unidirectional rather than the bipolar perspective which I consider more useful; and it has been specifically designed for use with a young offender population, and would not be appropriate for general use. As Furnham (1986) points out, more psychometric assessment of the scale is in any case called for. The creation of a new questionnaire therefore seemed to be the only option.

In the present study a bipolar scale was used with both a self-report questionnaire and a teacher questionnaire. It was originally my intention to ask for reports by each child's parents as well as two teachers who knew the child best, in order to obtain a perspective on the child from those adults who spend most time in direct contact with him/her. This proved impossible for reasons which will be described in chapter 4. A general rating of social ability by the teacher was also required, to ascertain if the questionnaire correlated with that rating. It was hoped that a cross-section of children from first, second and third forms in England, Ireland, Scotland and Wales would participate, given that culture and age could prove to be significant factors, but this was only partially successful. Also, based on Bellack's recommendation, it was originally hoped that a wider range of options to each question would be possible than was eventually the case (five options had to suffice). Some questions were also originally duplicated to give an "inconsistency" score; the order of the response options was randomized; and a five minute interview with each child was planned. Sadly, these three strategies had to be abandoned: the reasons, again, will be described in chapter 4. Care was taken to ensure

3 This is an important point, because there is some doubt as to whether measurements of child behaviour can be applied across cultures (e.g. Bronstein, 1986).

that the conditions immediately prior to and during administration of the questionnaire were as controlled as possible; that the instructions given were clear and standardized; and that the questions themselves were relevant, ranged in difficulty and were in an imaginable context. The skills which the questions are supposed to measure were clearly defined to allow criticism by other investigators and comparisons with other studies.

Validation of the questionnaire was sought by obtaining measures (mentioned above) of general social ability from the teacher, both in the form of a questionnaire and an overall score; a peer popularity score; and an overall score from child "naive judges", who rated a videotape of the children. Unfortunately, only a small group were videotaped because of practical difficulties - the original intention had been to obtain video records of all the children participating. The standard statistical technique of correlating scales which purport to measure the same characteristic in order to enhance validity was not used in this study because, given the criticisms of them which are outlined earlier, it would be illogical then to argue that a correlation between them and the present questionnaire increased the likelihood that this questionnaire measured social skill. The peer popularity score was arrived at by asking the child to write down his/her five best friends and then dividing the number of nominations into the total number of potential nominations. This circumvents the ethical problems raised by rating all the children in the class or nominating disliked peers, though the statistical difficulty of not having a clearly defined unpopular group remains (cf. 3.3.4 above for a discussion of the relationship between ethics and statistical limitations), and the consequences of that will be discussed throughout the analysis of

results in chapter 5.⁴ Rating the children in their school setting by observers had to be carried out through the medium of videotaping alone (and not observation "in the flesh"). The limitations of this method, detailed earlier, remain, and the scores have to be scrutinized with this in mind. Judges were asked to give an overall rating for each child, and two sub-scores for verbal and non-verbal communication. They were also asked to write down (in an unstructured format to avoid imposing pre-supposed categories which might be inappropriate) the reasons why each score was given, i.e. what they did and did not like about each subject. The practical problems of this medium of assessment, and the extent to which this approach was successful, will be discussed in 6.4.

It is evident from this brief description - a more detailed discussion of the measures chosen and their administration is reserved for chapter 4 - that by no means all the problems discussed earlier in this chapter with regard to assessing social skill have been resolved in the present study. This was in the main due to circumstances beyond my control. To a very great extent, however, these problems have, I believe, been overcome; and where limitations remain irrespective of the improvements made and the controls instituted, these have been clearly identified so that the results may be assessed in their light. A detailed description of the method and results of the study follows in chapters four to six.

4 One has to be aware, of course, as I have pointed out elsewhere in this chapter, that the choice of one assessment measure over against another inevitably involves the risk for the researcher that (s)he will end up measuring only one particular dimension of social competence (cf. Gresham, 1981, who compared two sociometric rating scales, three peer nomination measures and four categories of behavioural observations, finding that rating scale and nomination measures assess different dimensions of sociometric status).

4. DEVELOPMENT OF THE PRESENT QUESTIONNAIRE

4.1 Introduction

The current state of uncertainty where the larger questions about SST are concerned has demanded that I begin this dissertation by offering both a description and critique of the current state of affairs and some justification of the philosophy and methodology adopted in this project itself. This I have sought to do in chapters one to three. In particular, I have explained why the development of new self-report and teacher questionnaires is necessary. In this chapter, and in chapters five and six which follow, I describe the development and validation of the new bipolar measure itself. Chapters five and six deal give a detailed analysis of the results, both statistical and descriptive. In this chapter, I am concerned rather to recount the history of the development of the new self-report and teacher questionnaires, in order to provide a context within which the results may be understood.

4.2 Initial Steps

4.2.1 Consultation with Children

The first stage in the whole process began with an attempt to discover, from the horse's mouth as it were, the characteristics attributed by children themselves to the peers they liked and disliked. In other words, what is skilled and unskilled behaviour? This exercise proved surprising and enlightening.

Two youth clubs agreed to participate. Youth clubs, rather than schools, were chosen to elicit this information for two reasons. First, an informal setting seemed more likely to initiate responses from the children; and secondly, the children knew me very well, and it therefore seemed likely they would be less inhibited in the content of what they would say and write. The Youth Clubs met in the same hall, sandwiched between a Council Housing Estate and an affluent area of Cambridge. As a result, there was a mix of social class and academic ability. No formal

attempt was made to divide the children's responses according to social class or academic achievement, because asking questions such as "what is your father's occupation?" or "what were your results in the last class examinations you took?" may have caused an awareness of differences hitherto disregarded within the club, and could have resulted in one "group" being alienated from another. Informally, however, there seemed to be no consistent differences of attribution between those children from the Council Housing Estate and those from privately owned homes, nor between the children who attended private schools and those from the local comprehensive. For example, children from both types of school cited "snobbishness" as a negative characteristic.

30 Youth Club members participated in the consultation: 20 girls and 10 boys. All the boys attended the local comprehensive school. 8 of the girls were day pupils at a private school, the remaining 12 from two different local comprehensives. The children were asked open-ended questions, so that possible bias in terms of the researcher anticipating what the answers might be could be avoided. They simply had to list the characteristics of people in their class at school whom they liked most, and the characteristics of those whom they disliked most. Their class in school, rather than the Youth Club, was chosen for two reasons. First, the questionnaire is intended for use in schools. So much of a child's life is spent there, and the child has no option but to attend, either voluntarily or, in the case of some of the children, under court order. A Youth Leader may know a child as well as, or even better than, a teacher, but the child chooses to attend the Youth Club, and as a result may not be representative of his/her age group. Secondly, asking the children to choose liked and disliked people from the Club may have generated teasing and ill-feeling. Even though the children would not have had to identify unpopular individuals, some children would, I suspect, have volunteered the information quite unself-consciously. Young adolescents are not renowned for discretion in such matters!

In addition, the children were encouraged to write freely about their choice of characteristics, placing them in context if necessary, and describing why particular traits were liked or disliked. For example, in one case a disliked peer had been described as "two-faced". The second

stage of the process produced a story of a particular recent incident in which this girl had said one thing to her friend's face and another to other peers.

The third stage involved analysing all the characteristics cited and stories narrated, grouping the characteristics most frequently cited according to their frequency, while using the stories as a check to ensure that the label used for the liked or disliked peer was an accurate one. from the context in which they were described and then grouping them according to the frequency with which they occurred. The lists of characteristics which resulted follow below.

Characteristics of Liked Peers

1. won't let you down - loyalty across many different situations
2. keeps secrets
3. shares things - sweets, make-up, etc.
4. allows you to copy homework; whispers answers in class
5. pretty; handsome (usually only mentioned by girls)
6. says what (s)he thinks, but in a nice way: e.g. if (s)he dislikes your new hairstyle will say so, but diplomatically, "I think the other style suited your face better because it emphasised your eyes"
7. never brings you down in front of other people

Characteristics of Disliked Peers

1. bullies others
2. big-headed: "thinks she's gorgeous"
3. "sucks up" to teachers
4. snobbishness
5. always talking in class
6. never talking in class
7. always has homework done
8. never has homework done
9. always good
10. smells/spotty/old-fashioned in choice of hairstyle/clothes

11. too conscious of appearance
12. always talking
13. always talking about self
14. too loud
15. too quiet
16. always asking to copy homework/what is for homework
17. gets angry/sulks when loses a game
18. never admits wrong-doing or apologises

It should be pointed out at this stage that there were more girls than boys in both youth groups. To overcome this problem, to some extent, a large group of boys whose practice it was to wait outside the youth club were engaged in conversation and the information necessary to supplement the above lists was derived from those "chats". As a result I am less confident that the questionnaire reflects those characteristics regarded by boys as skilful and unskilful than those so regarded by girls.

4.2.2 Observations Made from the Lists of Attributes and the Ensuing Discussions

It is evident from the above lists, firstly, that there was a higher number of dislikes than likes listed by both girls and boys; and secondly, that many contradictory dislikes (but not likes) were listed and quoted in discussion, both across the range of the group and within individuals (e.g. "she always has her homework done - she's so goody-goody"; "she never has her homework done, she's always trying to get someone to let her copy"). During the ensuing discussions based on the lists of characteristics made by the children, I became increasingly intrigued as to whether the children were arbitrarily choosing characteristics to support their liking or dislike of another child or whether it was the characteristics themselves which determined the popularity, or lack of it, of an individual. In addition to the example just cited, another girl said of a liked peer "she's really pretty and great fun to be with - everyone likes her, even all the teachers like her. Sometimes at breaktime when I'm with her she just chats to them and says she likes their clothes and things." The same girl said of a disliked peer, "she's always trying to talk to the teachers

and she's so nice to them, always sucking up to them". It seems there are two possible ways to interpret this observation of inconsistency. On the one hand, it may be that there are certain specific characteristics which are universally and consistently liked or disliked by peers (e.g. sharing sweets/talking to teachers), but that manifestation of characteristic by itself will not result in popularity or unpopularity. Rather, the whole repertoire of accompanying characteristics may determine peer popularity, and thus peers may respond to a specific characteristic in different ways depending on whether it is found in a popular or unpopular peer. On the other hand, popularity or unpopularity may bear little or no relation to specific individual characteristics and children may choose liked and disliked peers along criteria as yet unknown to us, then attempt to rationalise the like or dislike of the person by citing specific characteristics.

If specific characteristics of themselves are either liked or disliked, and thus the presence of those characteristics in an individual causes the individual to be liked or disliked by the peer group, then we have to ask why the same characteristic can be cited as positive in one instance and negative in another. It is possible that so few children would have only positive characteristics that popularity is more likely dependent on the individual having mostly positive characteristics. Negative characteristics found in a popular individual would need to be either ignored, reinterpreted ("but when X talks to the teachers he/she's not sucking up to them - it's just X gets on well with everyone") or allowances made ("he/she does have his/her faults like everyone but he/she's such a nice person"). The same three options also apply to positive characteristics being found in an unpopular individual. The last of the above three options was never cited as an explanation in discussions with the youth club children, whereas the second was forwarded when the children were asked about characteristics which were given as reasons for liking and disliking. Festinger's theory of cognitive dissonance (Festinger et al., 1956), of course, rested on the observation that individuals strive towards harmony of attitudes and attitude components. Disruption of that harmony required a change in the attitude or the attitude component to reduce dissonance and restore harmony. Reinterpretation of a characteristic to fit in with the existing operational attitude towards the individual could be explained in terms of this "striving for harmony".

A second possible explanation for why a characteristic can be cited to support one's like and dislike of certain individuals is that liking or disliking is arbitrary, or based on factors which are not wholly available to our conscious mind. Perhaps we choose "liked" individuals on the basis of their stimulation of tried and practised behaviour patterns in ourselves; or perhaps we choose individuals that will reinforce the feelings and beliefs we already have, or, remembering the high value the children placed on loyalty, who will protect our self-image and not leave us vulnerable to others in a group. Observation of individuals in everyday life, and much of social psychology, would lead us to wonder if we tend to commit ourselves to a particular philosophy or person, then find reasons to justify our commitment. Much work has been done in social psychology on situations where the commitment of an individual or group to a particular person or belief is tested by circumstances. For example, Mrs. Keech and the religious group, the "Seekers" (who awaited the arrival of a space ship to rescue them from an impending flood which had been prophesied from within the group, then attributed the non-appearance of both the flood and the space ship to their "faith"; cf. Festinger et al., 1956) are not the only example of a group which has reinterpreted evidence in such a way as to protect its original belief structure. Contemporary examples abound in everyday life of human beings, whether religious believers, politicians or academics, adopting positions or making assertions which contradict other deeply held convictions, and when challenged giving explanations which are usually coherent and rational. Personal preferences for one scientific theory over another, and for one person over another, may be made according to criteria which are much less rationally coherent than we would like to believe. The central question is, do contradictions like those observed in the children's delineation of liked and disliked characteristics, and those contradictions with which we as a society live, result from thinking through the complexities of the issues involved; or does the rationalisation follow as a justification after the individual has arbitrarily or for some other reason already adopted a certain preference or position? Harré's study of ethogenics (see 2.3.2 above) may help elucidate the psychological process involved here. Harré's work would support the idea that the contradictions observed in the adolescents' reasons for liking and disliking resulted from a commitment to liking or disliking which was then rationalised.

Either of the two options just discussed, or a combination of the two, in addition to Harré's work, could provide a starting point to study this interesting phenomenon of using the same reason ("characteristic" in our study) to verify two mutually opposing points of view. A study of that phenomenon would in itself be a major undertaking and thus must, at present, be abandoned for the purposes of this project.

4.3 Formulation of the Questionnaire

4.3.1 The Format of the Questionnaire

The lists of characteristics in combination with the contextualisation supplied by the children during discussions were formulated into two alternative questionnaires - one utilising a "Yes/No" format, the other adopting a bipolar scale similar to that used by Trower *et al.* (1978) with an adult population and outlined in the introduction. A statistician was consulted at this point to ensure that either form could be analysed statistically and meaningfully, and to ensure that no underlying problems of interpretation existed in either form. These two alternatives were then compared to determine, firstly, which format was easier to administer and secondly, which format elicited the most usable information.

With regard to administration, the instructions for administering the "Yes/No" questionnaire were more straightforward and more familiar to teachers. Fewer errors resulted, in that children usually circled only one answer and responded to all the questions (there were about twenty questions listed on each page, and fewer pages than in the bipolar questionnaire). In contrast, the bipolar questionnaire had slightly more complicated instructions and children sometimes ticked two boxes or omitted a page of questions accidentally, as there were more pages and only two or three questions on each page. At this juncture the children were working through each questionnaire at their own pace, and were only asked at the end of the period to check that all of the questions had been responded to.

With regard to the utility of the information, it was evident that, in order to elicit the same amount of information as the bipolar scale, the "Yes/No" questionnaire had to comprise an intimidating list of questions. The latter did not take longer to answer than the former when tested, but

teachers' responses were more negative towards it because it looked longer. A considerable amount of work reorganising answers into groups of responses (e.g. initiating peer contact; initiation of, or responding to, bullying; talking to authority figures), and thus arriving at a score for each subgroup, then a total score, in order to present the information concisely, was also necessary with the "Yes/No" format. Bearing in mind recent criticisms of unidirectional measures (e.g. Bellack, 1983), it was decided that the bidirectional questionnaire was the better of the two possible alternatives. It yielded richer information, in that a variety of responses to a particular question was catered for; the information derived from the questionnaire was already in such a form that little further organisation was necessary to prepare it for statistical analysis; the important issue of avoiding unskilled individuals appearing as skilled, which was a problem of unidirectional scales, was resolved; and the practical problems of the bidirectional scale could be overcome with changes in administration procedures.

4.3.2 Consultations

Having decided on the questionnaire format, the bidirectional questionnaire covering the areas of social skill outlined by the Youth Club children was submitted to the Department of Education in Cambridge in order to get their comments and suggestions. The language and phrasing of the questionnaire was based on that used commonly by the Youth Club children - no difficult or long words were used, and questions were made as concrete and unambiguous as possible. It seemed best, however, to check with those experienced in working with children in an educational context, to ensure that clarity had been achieved. A positive response was obtained, but it was pointed out by the Senior Educational Psychologist that the average reading age in the county for twelve- and thirteen-year-olds was seven to eight years. Though she thought the language of the questionnaire was sufficiently clear and simple, to make sure that this was so I decided to give the questionnaire to a group of thirty seven- and eight-year-olds. The teacher kindly agreed to make some comments on where she thought the language or concepts could be improved, and these suggestions were incorporated into the design to improve the questionnaire.

4.3.3 Pilot Study

A pilot study was then carried out: the questionnaire was given to five classes in a Cambridgeshire comprehensive school. At this stage, in addition to the children's questionnaire, the teachers were also asked to fill in a corresponding questionnaire. The questions were the same in content, but phrased in the third person singular, and the language was not as simplified as in the children's questionnaire. Also, an additional question about gestures was included in the teacher questionnaire, asking not just about the frequency of gestures, as in the pupil questionnaire, but about the appropriateness of those gestures. As the children were asked a question which would have been difficult for teachers to answer (whether their method of dealing with bullying was an effective one), and which was therefore omitted from the teacher questionnaire, the resulting number of questions was the same for both questionnaires (that is, thirty). Finally, children were requested to write the names of their five best friends in the class on the back sheet of the questionnaire. This was intended to provide a measure of popularity. In the pilot study both children and teachers were asked for their comments, the children on the children's questionnaire and the teachers on both. In particular, the teachers were asked to say whether they felt they knew the children well enough to answer such detailed questions about them.

Various unanticipated practical problems arose. There had been considerable difficulty in obtaining schools willing to participate, because of industrial action. Teachers were unsure if participation constituted a breach of union rules - there was some confusion about what "not participating in extra-curricular activities" meant in practice -; and in general, staff were under a great deal of pressure and suffering from low morale. As a result, it seemed best to allow the children to fill in the questionnaire at their own pace with the minimum of teacher participation. However, even though teachers were asked to glance at questionnaires while collecting them and to pay particular attention to the scripts of slow readers and children whose first language was not English, this method still proved disastrous in terms of the number of spoilt scripts, and had to be abandoned. Many scripts were unfinished; some children had omitted pages by turning over two pages at once and failing to notice the missing numbered questions; and some had forgotten to record the

details of age, teacher etc., at the top of the questionnaire, even though in the teacher's instructions teachers were asked to complete this and check it before beginning the questionnaire proper. Another problem which arose unexpectedly was the number of questionnaires which had to be rejected either because the name was foreign, or because only the initial and surname were given, and it was impossible to know whether the child was a girl or a boy. Some of the writing was also illegible. This latter problem ought to have been overcome by referring to the teacher's list of class names which was requested, but sometimes the teacher's writing was also illegible, or only the initial and surnames of children were included, or the list was given alphabetically without dividing girls from boys. The names of the five best friends listed on the back sheet of the questionnaire were also sometimes illegible. Sometimes the names were not those of people in the class, and sometimes "pet" names were used, or a Christian name alone, when there were two or three children with the same Christian name in the class. A more serious problem was the reluctance of teachers to complete the teacher questionnaire on each child because it looked so long. Two teachers agreed to fill in a selection of questionnaires (10) from a class of thirty, although they did find it took less time to complete each one than they had anticipated. They took between 5 and 10 minutes for each script, becoming faster as they progressed. Assuming a maximum time for each questionnaire of 10 minutes, this would require approximately 5 hours work of each teacher, if there were 30 children in the class, and I had originally requested that 2 teachers should independently fill in a questionnaire on each child, in case of a personality clash between a particular teacher and child.

4.3.4 Further Consultations

At this stage a head teacher and a science teacher who had completed a science questionnaire with his pupils of the same age group were consulted for advice. The science teacher, pointing out that morale was low and time precious, thought it unlikely that the teacher questionnaire would be completed by teachers in its present form, and suggested that it be reduced by about half in order to persuade teachers to complete it. He also thought that teachers were unlikely to cooperate in the administration of

the children's questionnaire for the same reasons, and said in addition that he had found that reading the questionnaire aloud created a group response (usually of hilarity!), rather than an individual one, to the questions. He suggested that either the children should be allowed to work through the questionnaire at their own pace, thereby requiring only minimal supervision by the teacher; or that I myself should administer the questionnaire while the teacher remained present, but was able to get on with his/her own work. The former suggestion was rejected because of the problems encountered in the pilot study (unfinished scripts, questions omitted), and because the head teacher agreed that only close supervision of the children would ensure that all of the children answered all of the questions. The latter suggestion seemed a reasonable one, but after conferring with the head teacher, I decided against administering the questionnaire myself. The head teacher pointed out that the children's own teacher would know the children well and therefore could read at a pace suited to the slower readers in the class; could check on the slower ones while walking around; and could ensure that order and discipline were maintained. In addition, I was also concerned that the children might be reluctant to ask a stranger for clarification if they were, for example, unable to understand my accent or the wording of the instructions. With regard to the teacher questionnaire being rather long and my concern that the teacher might not know the child sufficiently well, the head teacher affirmed that most of her staff would know their pupils sufficiently well to answer the teacher questionnaire, and that she had found that she could fill in the teacher questionnaire more quickly than my projections based on the pilot study suggested. She also shared my opinion that it would be impossible to lose much of the content of the questionnaire without also losing data essential to ascertaining the child's social ability.

As a result of these discussions, and further independent pondering, it was decided that:

- (1) the teacher questionnaire should remain the same length, but only one teacher, rather than two, would be requested to fill in the questionnaire on each child. It would be made clear that the teacher could take as long as necessary to complete the questionnaires (if (s)he wanted to wait until the nearest vacation that would be fine). The format of the questionnaire would be changed. Instead of 30

questionnaires, the teacher would be given one questionnaire with a "master" answer sheet, which would enable the teacher to fill in the answers more quickly, either by answering each question for all 30 children or by filling in each child's assessment across one line of the "master" sheet. In the event, most teachers opted for the former strategy.

- (2) the teacher who knew the child best (probably the Form Teacher if the school operated such a system) would be responsible for filling in the teacher questionnaire on the child and administering the pupil questionnaire.
- (3) the pupil questionnaire would be read aloud by the teacher and each child would complete each question before the teacher would continue with the next question.
- (4) the questionnaire would be given under examination conditions to ensure that there was not a "group" response.
- (5) teachers would be given very detailed instructions to ensure uniformity throughout schools and classes as far as possible.

It seemed prudent to include a measure of intellectual ability, and also a means of ascertaining whether the child's actual assessment of him/herself was the same as how (s)he would like to be. A discrepancy between the two might provide an indication of whether the child in fact knew what behaviour was skilled, but was unable to react in the way (s)he knew to be appropriate, or perhaps was skilled in accordance with the questionnaire, but desired to be more extreme in his/her behaviour. The Head of the Education Department in Cambridge was approached and asked for his opinion of what would be reasonable to request from head teachers. He was also asked to criticise the drafts of a few optional letters to head teachers, introducing and describing what the project would involve. As anticipated, given the difficulty already experienced in obtaining cooperation from teachers, he thought that asking for a standard test of intelligence to be carried out would be unreasonable. He suggested that a very short test might be acceptable - an idea I subsequently decided against because it would have been only a token effort, and not a serious attempt to see if difference in intellectual ability really did affect social behaviour. One alternative proposition of mine was that the children's English and Mathematics examination results be used instead as

an indication of ability, but this was unacceptable because of the confidential nature of such results. He did, however, point out that each individual head teacher was autonomous and might differ in what they would agree to. The main problem again was thought to be the industrial action taking place and whether or not participation in a study such as this would constitute breaking the union directive of non-participation in extra-curricular activities. At a later stage, as a matter of courtesy, each Education Department responsible for the particular school which had agreed to take part in the study was approached and permission to embark on the testing was requested. Five of the six approached readily agreed, stating that the head teacher's decision was all that was required, though I had taken the precaution of sending a full report, inclusive of the material which would be used, to each authority. The policy of the sixth authority was that a Teacher Consultative Committee sat monthly, any requests similar to mine being dealt with by them. Such requests were apparently numerous and usually turned down. Sadly, though predictably, they refused permission, even though the head teacher had agreed to take part. No reason was given.

4.3.5 Recruitment of Schools

Following the discussion with the Cambridge Head of Education, a letter was drafted on university headed notepaper and sent to selected head teachers in Leicestershire, Cambridgeshire, Suffolk, Northern Ireland and Scotland, outlining the purpose of the project and what it entailed. Subsequently, head teachers in Kent were also approached. When writing to schools, an attempt was made to have a reasonable cross section of comprehensive, grammar, secondary modern, private and remedial schools in England, Ireland, Scotland and Wales. It was also intended that 1st, 2nd and 3rd year pupils would take part, as this was the age group of particular interest to the Department of Child and Family Psychiatry at Cambridge, who are doing extensive work in this area of social skills, but are hampered by the lack of a reasonable assessment measure. Having asked me to come and talk to them about what I was hoping to achieve, they described the problems they were experiencing as a result of inappropriate assessment measures, and were very enthusiastic and cooperative in their

support of this project. Because of the age group with whom they were already working, it seemed logical to attempt to standardise my own questionnaire on the same age group.

Sadly, however, the response to my letter was very poor, even where (as in the case of Kent schools) it was counter-signed by the Head of Department, Professor Herbert. Over twenty schools were sent letters. Only five of these replied - two negatively and three agreeing to take part. As a result of the poor response from schools, the final age range tested was in fact confined to 1st and 2nd year children. Moreover, this group was considered collectively rather than separately, as one would have preferred because of the possible changes in appropriate social responses during the first three years of secondary school. In addition, the schools taking part were less balanced across nationality and type of school and much fewer in number than I had hoped. In the end, and largely due to personal contact rather than in response to the official letter, the final sample consisted of:

- 2 grammar schools from Northern Ireland
- 1 grammar school from Kent
- 1 remedial class from Kent
- 1 secondary modern school from Kent
- 1 comprehensive school from Scotland

To say that this sample is smaller and less balanced than I had hoped is not to say, however, that it does not represent a good mix of schools. The schools from Northern Ireland, for example, had clearly contrasting characteristics. One was situated just outside Belfast, and was therefore part of the city structure, while the other was near the north coast in County Antrim, and was representative of the small agricultural town. The first had private boarding students as well as non fee-paying day pupils. The second had only day pupils, and was thus more typical of the majority of grammar schools in Northern Ireland. Parental occupations also generally differed. On the whole parents from the first school were professionals, mostly working in central Belfast. The second school had a wider cross-section of occupations, and in particular there were many more children from the farming community.

The Kent grammar school was similar to the first of the Irish schools, situated in an affluent residential area within the London commuter belt and populated by children of parents who were largely professional people. It differed from both the Irish schools, however, in being a single-sex school (for boys only). The other Kent schools in the study were very different from all these others. They were both situated in a somewhat deprived, densely populated and multi-racial area (also in the commuter belt) where the demand on local resources and facilities was enormous. Parental occupations in these two schools covered a wide cross-section of trades and skills, with a number of families having one or both parents unemployed.

The Scottish comprehensive, situated in a small town within the commuter belt for Glasgow, was in many ways similar to these latter two Kent schools. Here too there was a wide cross-section of parental occupations, although (partly because of the demise of the grammar school system in this area in contrast to Kent, and partly because it was perceived as being a "good" school) there were more children here of parents who were professionals.

4.4 Testing of the Questionnaire

4.4.1 Introduction

The number participating in the main study (that is, the total number of questionnaires which were unspoilt, with names, sex, and so on included and which had corresponding teacher questionnaires) was 221. The composition of the sample was as follows:

Northern Irish grammar schools	66 girls, 83 boys
Kent grammar school	0 girls, 21 boys
Kent secondary modern school	23 girls, 16 boys
Kent remedial class	7 girls, 5 boys

At a later stage a Scottish class was included to ascertain whether the zero value was the "norm" in Ireland, England and Scotland. It had been hoped to include two Scottish schools for the duration of the testing but

unfortunately, though they were keen to be involved, one was fighting closure and the other was moving to new premises. In the end one was able to participate by filling in the "actual" questionnaires (see 4.3.4 below) only.

4.4.2 Parental Permission

The first phase of the main study involved obtaining parental permission for the children to participate. Letters to parents on university notepaper were given to each school (see Appendix 21), describing the purpose of the study and giving a couple of examples of the sort of question which their children would be answering. One hoped that this would assure the parents that no personal questions about the family would be included, and indeed this specific commitment was given in the letter. Schools varied in their response to this letter requesting parental permission. One head teacher not only sent it to the parents but would not let a child take part unless it was returned with the parents signature; another head teacher said it was unnecessary and did not send it out; yet another decided to draft a letter directly from the school which included the content of my letter but added the blessing of the head teacher; and the remaining schools sent the letters to the parents saying that if permission was not granted by a given date they would assume the child could take part. Only two parents out of all those who were approached refused permission, and many took the trouble to write letters of permission. This positive response from the parents was encouraging, as one always hopes to embark on any work with children with the full support and involvement of the parents. It would be much easier for the psychologist and school to assess and attempt to help those children with social and personal difficulties if parents saw such involvement as supportive of themselves and the child, rather than as criticism of them or invasive of their privacy. The Department of Child and Family Psychiatry at Cambridge were surprised at the positive response they received from parents of children they had identified as "difficult" in the classroom. The parents apparently said in discussion with the psychologists there that they themselves had tried to ask head teachers and teachers for help at a much earlier stage in the child's history because they had been concerned

at the child's behaviour, and were now relieved that someone outside the family had acknowledged that a problem did exist. Considerable goodwill and honest appraisal of the offspring may well exist within families which perhaps has not been fully recognised by psychologists working in schools. This would be particularly encouraging given the dilemma of staff shortages facing many schools now, since psychologists may have to rely more on a parental assessment of the child than has been acceptable in the past. It seems that one reason for the reluctance of psychologists and others assessing the behaviour of children to rely on a parental assessment is the understandable assumption that parents will be biased towards a favourable assessment of the child. That is an assumption that may be true or not, or rather, true in some cases but not in others. The assumption that the teacher is less likely to be biased seems rational, but I was unable to find any evidence to support or undermine such an assumption. As a result, for practical purposes in this study the teacher is the authority adult who is assumed to be the most neutral and to have a good working knowledge of the child, although it is an assumption which could well be mistaken. In an ideal study it would have been preferable to have the parents' assessment of the child in addition to that of the teacher (it would have been interesting to see if a bias towards a positive perspective of the child did exist when compared with that of the teacher), but this would have proved too time-consuming for the schools to help organise. The response of the parents in allowing their children to take part, however, is an encouraging omen for future studies.

4.4.3 Instructions to the Teacher

When head teachers responded to the introductory letter, some replied with the name or names of teachers willing to take part, who felt they knew the children sufficiently well to answer the questionnaire; or they arranged a meeting to discuss the project in more detail and at that stage suggested certain teachers. As the questionnaire was being given in different parts of the country by different teachers, it was important to ensure the minimum of deviation in the administration of the questionnaire.

Teachers, therefore, were given a script of specific instructions which included the mode in which the questionnaire was to be given and the exact wording which was to be adopted (see Appendix 22).

4.4.4 Scoring the Questionnaires and Obtaining a Peer Rating

The filling out of the questionnaires took place over two sessions. During the initial session the children were asked first to fill in the questionnaire according to what was true for them; then told that a space for elaborating on any question they wanted to was provided at the end of the questionnaire; and finally requested to write down their five best friends in the class. Some questionnaires were returned with the names of friends outside the class written down, and these were subsequently returned to the school so that this could be corrected. During the second session the children were given a second questionnaire with the same questions as the first, but prefaced by different instructions. This time the children were requested to fill in the questionnaire according to how they would like to be. When all the questionnaires were collected, numbers were assigned to each subject. Five sources of data were available for each.

1. The self-report questionnaire in which the subject described his/her actual behaviour as (s)he believed it to be, and which shall be referred to from now on as the "actual" questionnaire (see Appendix 1)
2. The self-report questionnaire in which the subject described his/her behaviour as (s)he would like it to be, and which shall be referred to from now on as the "desired" questionnaire (see Appendix 1)
3. The teacher's questionnaire (see Appendix 1)
4. The teacher's general score of social skill.
5. The children's lists of their five best friends.

A total score was derived from each questionnaire in the following way. The number of -2, -1, 0, +1 and +2 responses were individually summed, then multiplied by the figure representing that total score. Those five scores were then summed.

For example, on his actual questionnaire subject 1 scored zero -2's; four -1's; twenty 0's; four +1's; and zero +2's. Two calculations were obtained, firstly by collapsing the + and - signs, and secondly by inserting the + and - signs. Hence $0 \times -2 = 0$; $4 \times -1 = -4$; $20 \times 0 = 0$; $4 \times +1 = +4$; $0 \times +2 = 0$. With the + and - signs inserted, a total score of 0 is obtained, with the + and - signs collapsed, a total score of 8 is obtained.

Each subject thus had a single score for the following:

1. their actual questionnaire with + and - signs collapsed
2. their actual questionnaire with + and - signs inserted
3. their desired questionnaire with + and - signs collapsed
4. their desired questionnaire with + and - signs inserted
5. the teacher's questionnaire with + and - signs collapsed
6. the teacher's questionnaire with + and - signs inserted
7. the teacher's general score
8. a peer rating

It will be immediately evident that inclusion of the + and - signs may give a distorted picture. A child scoring at both extremes of the questionnaire will have a final score close to zero because the extremes cancel each other out. As a result, the data with the signs collapsed is more heavily relied upon for interpretation. The primary reason for analysing the data with signs inserted at all was simply out of interest, to provide a comparison with other results. Because so few children scored consistently at extremes, the data with signs collapsed did not vary enormously with that obtained from inserting the signs, though the statistical analyses were less often significant.

4.4.5 Problems with the Questionnaires

Some practical problems arose with the questionnaires, in spite of the precautions introduced after the pilot study.

1. Sometimes the children ticked two boxes - this usually occurred when they were unable to decide between two answers. Where possible, the questionnaire was returned and the child asked to respond to one of the two boxes ticked. If it was too difficult to contact the child again, an asterisk was inserted instead of a score when feeding the results into the computer.
2. The questions about bullying were apparently insufficient in the range of options offered. Of all the scripts with responses in the space to write freely, the majority wrote about bullying. The importance of possessing the skill of avoiding bullying was underestimated; and while the wording of the question implied children were either bullies or bullied, many children said they were both, and some said they were neither.
3. Some children said they would have liked more information about the context of some questions - they would have answered the same question differently if the context had been slightly different. For example, a best friend rather than a good friend would have produced different behaviour in certain cases; a bully who was also a friend would evoke different behaviour from a bully who was not a friend. This latter example is another illustration of adolescent behaviour which would probably be surprising to adults.
4. In the teachers' questionnaires, even though those teachers participating had confirmed that they knew the children well enough to answer the questions, there were still occasions where the teacher was unable to say how (s)he thought the child would behave. As with the pupil questionnaire, in such instances an asterisk was inserted instead of a score when feeding the data into the computer.
5. When listing their five best friends, children occasionally used only the Christian name of their friends, which caused a problem when there were two children sharing the same Christian name in a class, or pet

names. Additional instructions were included after the first occurrences of this to emphasise the importance of including the whole name.

6. Occasionally as many as ten or more names were included (twice girls wrote that they had so many friends they could not choose five), in which case only the first five were taken.
7. Occasionally children wrote that their best friends were outside the school environment and included only one or two casual friends in the class. In addition, a few boys wrote that they only had one or two best friends in total, so were unable to include five names. It has to be noted, therefore, that a child who appears low in popularity in the class is not necessarily an unpopular child - (s)he may just have his/her social life outside school in the same way adults often differentiate between colleagues at work and friends whom they interact with socially.

4.4.6 Statistical Analyses

First, all the individual scores for each question on the actual questionnaire were fed into the computer (a total of 30 for each child) to see if the zero score was in fact the "norm" as assumed.

Various statistical tests were then carried out on the following combination of data available:

1. Child actual in relation to teacher general scores, with + and - signs collapsed (see tables 1-3 in chapter 5, table 1 in Appendix 20)
2. Child actual in relation to teacher general scores, with + and - signs inserted (tables 1-2 in Appendix 19)
3. Child desired in relation to teacher general scores, with + and - signs collapsed (see tables 4-6 in chapter 5, table 2 in Appendix 20)
4. Child desired in relation to teacher general scores, with + and - signs inserted (tables 3-4 in Appendix 19)
5. Teacher questionnaire in relation to teacher general scores, with + and - signs collapsed (see tables 7-9 in chapter 3, table 1 in Appendix 20)
6. Teacher questionnaire in relation to teacher general scores, with + and - signs inserted (tables 5-6 in Appendix 19)

7. Child desired in relation to child actual scores, with + and - signs collapsed (see tables 10-12 in chapter 5, table 4 in Appendix 20)
8. Child desired in relation to child actual scores, with + and - signs inserted (tables 7-8 in Appendix 19)
9. Child actual in relation to teacher questionnaire scores, with + and - signs collapsed (see tables 13-15 in chapter 5, table 5 in Appendix 20)
10. Child actual in relation to teacher questionnaire scores, with + and - signs inserted (tables 9-10 in Appendix 19)
11. Child desired in relation to teacher questionnaire scores, with + and - signs collapsed (see tables 16-18 in chapter 5, table 6 in Appendix 20)
12. Child desired in relation to teacher questionnaire scores, with + and - signs inserted (tables 11-12 in Appendix 19)
13. Peer votes in relation to child actual scores, with + and - signs collapsed (see tables 19-21 in chapter 5, table 7 in Appendix 20)
14. Peer votes in relation to child actual scores, with + and - signs inserted (tables 13-14 in Appendix 19)
15. Peer votes in relation to child desired scores, with + and - signs collapsed (see tables 22-24 in chapter 5, table 8 in Appendix 20)
16. Peer votes in relation to child desired scores, with + and - signs inserted (tables 15-16 in Appendix 19)
17. Peer votes in relation to teacher questionnaire scores, with + and - signs collapsed (see tables 25-27 in chapter 5, table 9 in Appendix 20)
18. Peer votes in relation to teacher questionnaire scores, with + and - signs inserted (tables 17-18 in Appendix 19)
19. Differences between actual and desired scores with + and - signs collapsed (see table 28 in chapter 5)
20. Differences between actual and desired scores with + and - signs inserted (table 19 in Appendix 19)

For each of the above analyses¹ the following statistical tests were completed:

1. Analysis of Variance: this determined the probability that the means of the groups under consideration differed purely by sampling error.
2. Pearson Product Moment Correlation: this provided an index of the degree of linear relationship between the two variables in each of the analyses.
3. R^2 values: these provided an estimate of the proportion of variance in Y attributable to X. That is to say, they are the square of the correlation coefficient described in 2. above.
4. Regression Equations: these provided scatterplots which presented a visual display of the relationship between each pair of scores².
5. Tables of R and X values: these identified specific values which fell a long way from the anticipated regression line and exerted considerable influence on the line.

4.4.7 Computer Generated Analysis

The data from the two pupil questionnaires, the teacher questionnaires, the teacher general scores and the peer rating were typed into the computer (Minitab Programme with Fortran carriage control) and the computer carried out the statistical analyses outlined earlier. As Minitab is a teaching programme, the final step of each statistical analysis is omitted by it, and was completed manually.

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1. No tables of R and X values were produced for analyses including peer votes because of the absence of a clearly unpopular group - a consequence of the method of peer nomination adopted (see 2.5 above).
 2. Unfortunately it was not possible to present these clearly within the confines of the A4 format of this thesis, and they have therefore been omitted.

4.4.8 Test / Re-test

To ascertain if the test was a reliable one, one class completed the "actual" test on two different occasions, with a period of four weeks in between. A t-test was carried out ($t_{obs} = 9.5577$, significant at 0.01). A Pearson Product Moment Correlation was also carried out (0.7896, significant at 0.01). A larger number of classes would have been desirable, but this was impossible as so much class time had been taken up already.

4.4.9 Video

A video was made of a small group of children from a Northern Irish school to enable independent assessors to judge the social skill of the children. Again, one had hoped to video a much greater number of children for independent assessment: sadly, only a dozen were eventually filmed. Judges were asked to score children out of ten for social skill, as the teacher had done.

It had originally been intended to ask the judges to score the children along agreed criteria (e.g. friendliness, smiling and so on), but as it is unclear what specific qualities constitute social skill (see 3.2 above), it was decided to allow the judges to explain why they had given a particular score freely and without structure.

4.4.10 Letters of Thanks

Letters of thanks were sent to each head teacher, and those schools which specifically requested copies of the questionnaire, with the data necessary for interpretation, will be sent them.

4.4.11 Further Validation with a Small Group of Subjects

The practical constraints of classroom time and access to subjects, described above, prevented comparison of the new bipolar measure presented in this dissertation with other measures, as I had initially intended. After the main study was complete, however, another piece of research of limited scope was undertaken in order further to test the validity of the new measure. Thirty children from a Scottish primary school were given the children's actual questionnaire, the children's desired questionnaire and the junior Eysenck personality inventory. They were also asked to name their five best friends in the class, and were videotaped both in the playground and in the classroom during a "wet" playtime. The teacher was then asked to supply a list of the five most popular and five most unpopular children in the group and to give each of these ten children a score out of ten for their sociability amongst peers. This group of ten children were also given, during their lunch breaks, the Wechsler Intelligence Scale for Children. The results of this in-depth analysis across the various measures are summarised in 6.5 below.

5. ANALYSIS OF RESULTS: THE STATISTICAL ANALYSES

5.1 Introduction

In this chapter I present a statistical analysis of the results of the study, which should be read along with the descriptive analysis of the results in chapter 6. The following is a key to the abbreviations which are found in the chapter:

- c51 Child actual questionnaire with + and - signs collapsed
- c52 Child desired questionnaire with + and - signs collapsed
- c53 Teacher questionnaire with + and - signs collapsed
- c61 Child actual questionnaire with + and - signs inserted
- c62 Child desired questionnaire with + and - signs inserted
- c63 Teacher questionnaire with + and - signs inserted
- c20 Teacher general score
- c23 Peer rating

The phrase "child actual questionnaire" refers to the child questionnaire as it was completed when the children were asked to respond in terms of their real behaviour at the present time. The phrase "child desired questionnaire" refers to the child questionnaire as it was completed when the children were asked to respond in terms of their ideal behaviour - how they would like to behave. The teacher questionnaire is measuring how the teacher perceives the child's actual behaviour at the present time, while the teacher general score is a one-off score to indicate where along a continuum the teacher would place the child's overall social skill. The peer rating is an indication of how many peers chose a particular child as one of five friends in his/her class.

5.2 Derivation of the Above Scores

A single score for each subject in each of the categories c51, c52, c53, c61, c62 and c63 was arrived at in the following way. Each questionnaire included 29 questions with 5 alternative answers (an additional question with a "yes/no" answer being included on the "actual" questionnaire: see Appendix 1). Those 5 possible answers fell along a continuum: -2, -1, 0, +1, +2. Having summed the total number of -2's, -1's, 0's, +1's and +2's for each subject, the 5 totals were then multiplied by the figure representing that summation. For example, subject 1 scored zero -2's, four -1's, twenty 0's, four +1's and zero +2's on his actual questionnaire. Each of these scores were then multiplied and summed to produce a final single score: 8 when the + and - signs were collapsed, and 0 when the + and - signs were inserted.

Not all the statistical information recorded in respect of these categories is, however, reproduced in this chapter. There is, first, a need for some caution where the statistical analyses with the + and - signs inserted are concerned. One cannot know (taking an extreme example to illustrate the point) if a subject having a single score of zero when the signs are inserted is a very skilled individual scoring 100% zero's, or an extremely unskilled individual who scores at both extremes of the bidirectional scale and thus emerges with a zero score. These analyses with the + and - signs inserted are therefore not included in the body of this chapter. Since it is nevertheless useful to have a comparison with the data in which the signs are collapsed, they are recorded in Appendix 19 for reference. The need for clarity of presentation, secondly, has led me to include in the discussion below of the analyses where the signs are collapsed only a summary table of the Pearson Product Moment Correlation, the r values, and the ANOVA's for these analyses (with the significance level where appropriate). A more detailed description of this data in respect of the analyses where the signs are collapsed can be found in Appendix 20. Appendix 20 also includes a record of subjects whose results either fell a long way from the regression line or had a considerable influence on that line.

To return to our explanation of the scoring: the continuum along which the teacher was asked to place a child's overall social skill was from 1 to 10, so that the C20 score is a single figure within that range, where 1

represents the very unskilled, 5 the averagely skilled and 10 the exceptionally skilled child. C23 is a peer popularity score derived from the ratio of peer votes obtained by each child in relation to the total number of possible votes (s)he could have obtained had every member of the class voted for him/her. This was necessary because the total number of children in each class varied. The scores here range between 1.0 (very popular) and 0.0 (very unpopular).

It should be made clear at this point that a working assumption for the piece of research under consideration here was that the "zero response" on the child questionnaires represents the most socially appropriate response. The basis for this assumption lies in the responses of the children involved in the early stages of the project (see 4.2 above). In order to test whether this is correct, however, a further analysis of the top 10% (the most popular children) and the bottom 10% (the most unpopular children) was carried out subsequent to the main study. This analysis, the results of which can be found under 5.14 below, suggested that the total sample was indeed measuring what it is asserted here to have been measuring.

5.3 Child Actual Scores in Relation to Teacher General Scores

This analysis compares what children said about their actual behaviour in the situations described on the child questionnaire with the teacher's assessment of their overall social skill. On the reasonable assumption that the teacher's general score gives a fair assessment of skilled and unskilled behaviour in the children, a small discrepancy between the two scores would suggest that the child questionnaire is measuring the children's actual social skills well. A large discrepancy would suggest the opposite.

Table 1 Breakdown of child actual scores in relation to teacher general scores with + and - signs collapsed (c51 and c20)

81 children scored 10 or less on their actual questions	36.65%
Of these, 58 (71.60%) scored 6 or above on the teacher rating	
16 (19.75%) scored 5 on the teacher rating	
7 (8.64%) scored 4 or less on the teacher rating	
100 children scored 11 or less on their actual questions	45.24%
Of these, 74 (74.00%) scored 6 or above on the teacher rating	
18 (18.00%) scored 5 on the teacher rating	
8 (8.00%) scored 4 or less on the teacher rating	
80 children scored between 12 and 17 on their actual questions	36.19%
Of these, 53 (66.25%) scored 6 or above on the teacher rating	
13 (16.25%) scored 5 on the teacher rating	
14 (17.50%) scored 4 or less on the teacher rating	
41 children scored between 18 and 37 on their actual questions	18.55%
Of these, 18 (43.90%) scored 6 or above on the teacher rating	
10 (24.39%) scored 5 on the teacher rating	
13 (31.70%) scored 4 or less on the teacher rating	
0 children scored between 38 and 60	
180 children in total scored 17 or less on their actual questions	81.44%
Of these, 127 (70.55%) scored 6 or above on the teacher rating	
31 (17.22%) scored 5 on the teacher rating	
22 (12.22%) scored 4 or less on the teacher rating	

Table 2 Histogram: the percentage of children scoring 0 on the child actual questionnaire (hatched areas) compared with the percentage of children scoring 6 or above on the teacher general score (cross-hatched areas)

% of children
scoring within
each range

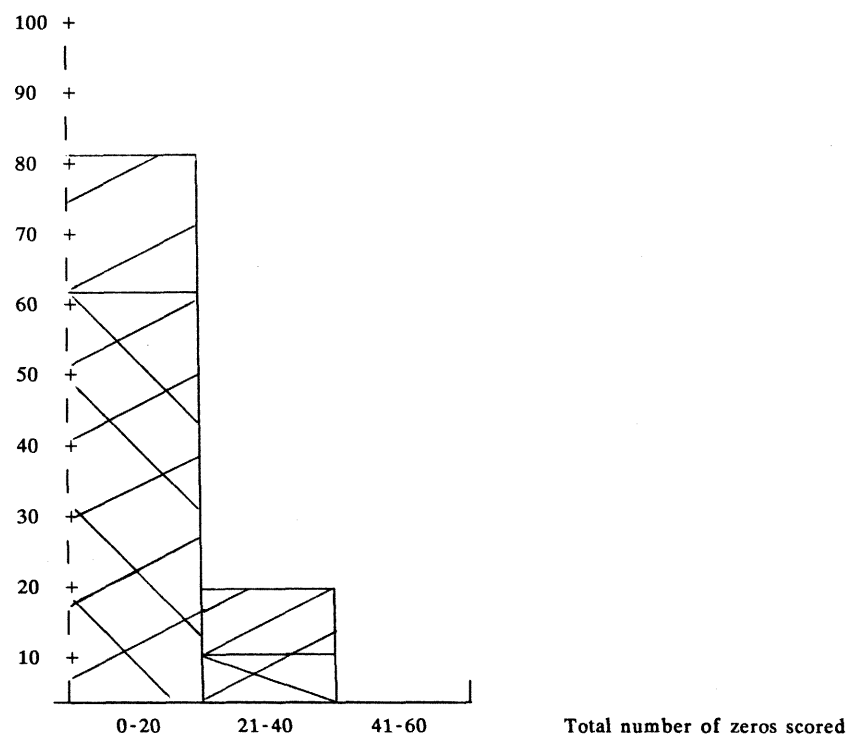


Table 3 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	r	signif.			F	signif.
c51 & c20	-0.298	0.01	0.084	8.4	21.270	0.01

Conclusion

As anticipated, there is a negative correlation between the teacher general score and the child actual score. The higher the teacher general score, the closer to zero the child actual score. All the children who scored high on the teacher general score also fell close to zero, whereas those children falling low on the teacher general score were spread out considerably on the child actual scale. The percentage proportion of variance in X attributable to Y is negligible (8.4%). The questionnaire seems to be measuring the children's actual social skills well, assuming that the teacher's general score is a fair assessment of skilled and unskilled behaviour. The exception to the general rule is the child who scores only 2 on the teacher general scale but falls within 0 to 20 on the actual scale - a result which needs to be noted, but does not cause our general conclusion to be qualified.

5.4 Child Desired Scores in Relation to Teacher General Scores

This analysis compares what children said about their ideal behaviour (how they would like to behave) in the situations described on the child questionnaire with the teacher's assessment of their overall social skill. On the reasonable assumption (again) that the teacher's general score gives a fair assessment of skilled and unskilled behaviour in the children, a small discrepancy between the two scores would suggest that the child questionnaire is measuring the children's ideal/desired social skills well. A large discrepancy would suggest the opposite.

Table 4 Breakdown of child desired scores in relation to teacher general scores scores with + and - signs collapsed (c52 and c20)

105 children scored 7 or above on the teacher	47.51%
general score	
Of those, 74 (70.47%) scored between 0 and 10 on the child	
desired questionnaire	
23 (21.90%) scored between 11 and 20 on the child	
desired questionnaire	

7	(6.66%)	scored between 21 and 30 on the child desired questionnaire	
1	(0.95%)	scored between 31 and 35 on the child desired questionnaire	
116 children scored 6 or below on the teacher general score			52.48%
Of those,	56	(48.27%) scored between 0 and 10 on the child desired questionnaire	
	40	(34.48%) scored between 11 and 20 on the child desired questionnaire	
	16	(13.79%) scored between 21 and 30 on the child desired questionnaire	
	4	(3.44%) scored between 31 and 35 on the child desired questionnaire	
18 children scored 10 on the teacher general score			8.14%
Of those,	17	(94.44%) scored between 0 and 10 on the child desired questionnaire	
	1	(5.55%) scored between 25 and 30 on the child desired questionnaire	
4 children scored 2 on the teacher general score			1.80%
Of those,	1	(25.00%) scored 0 on the child desired questionnaire	
	1	(25.00%) scored 15 on the child desired questionnaire	
	1	(25.00%) scored 26 on the child desired questionnaire	
	1	(25.00%) scored 35 on the child desired questionnaire	
5 children scored over 30 on the child desired questionnaire			2.26%
Of those,	4	(80.00%) scored 5 or below on the teacher general score	
	1	(20.00%) scored 8 on the teacher general score	

Table 5 Histogram: the percentage of children scoring 0 on the child desired questionnaire (hatched areas) compared with the percentage of children scoring 6 or above on the teacher general score (cross-hatched areas)

% of children
scoring within
each range

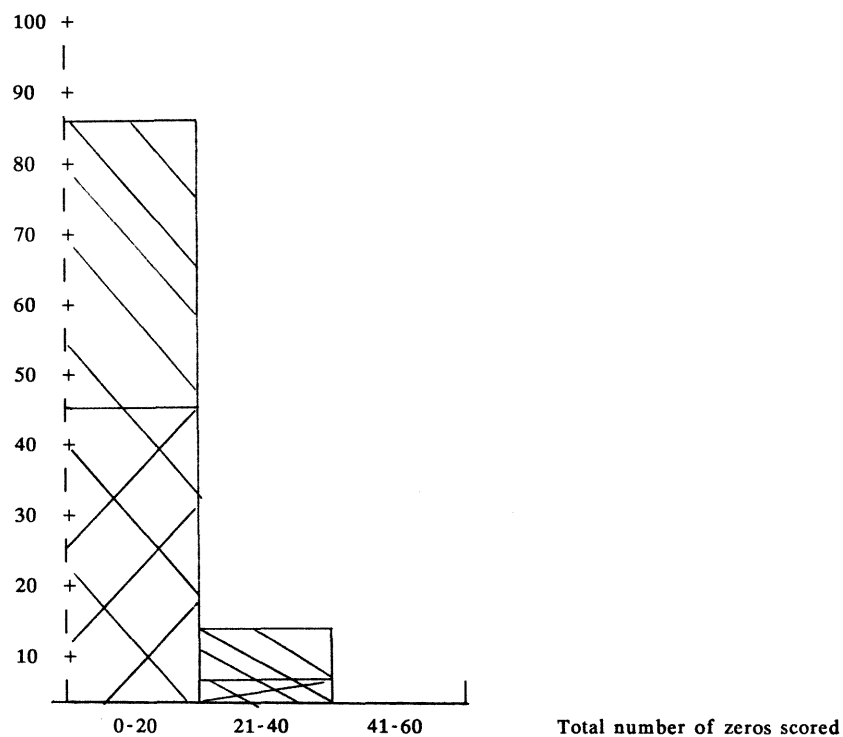


Table 6 Statistical Summary

<u>Condition</u>	<u>PPMC</u>		<u>r-squared</u>	<u>r-squared (%)</u>	<u>ANOVA</u>	
	<u>r</u>	<u>signif.</u>			<u>F</u>	<u>signif.</u>
c52 & c20	-0.273	0.01	0.070	7.0	17.590	0.01

Conclusion

As anticipated, there is a negative correlation between the teacher general score and the child desired score. The children who scored high on the teacher general score also fell close to zero on the child desired questionnaire, whereas those children falling low on the teacher general score were spread out considerably on the child desired scale. In addition, we can see when comparing this distribution with that of the "actual" group that considerably more children fall between 0 and 10 on the desired questionnaire than on the actual questionnaire (130 compared with 81 respectively). This will be discussed further under the comparison between c51 and c52. The percentage proportion of variance in X attributable to Y is negligible (7.0%). The questionnaire seems to be measuring the children's ideal/desired social skills well, assuming that the teachers general score is a fair assessment of skilled and unskilled behaviour. The exception to the general rule is the child who scores only 2 on the teacher general scale but falls within 0 to 15 on the desired scale - again, a result which needs to be noted, but does not cause our general conclusion to be qualified.

5.5 Teacher Questionnaire Scores in Relation to Teacher General Scores

This analysis compares how the teacher assessed the children's actual behaviour in the situations described on the teacher questionnaire with the same teacher's assessment of their overall social skill. A small discrepancy between the two scores would suggest that the skills which teachers had in mind in deciding whether a child was skilled or unskilled are generally those included in the questionnaire. A large discrepancy would suggest the opposite.

Table 7 Breakdown of teacher questionnaire scores in relation to teacher general scores with + and - signs collapsed (c53 and c20)

134 children scored 10 or less on the teacher questionnaire	60.63%
Of these, 118 (88.05%) scored 6 or more on the general scale	
14 (10.44%) scored 5 on the general scale	
2 (1.49%) scored 4 or less on the general scale	
87 children scored 11 or more on the teacher questionnaire	39.36%
Of these, 27 (31.03%) scored 6 or more on the general scale	
27 (31.03%) scored 5 on the general scale	
33 (37.93%) scored 4 or less on the general scale	

Table 8 Histogram: the percentage of children scoring 0 on the teacher questionnaire (hatched areas) compared with the percentage of children scoring 6 or above on the teacher general score (cross-hatched areas)

% of children
scoring within
each range

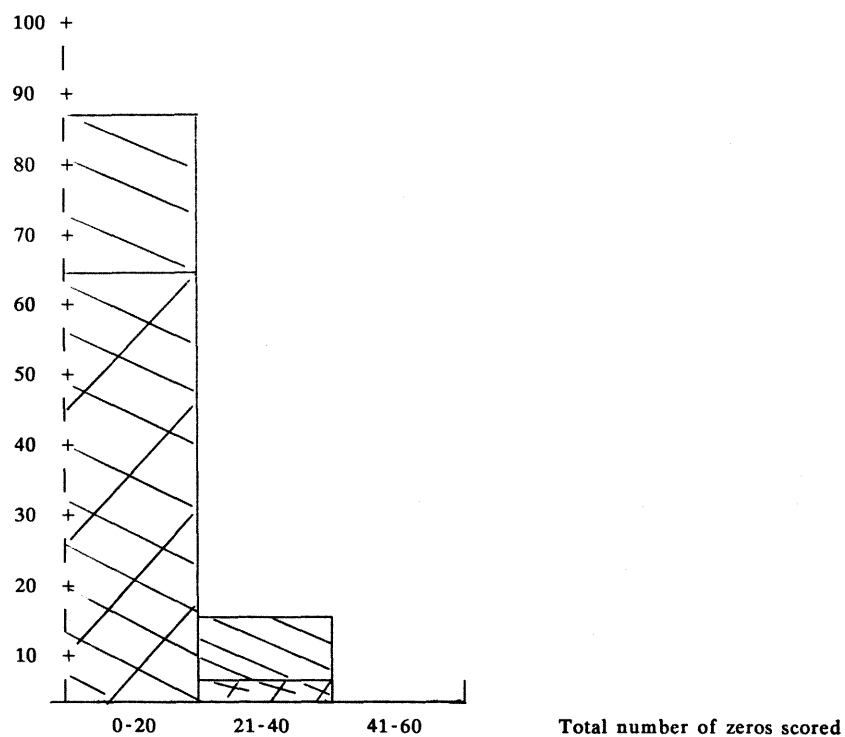


Table 9 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	r	signif.			F	signif.
c53 & c20	-0.685	0.01	0.467	46.7	193.170	0.01

Conclusion

As anticipated, there is a very strong negative correlation between the teacher general score and the teacher questionnaire. This would lead us to conclude that the skills which teachers had in mind in deciding whether a child was skilled or unskilled are indeed generally those included in the questionnaire. Almost all of the children who scored high on the teacher general score also fell close to zero on the teacher questionnaire. However, those children falling low on the teacher general score were more spread out on the teacher questionnaire, and this observation, together with the fact that the correlation is not a perfect one, would suggest that there are skills deficits which the questionnaire may have omitted. The percentage proportion of variance in X attributable to Y is just less than 50%, the highest r value of all the relationships under consideration. We might expect this, given that the same individual is assessing the same qualities in the same children. The questionnaire seems to be measuring successfully those skills which are judged by the teacher to constitute skilled behaviour, although there seem to be omissions that need further investigation.

5.6 Child Desired Scores in Relation to Child Actual Scores

This analysis compares what children said about their actual behaviour in the situations described on the child questionnaire with what they said about their ideal behaviour (how they would like to behave). A small discrepancy between the two scores would suggest that a child was aware of the behaviour regarded as skilled by his/her peer group (on whose assessment the questionnaire was based); was able to behave in accordance with this knowledge; and was happy with his/her behaviour. A large discrepancy would suggest the opposite.

Table 10 Breakdown of child desired scores in relation to child actual scores with + and - signs collapsed (c51 and c52)

130 children scored 10 or less on the desired questionnaire	58.82%
Of these, 63 (48.46%) scored 10 or below on the actual scale	
44 (33.84%) scored between 11 and 15 on the actual scale	
14 (10.76%) scored between 16 and 20 on the actual scale	
8 (6.15%) scored between 21 and 25 on the actual scale	
1 (0.77%) scored between 26 and 30 on the actual scale	
62 children scored between 11 and 20 on the desired questionnaire	28.05%
Of these, 15 (23.80%) scored 10 or below on the actual scale	
41 (65.07%) scored between 11 and 15 on the actual scale	
4 (6.34%) scored between 16 and 20 on the actual scale	
1 (1.58%) scored between 21 and 25 on the actual scale	
1 (1.58%) scored between 26 and 30 on the actual scale	
29 children scored 20 or more on the desired questionnaire	13.12%
Of these, 2 (7.14%) scored 10 or below on the actual scale	
5 (17.85%) scored between 11 and 15 on the actual scale	
8 (28.57%) scored between 16 and 20 on the actual scale	
7 (25.00%) scored between 21 and 25 on the actual scale	
2 (7.14%) scored between 26 and 30 on the actual scale	
5 (17.85%) scored over 30 on the actual scale	

Table 11 Histogram: the percentage of children scoring 0 on the child desired questionnaire (hatched areas) compared with the percentage of children scoring between 0 and 20 on the child actual questionnaire (cross-hatched areas)

% of children
scoring within
each range

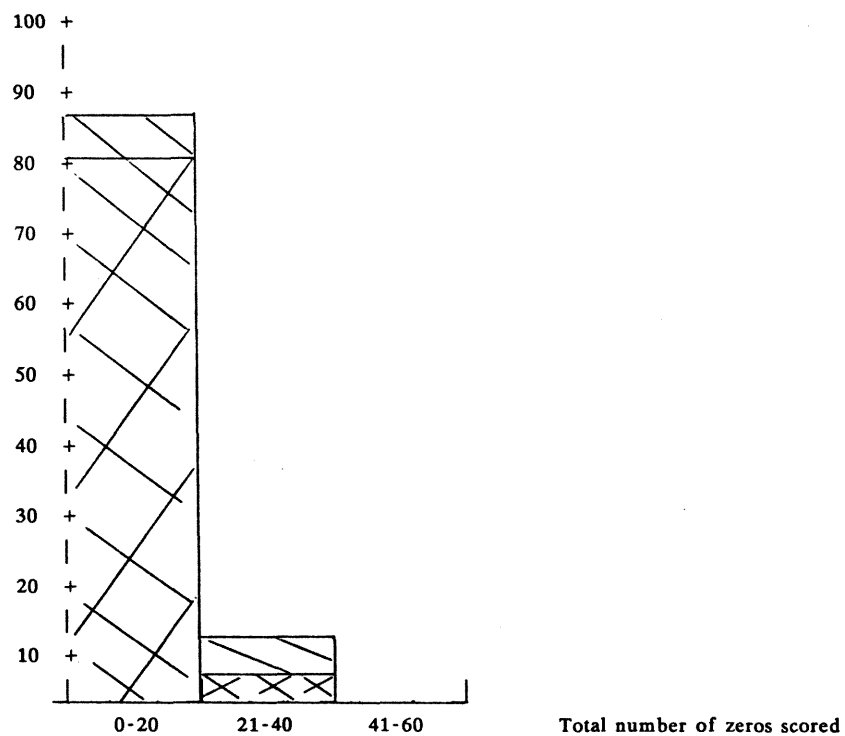


Table 12 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	<u>r</u>	<u>signif.</u>			<u>F</u>	<u>signif.</u>
c51 & c52	0.528	0.01	0.028	2.75	84.570	0.01

Conclusion

There is a very strong correlation between the child actual score and the child desired score. This suggests that the majority of children were aware of what behaviour was regarded as skilled by their peer group (on whose assessment the questionnaire was based), were able to behave in accordance with this knowledge, and were happy with their behaviour. Many confirmed this last point by writing in the free space provided that their answers to the second questionnaire were similar to the first because they were indeed happy with themselves. However, between a quarter and a third of the children possessed a knowledge of appropriate social skills more sophisticated than their actual behaviour as described might suggest. This seems to me an important finding and raises some interesting questions: is their assessment of their actual behaviour accurate; are these the most skilled children in terms of popularity and teacher assessment or not; are they overly critical of themselves, and if so is this an important skill in itself? Without a clearly defined unpopular group, of course (see 3.5 above), answers to these questions may only be put forward tentatively (see further chapter 6). The percentage proportion of variance in X attributable to Y is 27%. This would be expected given that the same children are filling in the two measures, but that two different criteria of assessment are in operation.

5.7 Child Actual Scores in Relation to Teacher Questionnaire Scores

This analysis compares what children said about their actual behaviour in the situations described on the child questionnaire with what the teacher said about their actual behaviour in the same situations. A small discrepancy between the two scores would suggest that there is considerable agreement between these two perspectives. A large discrepancy would suggest the opposite.

Table 13 Breakdown of child actual scores in relation to teacher
questionnaire scores with + and - signs collapsed (c51 and c53)

134	children scored 10 or below on the teacher scale	60.63%
Of these,	57 (42.53%) scored 10 or below on the actual scale	
	65 (48.50%) scored between 11 and 20 on the actual scale	
	8 (5.97%) scored between 21 and 30 on the actual scale	
	4 (2.98%) scored between 31 and 40 on the actual scale	
56	children scored between 11 and 20 on the teacher scale	25.33%
Of these,	15 (26.78%) scored 10 or below on the actual scale	
	33 (58.92%) scored between 11 and 20 on the actual scale	
	7 (12.50%) scored between 21 and 30 on the actual scale	
	1 (1.78%) scored between 31 and 40 on the actual scale	
22	children scored between 21 and 30 on the teacher scale	9.95%
Of these,	5 (22.72%) scored 10 or below on the actual scale	
	13 (59.09%) scored between 11 and 20 on the actual scale	
	2 (9.09%) scored between 21 and 30 on the actual scale	
	2 (9.09%) scored between 31 and 40 on the actual scale	
9	children scored between 31 and 40 on the teacher scale	4.07%
Of these,	4 (44.44%) scored 10 or below on the actual scale	
	3 (33.33%) scored between 11 and 20 on the actual scale	
	2 (22.22%) scored between 21 and 30 on the actual scale	

Table 14 Histogram: the percentage of children scoring 0 on the child actual questionnaire (hatched areas) compared with the percentage of children scoring between 0 and 20 on the teacher questionnaire (cross-hatched areas)

% of children
scoring within
each range

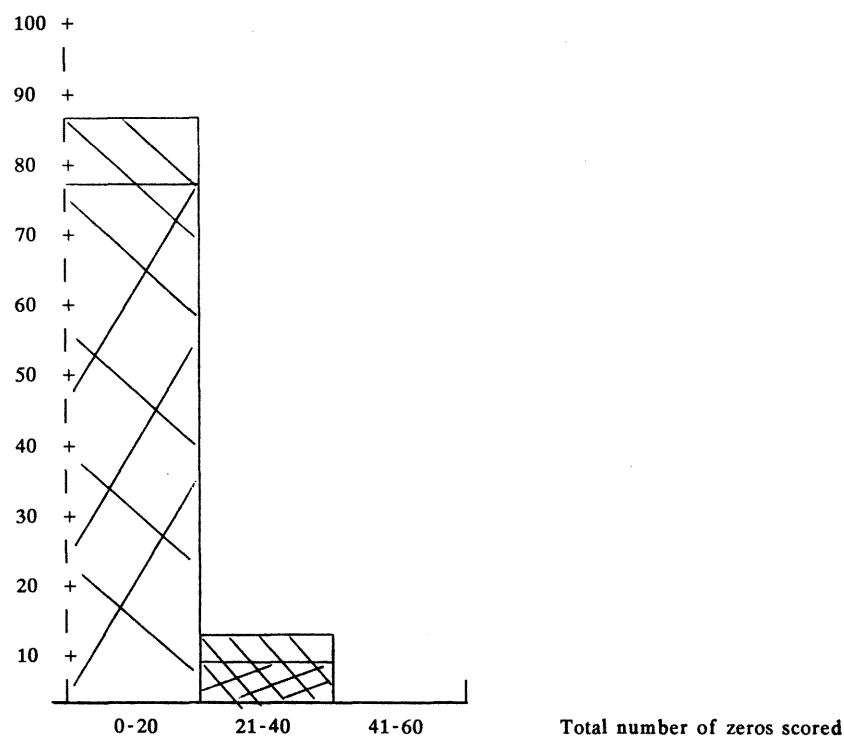


Table 15 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	r	signif.			F	signif.
c51 & c53	0.162	n.s.	0.022	2.2	5.896	0.05

Conclusion

The weakness of the Pearson Product Moment correlation (0.162, not significant) between the child actual scores and the teacher questionnaire scores may be due to outlying scattered results; or it may be that there exists only a tentative relationship between the two. There were 17 results which were either a long way from, and/or exerting considerable influence on, the anticipated regression line. To ascertain the extent to which a relationship exists between the two measures, and to consider the nature of that relationship, it seems prudent to examine the spread of scores carefully and in detail. Looking at the breakdown of the results, it is clear that the majority of the sample fall within the middle range on both questionnaires. 170 fall within 0 to 20 on the teacher questionnaire and 0 to 20 on the actual questionnaire, while 149 fall within -10 to +10 on the teacher questionnaire and -12 to +12 on the actual questionnaire. However, it would seem that there is an interesting and unexpected relationship between the two sets of scores. Of the 60% of children scoring 10 or below on the teacher questionnaire, less than half scored 10 or below on the actual questionnaire (though it should be noted that over 90% of the 60% scored 20 or less on the actual scores); and of those falling outside that range (51 in all), 20 scored 20 or less on the teacher questionnaire, but more than 20 on the actual questionnaire. Of the 31 scoring more than 20 on the teacher questionnaire, 25 scored less than 20 on the actual questionnaire. This suggests that outside the general group who seem to be reasonably skilled and whose teacher agrees that they are reasonably skilled lie two distinct, though small, groups: first, a group which is reasonably skilled in the opinion of the teacher, but is not so skilled in terms of its questionnaire answers; and secondly, a group which is skilled in terms of its questionnaire answers but not in the eyes of the teacher. The remainder of the children (6 in total) were unskilled in terms of their own questionnaire answers and in the opinion of the teacher.

There are two possible interpretations here. The first group may be excessively critical of themselves, and therefore their answers may not be reflecting their actual behaviour as perceived by others; or it may be that their assessment of themselves is accurate, but that their behaviour is regarded as desirable by the teacher. For example, one teacher gave consistently higher general scores to children whom he scored as more

towards the "plus" end of the questions in the teacher questionnaire, and another teacher gave higher general scores to children whom she scored as more towards the "minus" end of the teacher questionnaire. The second group may perceive that its behaviour is skilled but be inaccurate in that perception in the opinion of the teacher; or it may be accurate in assessing its behaviour as skilled as defined by the questionnaire expectations, but certain teachers may not regard that behaviour as skilled. Since there is such a large group of children falling between 0 and 20 on the teacher assessment, this would indicate, in conjunction with the general scores, that most teachers regard the zero position on the questionnaire as the most skilful. We therefore need to know if perhaps one or two teachers are operating on a different assumption which would indicate that the latter of the above two alternatives is a possibility. The table listing the values which are a long way from the anticipated linear relationship, and influential in their effect on that line, shows that for c51 and c53 the 17 scores come from 10 different teachers, although 3 of those teachers are responsible for 9 of the scores (3, 3 and 3). This implies that there may be an element of idiosyncratic scoring, though not enough to account for the weakness of the correlation between the two measures.

It has already been noted in 5.5 that the correlation between the teacher general scores and the teacher questionnaire scores was not as strong as expected. We therefore concluded that there are skills not included in the questionnaire which teachers include when making a general assessment. This is not surprising, in that the questionnaire was based on children's assessment of social skills appropriate to their age group, and some of the characteristics they included as unskilful would probably surprise an adult (e.g. always having homework done). This would imply that there exists a discrepancy, albeit not a major one, between some teachers' assessment of skill and some children's assessment of skill. In addition there also remains the question of whether the perception of some children is faulty when assessing themselves, i.e. whether they are in fact overly critical or overly optimistic about their behaviour. Had we a more creditable assessment measure of peer popularity, an attempt at investigating such a question might have proved possible. For example, if the child was popular with peers and assessed skilful by the teacher, we could have ventured to suggest that a negative self-report would have been

a result of an overly critical self-image. In the absence of a clearly defined unpopular group, however, plus an assessment by only one teacher, the question remains unanswerable.

5.8 Child Desired Scores In Relation To Teacher Questionnaire Scores

This analysis compares what children said about their ideal behaviour in the situations described on the child questionnaire with what the teacher said about their actual behaviour in the same situations. A small discrepancy between the two scores would suggest that those skills which teachers have in mind in deciding whether a child is skilled or unskilled are largely the same as the skills which the child regards as necessary. A large discrepancy would suggest the opposite.

Table 16 Breakdown of child desired scores in relation to teacher questionnaire scores with + and - signs collapsed (c52 and c53)

134 children scored between 0 and 10 on the teacher questionnaire	60.63%
Of these, 88 (65.67%) fell between 0 and 10 on the desired scale	
34 (25.37%) fell between 11 and 20 on the desired scale	
10 (7.46%) fell between 21 and 30 on the desired scale	
2 (1.49%) fell between 31 and 35 on the desired scale	
56 children scored between 11 and 20 on the teacher questionnaire	25.33%
Of these, 26 (46.42%) fell between 0 and 10 on the desired scale	
19 (33.92%) fell between 11 and 20 on the desired scale	
8 (14.28%) fell between 21 and 30 on the desired scale	
3 (5.35%) fell between 31 and 35 on the desired scale	

22	children scored between 21 and 30 on the teacher questionnaire	9.95%
Of these,	11 (50.00%) fell between 0 and 10 on the desired scale	
	6 (27.27%) fell between 11 and 20 on the desired scale	
	5 (22.72%) fell between 21 and 30 on the desired scale	
	0 (0.00%) fell between 31 and 35 on the desired scale	
9	children scored between 31 and 40 on the teacher questionnaire	4.07%
Of these,	5 (55.55%) fell between 0 and 10 on the desired scale	
	4 (44.44%) fell between 11 and 20 on the desired scale	
6	children scored 30 or over on the desired scale	2.71%
Of these,	all (100.00%) fell between 0 and 20 on the teacher questionnaire	
59	children scored 5 or below on the desired questionnaire	26.69%
Of these,	40 (67.79%) fell between 0 and 10 on the teacher questionnaire	
	10 (16.94%) fell between 11 and 20 on the teacher questionnaire	
	5 (8.47%) fell between 21 and 30 on the teacher questionnaire	
	4 (6.77%) fell between 31 and 40 on the teacher questionnaire	

Table 17 Histogram: the percentage of children scoring 0 on the child desired questionnaire (hatched areas) compared with the percentage of children scoring between 0 and 20 on the teacher questionnaire (cross-hatched areas)

% of children
scoring within
each range

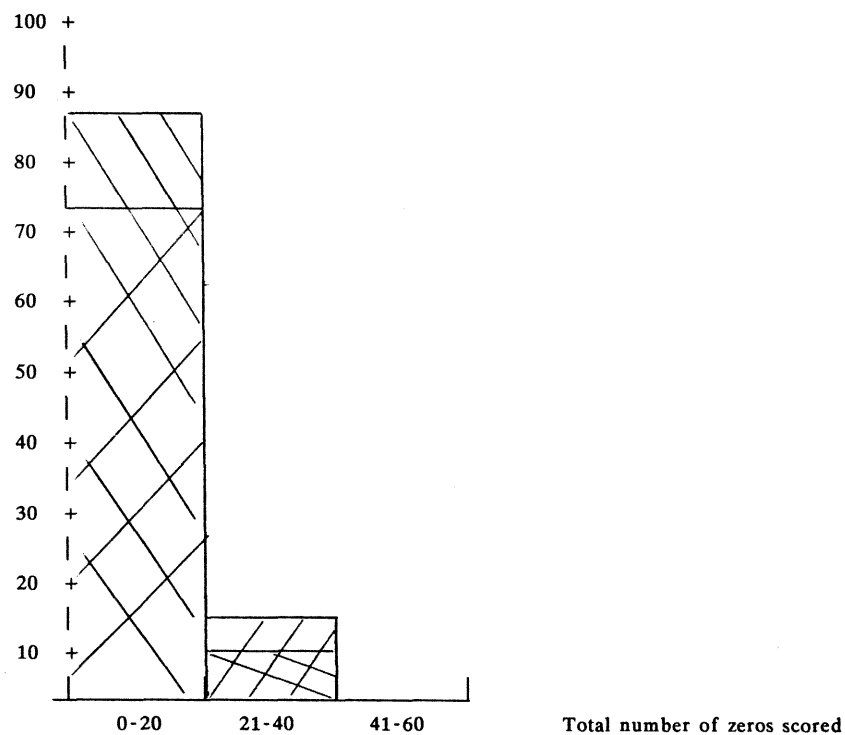


Table 18 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	r	signif.			F	signif.
c52 & c53	0.139	n.s.	0.015	1.5	4.323	0.05

Conclusion

As predicted, there is a positive correlation between the child desired score and the teacher questionnaire score, although it is a weak correlation. This would lead us to question if there are indeed skills which teachers use in deciding whether a child is skilled or unskilled which differ from those skills which the child regards as necessary. Certainly we can say that in the majority of cases, the closer to zero the child desired score, the closer to zero the teacher questionnaire score. Looking at the breakdown of results, and in particular at the ANOVA, we can see that most of the children who scored between 0 and 20 on the desired questionnaire also scored between 0 and 20 on the teacher questionnaire. The percentage proportion of variance in X attributable to Y is negligible. Those specific skills covered in the questionnaire seem to be judged by the teacher to constitute generally skilled behaviour, although there seem to be omissions that need further investigation. Of particular importance here are the 2 children scoring over 30 on the desired questionnaire, but fall within the 0 to 10 range on the teacher questionnaire; and the 5 children who score over 30 on the teacher questionnaire, but within the 0 to 10 range on the desired questionnaire.

5.9 Peer Votes in Relation to the Child Actual Scores

This analysis compares scores on the peer scale (how many children chose a particular child as one of five friends in the class) with what children said about their actual behaviour in the situations described on the child questionnaire. A small discrepancy between the two scores would suggest that there was a relationship between the child's actual behaviour as described and his/her popularity among peers. A large discrepancy would suggest the opposite.

Table 19 Breakdown of peer votes in relation to child actual scores with + and - signs collapsed (c23 and c51)

55 children scored above 0.60 on the peer scale	24.88%
Of these, 55 (100.00%) fell within 0-20 on the actual questionnaire	
58 children scored between 0.31 and 0.60 on the peer scale	26.24%
peer scale	
Of these, 38 (65.52%) fell within 0-15 on the actual questionnaire	
19 (32.76%) fell within 16-30 on the actual questionnaire	
1 (1.72%) fell within 31-60 on the actual questionnaire	
108 children scored 0.30 or below on the peer scale	48.86%
Of these, 74 (68.52%) fell within 0-15 on the actual questionnaire	
29 (26.85%) fell within 16-30 on the actual questionnaire	
5 (4.63%) fell within 31-60 on the actual questionnaire	
Only 18 children scored below 0.10 on the peer scale,	8.14%
ranging from 9-35 on the actual questionnaire	
6 children scored over 30 on the actual questionnaire	4.52%
Of these, 4 (66.67%) fell below 0.10 on the peer scale	

Table 20 Histogram: the percentage of children scoring 0 on the child actual questionnaire (hatched areas) compared with the percentage of children scoring 0.6 or above on the peer votes (cross-hatched areas)

% of children
scoring within
each range

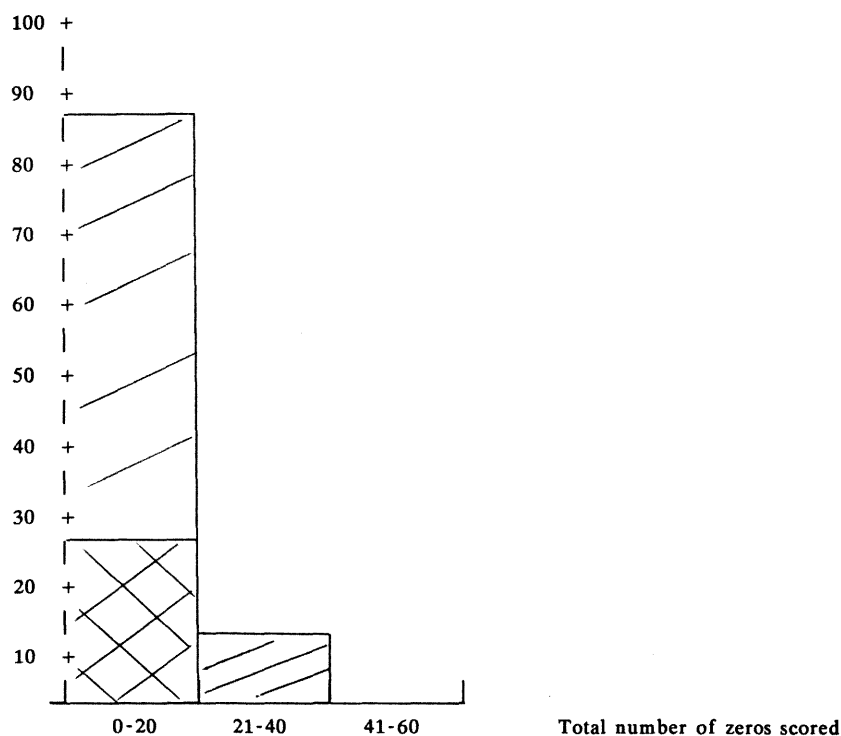


Table 21 Statistical Summary

Condition	<u>r</u>	PPMC <u>signif.</u>	<u>r-squared</u>	<u>r-squared (%)</u>	<u>F</u>	ANOVA <u>signif.</u>
c23 & c51	-0.225	0.05	0.046	4.6	11.687	0.01

Conclusion

As anticipated, there is a negative correlation between the peer vote and the child actual score, although it is a fairly weak correlation: the closer to zero the child actual score, the more popular the child, i.e. the closer the peer vote to 1.0. Looking at the breakdown of results and at the ANOVA we can see that almost all of the children who scored high on the peer vote also fell close to zero on the child actual questionnaire, whereas those children falling low on the peer vote were spread out considerably on the actual questionnaire. The percentage proportion of variance in X attributable to Y is negligible.

As mentioned before, one problem with the peer rating is the fact that a definitive unpopular group failed to emerge because of the sociometric method used. Any conclusions, therefore, have to be somewhat tentative at best. Within those limitations the results do suggest that a relationship between the two variables does exist. Six children have perfect scores on the peer rating, all falling within 0 to 16 on the actual questionnaire. Of the 55 children scoring 0.6 or above on the peer rating, all fell within 0 to 20 on the actual questionnaire. Of the 10 children who scored below 0.50 on the peer rating, 6 scored over 15 on the actual questionnaire, but what is more interesting and unexpected is that 4 of these children fell within 0 to 15. We seem to have 5 different groups:

- (1) the largest group, which is average or above average for the sample in popularity and scores reasonably close to zero;
- (2) a small group of very popular children scoring close to zero;
- (3) a small group of unpopular children scoring a considerable distance from zero;
- (4) a very small group of unpopular children scoring relatively close to zero;
- (5) a very small group of averagely popular children scoring a long way from zero.

The first three groups behave statistically as we would expect, but the last two require some explanation. The last group could be made up of those children who tend to act outrageously or unsociably in order to attract attention and gain friends, and while they may not achieve

popularity in the class as a whole, they succeed in affiliating themselves to a small group who either behave in a similar way, actively encourage or merely tolerate such behaviour. Group 4 could either be children who are skilled socially but have qualities which are unacceptable in certain schools or classes ("having homework done" was most frequently cited as an unpopular characteristic); those who know which social skills are required but are unable to perform them; those who think they behave in the way they know to be correct, but in fact do not; or perhaps those whose responses were random and who appeared skilled by chance. It is impossible to be certain without further investigation.

5.10 Peer Votes in Relation to Child Desired Scores

This analysis compares scores on the peer scale (how many children chose a particular child as one of five friends in the class) with what children said about their ideal behaviour in the situations described on the child questionnaire. A small discrepancy between the two scores would suggest that there was a relationship between the child's ideal/desired behaviour as described and his/her popularity among peers. A large discrepancy would suggest the opposite.

Table 22 Breakdown of peer votes in relation to child desired scores with signs collapsed (c23 and c52)

6 children scored 1.00 on the peer rating	2.71%
Of these, 1 (16.67%) fell outside 0 - 7 on the desired questionnaire	
49 children scored between 0.61 and 0.99 on the peer rating	22.17%
Of these, 1 (2.04%) fell outside 0 - 20 on the desired scale	
58 children scored between 0.31 and 0.60 on the peer rating	26.24%
Of these, 8 (13.79%) fell outside 0 - 20 on the desired scale	
108 children scored below 0.30 on the peer rating	48.86%
Of these, 20 (18.52%) fell outside 0 - 20 on the desired scale	

Table 23 Histogram: the percentage of children scoring 0 on the child desired questionnaire (hatched areas) compared with the percentage of children scoring 0.6 or above on the peer votes (cross-hatched areas)

% of children
scoring within
each range

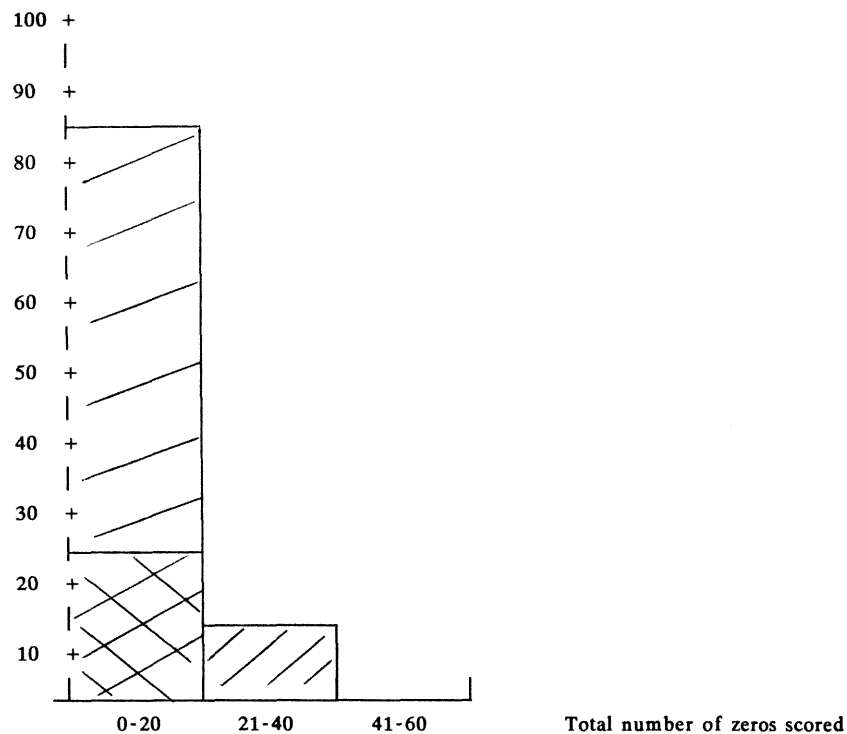


Table 24 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	r	signif.			F	signif.
c23 & c52	-0.278	0.01	0.073	7.3	18.330	0.01

Conclusion

As anticipated, there is a negative correlation between the peer vote and the child desired score, although it is an extremely weak correlation. The closer to zero the child desired score, the more popular the child, i.e. the closer the peer vote to 1.0. Looking at the breakdown of results and at the ANOVA we can see that almost all of the children who scored high on the peer vote also fell close to zero on the child desired questionnaire, whereas those children falling low on the peer vote were spread out considerably on the desired questionnaire. The percentage proportion of variance in X attributable to Y is negligible.

Within the limitations imposed by the non-emergence of a clearly unpopular group, the results suggest that a relationship between the two variables does exist. Generally speaking, those children who are more popular fall closer to zero than the children who are average or below average in popularity, whose results on the desired scale are spread over a greater range. Comparing these results with the actual results, it seems that across each popularity grouping there is a movement closer to zero in the desired questionnaire. More specifically, the six children who have perfect scores on the peer rating, all falling within 0 to 16 on the actual questionnaire, are predictably even closer to zero on the desired score. Of the 55 children scoring 0.6 or above on the peer rating, 16 fell outside the 0 to 20 range on the actual scale, compared with 7 on the desired scale. Of the 166 children scoring below 0.6 on the peer rating, 102 fell inside the 0 to 20 range on the actual scale, compared with 138 on the desired scale. By far the most intriguing finding here is that of the 8 children who scored 0 on the peer rating, 4 fell outside the 0 to 20 range on the actual scale and 4 fell just inside the same range, but 7 fell within the 0 to 20 range on the desired scale, 3 falling on zero. This would suggest that the unpopular children may know what skills are required to be socially skilled individuals and have the desire to behave skilfully, but lack the means of doing so. There are also 3 scores falling outside the 0 to 30 range on the desired scale which are worthy of note because of their exceptional nature. Of these 3, 1 scored just under 0.5 on the peer popularity rating, while the 2 others scored just under 0.6 and 0.8. As before, we seem to have 5 different groups:

- (1) the largest group, which is average or above average for the sample in popularity and scores reasonably close to zero
- (2) a small group of very popular children scoring close to zero
- (3) a small group of unpopular children scoring a considerable distance from zero
- (4) a very small group of unpopular children scoring close to zero
- (5) a very small group of averagely popular children scoring a long way from zero

As with the results in 5.9, the first three groups behave statistically as we would expect (children in group 3 might not know what is socially appropriate and therefore be unpopular with their peers) but the last two require some explanation. The last group could be made up of those children who tend to act outrageously or unsociably in order to attract attention and gain friends. While they may not achieve popularity in the class as a whole, they succeed in affiliating themselves to a small group who either behave in a similar way, actively encourage such behaviour, or merely tolerate it. Group 4, as mentioned earlier, are for me the most interesting group. They could be children who know which skills are required to be skilled socially but have other qualities untapped by the questionnaire which are unacceptable in certain schools or classes; or, more likely given the comparison with their actual scores, they could be children who know which social skills are required but are unable to perform them. Alternatively, their responses could have been random: they may have appeared to know what skills are required by chance. This is always possible with such a small group.

5.11 Peer Votes in Relation to Teacher Questionnaire Scores

This analysis compares scores on the peer scale (how many children chose a particular child as one of five friends in the class) with the teacher's assessment of how that child would behave in the situations described on the teacher questionnaire. A small discrepancy between the two scores would suggest that there was a relationship between the child's actual behaviour as described and his/her popularity among peers. A large discrepancy would suggest the opposite.

Table 25 Breakdown of peer votes in relation to teacher questionnaire scores with + and - signs collapsed (c23 and c53)

134 children scored between 0 and 10 on the teacher questionnaire	60.63%
Of these, 72 (53.73%) scored below 0.40 on the peer rating	
12 (8.95%) scored between 0.40 and 0.49 on the peer rating	
50 (37.31%) scored 0.5 or above on the peer rating	
56 children scored between 11 and 20 on the teacher questionnaire	25.33%
Of these, 40 (71.42%) scored below 0.5 on the peer rating	
16 (28.57%) scored 0.5 or above on the peer rating	
22 children scored between 21 and 30 on the teacher questionnaire	9.95%
Of these, 17 (77.27%) scored below 0.5 on the peer rating	
5 (22.72%) scored 0.5 or above on the peer rating	
9 children scored 31 or above on the teacher questionnaire	4.07%
Of these, 8 (88.88%) scored below 0.5 on the peer rating	
1 (11.11%) scored 0.55 on the peer rating	

A total of 31 children scored above 20 on the teacher questionnaire 17.00%

Of these, 2 (6.45%) scored 0.7 or above on the peer rating
4 (12.90%) scored between 0.5 and 0.69 on the peer rating
15 (48.38%) scored between 0.13 and 0.49 on the peer rating
10 (32.25%) scored 0.12 or below on the peer rating

6 children scored 1.00 on the peer rating 2.71%

Of these, 6 (100.00%) scored between 0 and 8 on the teacher questionnaire scores

8 children scored 0.00 on the peer rating 3.61%

Of these, 1 (12.50%) scored between 0 and 10 on the teacher questionnaire
7 (87.50%) scored between 10 and 25 on the teacher questionnaire

30 children scored 0.10 or below on the peer rating 14.02%

Of these, 10 (33.33%) scored 20 or above on the teacher questionnaire
10 (33.33%) scored between 10 and 19 on the teacher questionnaire
10 (33.33%) scored between 0 and 9 on the teacher questionnaire

Table 26 Histogram: the percentage of children scoring 0 on the teacher questionnaire (hatched areas) compared with the percentage of children scoring 0.6 or above on the peer votes (cross-hatched areas)

% of children
scoring within
each range

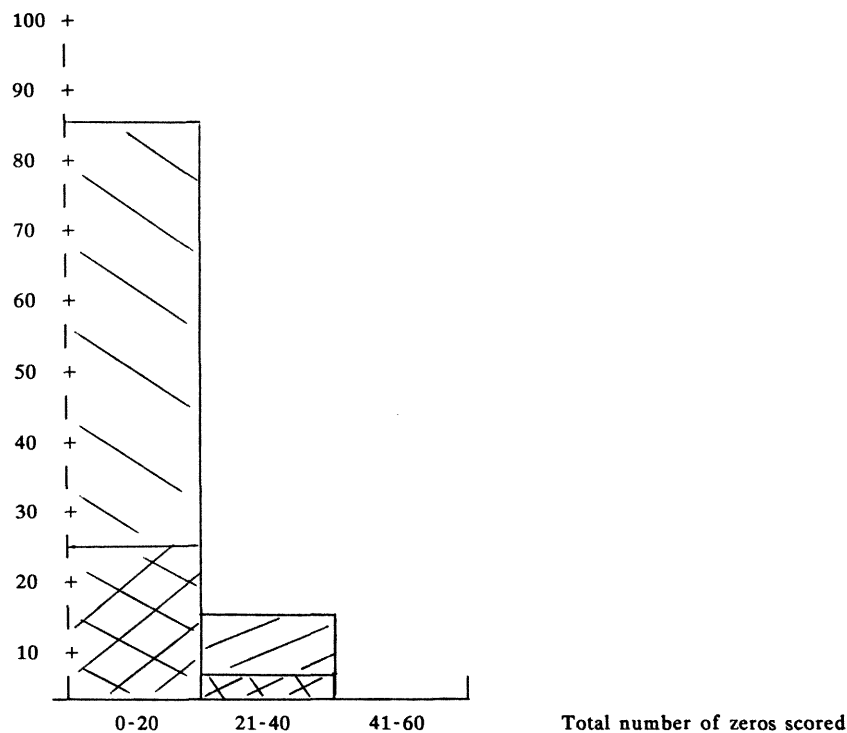


Table 27 Statistical Summary

Condition	PPMC		r-squared	r-squared (%)	ANOVA	
	r	signif.			F	signif.
c23 & c53	-0.179	0.05	0.028	2.8	7.289	0.01

Conclusion

As predicted, there is a negative correlation between the peer vote and the teacher questionnaire score. The more popular the child, the closer to zero the teacher questionnaire score. Looking at the breakdown of results and at the ANOVA we can see that almost all of the children who scored high on the peer vote also fell close to zero on the teacher questionnaire, whereas those children falling low on the peer vote were spread out considerably on the teacher questionnaire. The percentage proportion of variance in X attributable to Y is negligible.

The lack of emergence of a definitive unpopular group once again renders any conclusions somewhat tentative. The Pearson Product Moment correlation for peer vote and teacher questionnaire score is the lowest of the three analyses i.e. peer vote and (1) child actual score, (2) child desired score and (3) teacher questionnaire. This seems logical, as the teacher's assessment is the only adult one of the three, and the initial responses of the children on which the questionnaire is based showed that certain criteria used by the children to assess unpopularity would probably surprise some teachers. Having noted how weak the correlation is, we can only say that generally speaking, those children who are more popular with peers fall closer to zero on the teacher questionnaire than the children who are average or below average in popularity, whose results on the teacher scale are spread over a greater range. Of those children falling a long way from zero on the teacher's assessment (31 children scored over 20), one third scored 0.10 or below on the peer rating and only 2 scored over 0.7. The rest were in the middle group. Of 9 children scoring 31 or above on the teacher questionnaire, only one scored 0.5 or above. There seem to be 5 different groups:

- (1) the largest group, which is average or above average for the sample in popularity and scores reasonably close to zero on the teacher questionnaire
- (2) a small group of very popular children scoring close to zero on the teacher questionnaire
- (3) a small group of unpopular children scoring a considerable distance from zero on the teacher questionnaire
- (4) a small group of unpopular children scoring close to zero on the

teacher questionnaire

- (5) a small group of averagely popular children scoring a long way from zero on the teacher questionnaire.

The largest group seems to be able to get on fairly well with at least some peers and is regarded by the teacher as reasonably skilful. The children of group 3 seem to find difficulty in relating to peers and are judged by the teacher to be unskilful. The teacher's assessment here may provide a clue to why these children have difficulty in relating to peers, and perhaps adults, since the questionnaire covers both relationships. Group 4 could consist of the children who, though perceived by an adult to have the skills necessary for social functioning, lack those additional skills necessary for relating to their particular peers. For example, they may find it easy to talk to adults, which in certain schools could be sufficient grounds for unpopularity. Group 5 could consist of children whose "unsocial" behaviour, in the eyes of the teacher, ensures that they attract at least some friends. Group 2 are the most interesting group in this instance. They are the unusual few who succeed in relating well to both adults and peers without alienating themselves from either group in so doing. This small but fascinating group needs to be looked at more closely to identify the specific skills involved which enable these very fortunate children to be at ease socially with both an adult authority figure and universally amongst their peer group. From the children's comments when compiling the questionnaire, I doubted that popularity in both spheres was possible, and it is pleasant to be proved wrong.

A relationship between the teacher's assessment of skilled behaviour and the peer group's assessment of skilled behaviour thus does seem to exist, but how strong that relationship is cannot be established without a clearly defined unpopular group. The 2 children who scored close to zero on the teacher questionnaire but zero on the peer rating, and the 2 children who scored over 0.7 on peer popularity but over 20 on the teacher questionnaire, also need to be looked at closely along with the other groups mentioned earlier. It seems that while some children have the skills necessary to be acceptable to an adult or a peer, and some have the skills necessary to relate to both adults and peers, others have not the necessary skills to relate well to one or both groups.

5.12 Differences Between Actual and Desired Scores

This analysis shows, both graphically and numerically, the differences between the actual and desired scores for each of the 221 children.

Table 28 Breakdown of differences between actual and desired scores with + and - signs collapsed (c52 and c51)

Middle of Interval	Number of Observations	
-25	1	*
-20	2	*
-15	9	*****
-10	32	*****
-5	67	*****
0	68	*****
5	24	*****
10	11	*****
15	5	***
20	1	*
25	1	*

Conclusion

Most children were either happy with themselves or wanted to be only slightly different. Only 19 children had a difference between their actual and desired scores of + or -15 or more. These are the children of particular interest in this study, as they might hold the answer to whether an "unskilled" child is one who does not know which skills are regarded as appropriate, or one who knows which skills are appropriate (the assumption here being that the child desires those skills which will make him/her popular) but for some reason is unable to incorporate those skills into his/her own behaviour.

5.13 Summary Table of ANOVAs, Pearson Product Moment Correlations, and r-squared Values, and Review of Results

	ANOVA		PPMC		r ² (%)	r ²
	F	p	r	p		
Child Actual/Teacher General Score	21.270	0.01	-0.298	0.01	8.4	0.084
Child Desired/Teacher General Score	17.590	0.01	-0.273	0.01	7.0	0.070
Teacher Questionnaire/Teacher General Score	193.170	0.01	-0.685	0.01	46.7	0.467
Child Desired/Child Actual Score	84.570	0.01	0.528	0.01	2.75	0.028
Child Actual/Teacher Questionnaire Score	5.896	0.05	0.162	n.s.	2.2	0.022
Child Desired/Teacher Questionnaire Score	4.323	0.05	0.139	n.s.	1.5	0.015
Peer Vote/Child Actual Score	11.687	0.01	-0.225	0.05	4.6	0.046
Peer Vote/Child Desired Score	18.330	0.01	-0.278	0.01	7.3	0.073
Peer Vote/Teacher Questionnaire Score	7.289	0.01	-0.179	0.05	2.8	0.028

We are now in a position to review the material analysed in this chapter. The summary table above shows that the Anova suggests a significant relationship in the case of all nine sets of data discussed in the chapter. That is to say, there is a relationship between the teacher's general score and the child's actual questionnaire score; between the teacher's general score and the child's desired questionnaire score; between the teacher's general score and the teacher's questionnaire score; between the child's actual questionnaire score and the child's desired questionnaire score; between the child's actual questionnaire score and the teacher's questionnaire score; between the child's desired score and the teacher's questionnaire score; between the peer votes and the child's actual questionnaire score; between the peer votes and the child's desired questionnaire score; and between the peer votes and the teacher's questionnaire score.

The Pearson Product Moment Correlation similarly shows all the relationships identified to be significant, with the exception of two: the relationships between the child actual questionnaire and the teacher questionnaire, and between the child desired questionnaire and the teacher questionnaire. It is interesting that of these two sets of variables, the common difference between them is that of the teacher questionnaire. This would suggest that perhaps the teachers' impressions of the children's skilfulness socially is at variance with those of the children generally. This may be a result of the requirements of being socially successful in the world of peers being at variance with the requirements of the adult world; and of course, the questionnaire was based on perceptions of social skills elicited from the children themselves, and not on other tests or the perceptions of adults. Having noted this, however, I have to add, firstly, that the c51 & 53 analysis was only just outside the significance level on the PPMC, both analyses being significant on the ANOVA; and secondly, that looking at the descriptive data (see chapter 6), I was struck by the similarity of the teacher's assessment with that of the child's assessment of him/herself in the actual questionnaire, though not the desired. It may therefore be that the impression gained from the descriptive data is correct - that the child's assessment of his/her actual behaviour, and the teacher's assessment of the child's behaviour, show a considerable degree of similarity, unlike the child's desired questionnaire and the teacher questionnaire, which show less similarity.

The function of the regression analyses was primarily to identify those children whose results were falling a long way from the regression line, and having a considerable influence upon it - children whose results might then be considered more carefully in an assessment situation. The lists of such results, with subject numbers, are to be found throughout this chapter, "X" denoting considerable influence.

The r^2 values summarized above are included in an attempt to assess the findings of the present study as stringently as possible, since, statistically, the unsquared correlation can give the impression of a stronger relationship than that denoted by r^2 . The r^2 values suggest that little variance in Y is associated with differences in X in most of the combinations under consideration. The only two results which attribute more than 11% variance in Y to X are c20 & 53 (the teacher general score and teacher questionnaire score) - a result one would expect; and c51 & 52 (the child actual and desired questionnaires).

5.14 Validation of the "Zero Response" as the Most Socially Appropriate

Subsequent to the main study, a further analysis of the top 10% (the most popular) and the bottom 10% (the most unpopular) of children on the peer popularity rating was carried out, in order to ascertain if the zero scores of each group differed on the desired questionnaire (representing the child's "ideal" behaviour). One would expect, if the zero response is indeed the most appropriate or skilled response in the situations described in the questionnaire, that the most popular children would more frequently choose that option, and conversely, that the most unpopular children would less frequently choose that option. I list below, therefore, the 22 subjects who attained the best peer popularity rating and the 22 who attained the worst.

<u>Popular subjects</u>	<u>Zero responses</u>	<u>Unpopular subjects</u>	<u>Zero responses</u>
26	19	15	13
29	21	16	25
35	27	121	23
39	12	132	21
40	19	140	21
43	27	141	17
45	20	142	26
47	29	143	29
52	28	148	18
61	26	150	09
96	29	163	18
97	17	170	11
99	26	173	10
101	25	176	17
107	28	177	17
112	27	182	22
114	25	192	24
118	27	199	16
120	26	200	25
125	24	204	13
127	23	210	08
128	27	219	18

The average zero scores and standard deviation for the popular group desired scores and the unpopular group desired scores are as follows:

<u>Popular Group</u>	<u>Unpopular Group</u>
x = 24.18	x = 18.22
s ² = 19.48	s ² = 34.66

It is apparent from these results that the popular group scores closer to zero on the desired questionnaire, and that the range of variation across scores is much less for the popular group.

So far as the t-test results for the desired questionnaire (at a 0.001 level of significance) are concerned, a comparison of the means of the two groups results in $t_{\text{observed}} = 3.820$, which is greater than 3.551 (40 degrees of freedom). The null hypothesis that the means are equal is therefore rejected.

To conclude then, the popular group score consistently closer to zero when compared with the unpopular group on the desired questionnaire. There is also considerable discrepancy amongst the scores of the unpopular group when compared with the popular; and a statistically significant difference between the zero scores of the two groups. These results suggest that the total sample was indeed measuring what it is asserted in the dissertation to have been measuring. The zero response represents the most socially appropriate response.

5.15 Test-Retest Results

The test-retest results can be found in Appendix 18. The group who agreed to take part in this important exercise were from an Irish grammar school, though none of these subjects had seen the questionnaire previous to embarking on this stage of the study. The group comprised 6 boys and 25 girls - not as large or balanced a sample as one would have liked, but adequate to provide an indication of reliability nonetheless. A t test confirmed that a relationship existed between the two sets of scores ($t_{\text{obs}} = 9.5577$, significant at 0.01), as one would anticipate; and the correlation coefficient ($r = 0.7896$, significant at 0.01) indicated a strong relationship between the two sets of scores which would imply that the questionnaire is reliable. It compares favourably in terms of reliability with those recommended by Furnham (1986). This is especially so, as the potential for diversity of results is much greater than in these. There are five optional answers rather than two, which would be the more frequently used format; and even if a child scored -1 in one questionnaire and opted for -2 in the second, this small difference in score is still accounted for in the difference between the two sets of scores. Thus, an r value of 0.7896 seems quite encouraging in terms of the reliability of the questionnaire. It should be noted, however, that the problem with using an r value to measure reliability is that it can give

the impression of indicating a stronger relationship between two sets of scores than would be true in real terms. This is demonstrated in McCall (1975), where he compares r with r squared values. He points out that the r value has to be above 0.71 before 0.49 on the r squared scale is exceeded. In real terms then, this statistic means that more than half the variability in Y is attributable to X - which of course makes us also realise that the remaining percentage (less than half) is due to other factors. Until statisticians and mathematicians devise even better means of assessing findings from research, however, it is at least possible to say that the present measure compares favourably with other social skill assessment questionnaires.

6. ANALYSIS OF RESULTS: THE DESCRIPTIVE DATA

6.1 Introduction

This chapter comprises four parts. In 6.2, some general observations will be made about the descriptive data and the implications thereof. In 6.3, the exceptions to the general pattern will be discussed, in keeping with the commitment outlined in chapter 2 to treat all the data with equal consideration. In 6.4, the video assessment which formed part of this study will be evaluated. In 6.5, a piece of research additional to the main study is described and evaluated, the purpose of which is to offer further validation of the new bipolar measure presented here. Throughout the discussion the reader is invited to refer to the appendices cited, in order to check the validity of the conclusions.

6.2 A General Discussion of the Results from the Present Study

6.2.1 Percentage of Zero Scores

Appendix 8 shows the percentage of zero scores (divided into six categories; 0-5, 6-10, 11-15, 16-20, 21-25 and 26-29) on the actual and desired questionnaires, across the sample. The results indicate that the children in this study desired to behave more in the zero category than the extent to which they assessed themselves to do in real circumstances. A very small number (5.5%) assessed themselves to be in the 0-10 zeros category, and almost the same figure (5%) desired to be in that category. The percentage scoring in the 11-20 category on the actual questionnaire was much higher than on the desired questionnaire (over 40% fell within the 16-20 range), but this pattern was reversed for the 21-29 category (over 40% desired to be in the 21-25 range and 21%, compared with 3% on the actual questionnaire, desired to be in the 26-29 range). This would suggest that children are capable of possessing a knowledge of social skills, and also a desire to manifest those skills to their full potential, but find themselves unable to translate that desire into action in real life situations.

6.2.2 Pattern of Response

Appendices 4 and 5 show an analysis of the pattern of response to each of the 29 questions on the actual and desired questionnaires. On the actual questionnaire, 19 of the 29 questions fell below 70% in the zero category, whereas on the desired questionnaire only 7 fell below 70% (see further 6.3.2 below). This again indicates that children generally agree on which behaviour is the most appropriate and which behaviour they would like to adopt, but can distinguish quite ably between the behaviour which they most normally adopt and the way in which they would like to behave. It is also interesting to note throughout the questionnaires that where zero is not the most popular actual or desired option, there is considerable agreement amongst the children on which is the most likely or the most appropriate option. On the actual questionnaire, only questions 11, 12, 14, 28 and 29 have a reasonable balance of response to either side of the scale outside the zero category. All the others have a strong leaning to one side or the other. On the desired questionnaire, only question 23 has no strong leaning to one side or the other outside the zero category. In all the other questions there is considerable agreement among the children on where the appropriate behaviour for their social milieu is located. This is encouraging, as it suggests that the wording of the questions in general is meaningful and appropriate to this group of children. Furthermore, it also enables one to identify the questions already mentioned where considerable agreement does not occur to be regarded cautiously as possibly "weak" questions which may need to be omitted or clarified to improve the questionnaire.

6.2.3 Total Number of Zeros (Boys Compared with Girls)

Appendix 9 shows the total number of zeros in each of the 6 categories for the boys compared with the girls on both the actual and desired questionnaires. From this it is clear that the pattern for both sexes is similar on the actual questionnaire and on the desired questionnaire. On the actual questionnaire the majority of boys and girls fall into the 16-20 range, and on the desired questionnaire the majority in both groups fall into the 21-25 range. Outside those ranges, girls do appear to rate

themselves as being more skilled (i.e. having more zero choices) in real situations, and also desire to behave more frequently as described in the zero choice. More boys than girls fell into the 0-15 zero range on both the actual and desired questionnaires.

6.2.4 Pattern of Response by Nationality and School

Appendix 9 also shows the pattern of response of the Irish, English and Scottish participants (though the Scottish sample, it must be remembered, only completed the actual questionnaires). A slightly different pattern emerged here amongst the three different nationalities. In both the Irish and English samples, the majority fell into the 16-20 range on the actual questionnaire. On the desired questionnaire, however, the English sample still peaked in the 16-20 range (although the percentages in both the 21-25 and 26-29 ranges increased), whereas the majority of the Irish sample peaked on the 21-25 range, and also had a higher percentage than the English sample falling into the 26-29 range. The Irish group seemed to assess themselves more critically on their actual behaviour, but their knowledge of appropriate social behaviour appeared to be better than the English group. It does have to be added, though, that the Irish group comprised grammar school children exclusively (albeit from different schools), while the English sample comprised secondary modern and remedial children, as well as grammar school children. It is unfortunate that we do not have results for the desired questionnaire and also a greater number of subjects from the Scottish group. The sample peaked (marginally) in the 21-25 range on the actual questionnaire and also had the highest percentage of the three falling into the 26-29 range on the actual questionnaire. It would be interesting to see if this pattern held true with a larger sample, and whether the desired results would be correspondingly in the higher range of zero choices.

Appendix 9 further shows the results for the grammar, secondary modern, remedial and comprehensive groups. On the actual questionnaire, a similar pattern exists between the grammar, secondary modern and remedial groups; but the comprehensive group's pattern is slightly different. The first three groups all have the majority of children within them falling in the 16-20 range, while the comprehensive group peaks (marginally) in the 21-25

range. It also has a much higher percentage of children falling in the 26-29 range than do the other three groups. As the comprehensive group is exclusively Scottish, the comments above with reference to the Scottish group also apply here, and therefore will not be repeated. On the desired questionnaire, each of the three remaining groups has a different pattern. The remedial group peak in the 16-20 range, with no children scoring in the 26-29 range; about a third of the secondary modern group fall into the 16-20 range, with about a quarter falling in the 26-29 range; and the grammar school children have half the sample falling in the 21-25 range, with just under a quarter falling in the 26-29 range. Over 70%, then, of the grammar school children fall in the 21+ range on the desired questionnaire, compared with 25% of the remedial group and 39% of the secondary modern group. The question which immediately springs to mind is whether this observation implies that grammar school children are more knowledgeable about appropriate social skills and, if so, are therefore more successful socially than children from other types of school, even though their own judgement of their actual behaviour is more comparable with the other groups. This question cannot be answered in this study, however, because the groups are too imbalanced numerically and compositionally. That is, the Irish group are also exclusively grammar school children; the secondary modern are mixed, with only a small grammar school component; and the remedial and comprehensive groups are very small in comparison with the other two. To identify one particular characteristic which is attributable to a statistical observation is therefore impossible.

6.2.5 Boys and Girls: General Comparison

Appendix 7 shows the number of responses to each question on the desired questionnaire in the -2, -1, 0, +1 and +2 categories for the boys and the girls in the sample. It is interesting that of the 29 questions, the girls have a higher zero score than the boys in 17 of them; that there is a tie in 4 of them (5, 8, 11 and 13); and that in the remainder, 8 in all, the boys score higher than the girls in the zero category. The latter 8 questions are numbers 2, 10, 12, 15, 20, 23, 26 and 27.

Question 2 is about how much we use our hands when talking. Both the boys' and girls' zero scores were low, with a heavy leaning to the minus side of the scale. Girls were even less enthusiastic about using their hands than boys. This surprised me, as my intuitive impression was that females gesticulated more than males. It would be interesting to ascertain if there is some positive association which girls have (e.g. demureness, shyness, sweetness) with regard to not gesticulating; and conversely, if there is some negative association with gesticulation (e.g. aggressiveness, forcefulness, pushiness).

Question 10 has only 1% difference between the boys and girls zero scores, and since the remainder of the distribution of answers is almost the same for both sexes too, no further comment is required.

Question 12 has 6% fewer girls than boys opting for the zero category, and the remainder of both samples leaning to the minus side of the scale. This question is about how easy it is to say sorry to someone of the child's own age. It is not surprising in this instance to find that girls score lower than boys in the zero category (saying sorry if in the wrong, but not otherwise), but higher on the -1 and -2 categories (saying sorry often/sometimes even when not in the wrong). My observations of pre-school and teenage children would suggest that in both age ranges girls find saying sorry much easier than boys. Being able to do so may even be a required part of a girl's social repertoire, whereas saying sorry seems to present boys with difficulty, perhaps because it is not part of a "manly/macho" image. This would certainly be an interesting observation to follow up.

Question 15 similarly shows the girls falling 6% lower than the boys in their desire to please other people they get on well with, and leaning a little more than the boys to the minus side of the scale (trying to please everyone/most people most of the time). Again, from my observations of children this is not a surprising result, except for the fact that almost as many boys opted for the -1 and -2 categories as girls (58% of girls and 54% of boys). This makes one wonder whether boys actually adopt a "don't care what anyone thinks" approach more than girls, which would have been my impression. If so, there is a further question as to whether this is part of the image which boys believe to be necessary for popularity, or, indeed, whether a "macho" positive image still exists as a popular one with boys

during this period of time. An analysis of current popular T.V. and film heroes plus interviews with children might help us to discover which male images are regarded positively and which negatively at the present time.

Question 20, like the other questions, shows a similar distribution of response for both boys and girls. There is only a 3% difference between the girls' and boys' zero scores, with 2% more girls desiring to be to the minus side of the scale and 2% more desiring to be to the plus side. The question is about bullying, and a healthy number of boys and girls desire neither to be bullied nor to bully. Of the rest, 13% of boys and 15% of girls desire to be bullied sometimes or always (only 1% of girls and 2% of boys fall into the latter category); and only 4% of boys and 7% of girls desire to be sometimes a bully of other people (1% of boys desire always to be bullying others).

Question 23 has 5% fewer girls than boys trying to deal with bullies by themselves and calling a teacher if that failed. This is not surprising, since the question did not clarify whether the attackers were the same or a different sex from the child, nor was the context of the bullying given. Girls would probably be less likely to fend off boys physically attacking themselves or someone else, although they might try verbally to defend themselves or others if the bullying took the form primarily of intimidation. The pattern of response outside the zero category for boys and girls on this question was different. No boys desired to "do nothing" compared with 5% of girls; 21% and 19% of boys and girls respectively desired to try to defend themselves or the other person, and would give up if that failed; 8% of boys and 15% of girls would usually call a teacher; and, surprisingly to me, 10% of boys compared with only 3% of girls would always call a teacher. Detailed interpretation of these results would be dependent on knowing the circumstances and context which the child had in mind when answering the question, and for that reason it was a shame that interviews were impossible. It would be fascinating to know why as many as 10% of boys compared with so few girls thought it desirable always to call a teacher in instances of bullying. One could suggest many different scenarios which might explain this observation, but without further information from the children one cannot know how accurate such speculation might be.

Question 26 shows 7% fewer girls than boys desiring to ask questions in class only when necessary, and 6% more girls than boys preferring not to ask questions even if the questions are necessary. It is possible that more girls than boys prefer to be anonymous in class, and this may or may not be indicative of a positive image of quietness and shyness on the part of girls. Fortunately, over 80% of both boys and girls did want to be able to ask necessary questions, and only 1% of both boys and girls wanted to ask questions all the time. This seems a healthy balance for the smooth functioning of the class, both from the teacher's point of view and that of the pupils.

Question 27 shows only 2% fewer girls than boys choosing the zero option (i.e. responding to praise from a teacher by feeling pleased, but not letting it show to classmates too much). The overall pattern was slightly different, with 7% more girls than boys desiring to be embarrassed and wishing that the teacher had said nothing, and 4% more boys than girls desiring to respond to praise by going on about it to their friends.

These, then, were the eight questions on the desired questionnaire in which the boys scored higher than the girls in the zero category. A further interesting observation is that, overall, when the zero scores of the boys for the desired questionnaire were compared with those of the girls (see Appendix 7), there were only four questions where there was a 10% or more difference in the percentage of children choosing zero. This would indicate that no radical difference in terms of general response between the two sexes existed. The four questions where a large difference is apparent are numbers 6, 24, 25 and 29.

Question 6 is on the subject of starting a conversation with a teacher, and the distribution of response is very interesting. Nearly a third of the boys in the study said they desired "never to" start a conversation with a teacher or "only if they had to", compared with 23% of girls. 58% of boys said they would desire sometimes to start a conversation with a teacher, compared with 70% of girls (a difference of 12%); and 12% of boys compared with 7% of girls desired to talk to the teacher quite a lot - even in preference to peers. The relationship which boys experience with authority figures seems somewhat more difficult than that experienced by girls, and this is an area of interest often to be found in the literature on sex differences in children. When and why this difficulty emerges is not clear, and one would like to discover what images boys have, in

comparison with girls, of themselves and the opposite sex when relating to adult figures generally and to teachers in particular. It would also be interesting to know with which teachers boys experience most difficulty, if any; or whether all adult authority figures are equally difficult to those children who experience difficulty.

Question 24 is on talking to a new peer in the class. There was a 13% difference between boys' and girls' percentages in the zero category. 83% of girls said they would desire to talk to a new member if a chance to do so arose, compared with only 70% of boys. Only 3% of boys and 2% of girls desired never or probably not to approach the new person, while 26% of boys and 15% of girls desired definitely or always to talk to the new member, and to expect the person to stick with them. I found the high percentage of boys (and lower percentage of girls) who desired to initiate contact and to expect the child to stick with them very surprising. One wonders if this reflects a dissatisfaction on the child's part with his (or her) present handling of peer relations and a tendency, rather than trying to improve present relationships (perhaps because that is too difficult to do), to see a new member as new hope for themselves. This new hope may, of course, be short lived, if the characteristics or qualities which have caused the child to experience difficulty with peers are still intact. Adults who have moved around a lot of schools in childhood have told me that on entering a new class one is immediately approached by isolated members of the group, subsequently working one's way up the hierarchical ladder from unpopular to popular peers, leaving those less popular behind. This is obviously anecdotal, "unscientific" information, but I would like in the future systematically to gather such accounts together and compare them with actual observation of the dynamics which occur in a classroom when a new member is introduced.

Question 25, like question 6, is again on the subject of talking to teachers, and was deliberately included to compare responses between the two questions. 88% of girls compared with only 77% of boys said that they desired to talk quite easily to the teachers with whom they got on well. This percentage of boys is up dramatically on the 58% who said in question 6 that they desired only sometimes to start a conversation with a teacher. Correspondingly, the 30% who said in question 6 that they desired never to talk to a teacher, or only if they had to, has become 11% who say they desire never to do so, or to find it easy to do so. This may imply that

the problem does not lie generally with authority figures or adults, but that there are specific personality clashes between certain teachers and children. The percentage of both boys and girls choosing the +1 and +2 categories (talking to teachers in preference to classmates) also doubled for both groups in this question. Adding the phrase "get on well with" may have focussed the children's minds on specific teachers about whom they felt positive, and made the results somewhat different from each other.

Question 29, of all the 29 questions, has the greatest difference between boys and girls in the zero category. The topic is "being told off unjustly"; and 86% of girls would want to handle such a situation by explaining things, compared with only 72% of boys. The remainder of the boys were fairly evenly divided between those who desired to feel angry and upset and refuse to, or only reluctantly, give an explanation (about 14%), and those who desired to accept the rebuke and either say nothing to anyone or complain to friends (about 13%). The girls were similarly spread to either side of the scale, but the percentage choosing outside the zero option was much smaller - only 7% and 6% respectively. One would like to explore the idea of "justice" and the importance it has to each sex, as well as possible sex differences in responding to other peoples failings.

6.2.6 Boys and Girls: Responses According to Type of School

Appendix 15 gives the responses on the desired questionnaire according to type of school.

6.2.6.1 Grammar Schools

The grammar school children showed the smallest number of differences between boys and girls on the desired questionnaire of the 3 types of school concerned. Twelve questions showed a difference of 10% or more - questions 3 (11%), 4 (10%), 6 (17%), 13 (13%), 14 (12%), 15 (11%), 20 (10%), 21 (19%), 24 (10%), 25 (11%), 28 (14%) and 29 (18%). Of the 4 questions showing the greatest differences (6, 21, 28 and 29), questions 6 and 29 have already been discussed in the section on large differences between boys and girls scores across the whole sample. Question 21 is on

the subject of response to bullying. Here 57% of the girls said they desired to stop the bullies by joking or by being good at something they would admire, compared with only 38% of the boys. 50% of the boys desired to become angry and shout or fight back, compared with 28% of girls. Only 12% of boys and 16% of girls desired to either accept it or say it was unfair. Question 28 is on the subject of response to just (i.e. fair) punishment. 91% of girls said they desired to accept the punishment and say and show they were sorry, compared with only 73% of boys. 15% of boys did not want to say sorry or show how they felt, compared with 6% of girls; and 13% of boys wanted to show their anger and desired never or only sometimes to say sorry, compared with only 3% of girls.

6.2.6.2 Secondary Modern Schools

There were 19 differences of 10% or more between the secondary modern boys and girls. These occurred on questions 2 (17%), 4 (28%), 6 (11%), 7 (33%), 9 (28%), 11 (11%), 13 (27%), 14 (14%), 16 (17%), 17 (20%), 18 (16%), 20 (21%), 21 (27%), 24 (27%), 25 (20%), 26 (23%), 27 (11%), 29 (11%) and 30(14%). Of these, the eight with the greatest difference between the zero scores for boys and girls in order of the magnitude of the difference were questions 7, 4, 9, 13, 20, 21, 24 and 26. Four of the eight showed the boys scoring higher than the girls (13, 20, 21 and 26), and four showed the girls scoring higher than the boys (4, 7, 9 and 24).

Question 13 is on the subject of unreasonable requests from peers. No boys, compared with 17% of girls, desired to give in to the request rather than assert themselves. 19% of boys, compared with 4% of girls, in contrast desired to refuse in a very unpleasant way, whereas 30% of girls, compared with 6% of boys, desired to refuse in quite an unpleasant way. Apart from the 19% of boys who wanted to behave unpleasantly, the remainder were placed in the "refuse firmly" category. Why so many of the girls desired to refuse in quite an unpleasant way is unclear. It is possible that they believed refusing firmly would not have been a strong enough response to deter the other person.

Questions 20 and 21 are both on the subject of bullying, and the results here I found surprising. While over half of the boys desired never to bully nor be bullied, only 35% of girls expressed the same wish and 30%

of them (compared with 12% of boys) desired sometimes to bully others. Similarly, nearly half the sample of boys desired to get the bullies to stop by joking or achieving status, compared with only 17% of girls. 19% of boys and 22% of girls preferred the "become angry and shout" option, while 44% of girls, compared with only 31% of boys, preferred the "fight back" option. This is certainly a major difference between the pattern of the grammar school and secondary modern girls and boys, and raises some very interesting questions which I hope to investigate at a later date.

Question 26 is on the subject of asking questions in class. Here the boys are firmly rooted in the zero category, "only when you need to" (88%), with the remainder (6% and 6% respectively) opting for "often" and "all the time". 65% of girls also choose zero, but over a quarter opt for "usually not" (22%) or "never" (4%). This again contrasts with the grammar school children (both boys and girls), where nearly 90% of both groups opted for the zero category. There certainly appears to be a more complex picture emerging than that of differences in social responses appropriate for girls compared with boys. It seems that the type of school where the boy or girl has to function acts as a further filter in determining what constitutes a skilled response to a situation.

The response pattern for the other four questions is less surprising than for these. Question 4 is on the subject of smiling. Here 78% of girls, compared with 50% of boys, desired to smile quite a lot, but never at something unpleasant or inappropriate. This is again a much lower percentage than that of grammar school children. 31% of boys said they desired to smile sometimes just to themselves, or when something unpleasant had occurred, compared with only 4% of girls. Similarly question 7, on the subject of initiating conversation with classmates, showed 83% of girls, compared with 50% of boys, opting for the zero alternative "can start to chat easily to almost all your classmates". 19% of boys desired never to initiate conversation with classmates (compared with only 2% of grammar school boys and 0% of secondary modern girls). The remainder of the girls (9% in each case) opted for either the "sometimes" or "quite a lot" categories. Question 9, "responding to compliments", showed 78% of girls desiring to respond by feeling pleased and thanking the person, and 22% desiring to feel a little embarrassed but deep down quite pleased. Boys, however, responded differently. 50% desired to respond by feeling pleased and thanking the person; 31% preferred to feel a little embarrassed but

pleased; and 19% did not want to thank the person, but felt that they should receive compliments more - that they were not sufficiently appreciated. Question 24 is again (like question 7) about initiating contact - this time with a new classmate. 83% of girls chose the zero category ("would try to talk to them when an opportunity arose"); 9% said they would definitely like to approach the person and to expect loyalty from the newcomer; and the other 9% that they desired to be the first to initiate contact, and to expect loyalty from the newcomer. This compared with 56% of boys who opted for zero, with the remainder dividing up evenly between those who desired "never" to initiate contact, those who desired definitely to do so and those who desired always to do so (and to expect loyalty). A further 6% said they desired "probably not" to initiate contact. The pattern inherent in each of these four questions is more predictable and in line with the results from the grammar school group, whereas the earlier four questions would suggest that a closer analysis of which skills are appropriate for which contexts needs to be undertaken.

6.2.6.3 The Remedial Group

The remedial group was so small (6 boys, 6 girls) compared with the other groups that one can only make some tentative general observations about their results in comparison with the other groups. The raw scores are actually more informative in this instance than the percentages (see Appendix 6). Surprisingly, compared with the results from the other groups, more boys scored more frequently in the zero category than did girls. Of the 29 questions, more girls than boys opted for zero on only 10 occasions. When comparing the differential between the zero choices for boys and girls, only 5 questions showed boys and girls choosing somewhat differently. In questions 2, 3 and 21, three more boys than girls opted for zero; and in questions 16 and 25, three more girls than boys opted for zero.

Question 2 was on the subject of people using their hands when talking. 2 girls said they desired never to use their hands; 3 said they desired to use their hands less often than classmates; and only one said she desired to use her hands about the same amount as her classmates. In contrast, 4 boys said they would prefer to use their hands about the same amount as

classmates, and 2 said they would prefer never to use their hands. In question 3, on the subject of touching, 5 boys (compared with 2 girls) said they desired to touch others and be touched when it was natural to do so, and only 1 boy (in contrast with 3 girls) said he would prefer hardly ever to touch or be touched. One other girl said she preferred never to touch nor be touched. Question 21, on bullying, showed 4 boys desiring to deal with bullying by joking or being good at something the bullies would admire (in contrast with 1 girl); 1 boy preferring to become angry and shout at the bullies (compared with 2 girls); and 1 boy preferring to become angry and fight back (no girls chose this option). Of the remaining 3 girls, 2 opted for trying to tell the bullies their behaviour was unfair, and 1 preferred just to accept the bullying. Question 16 was the only question upon which all 6 girls agreed that they desired the zero option, which was that when they did badly at something, they would feel disappointed but would determine to do better next time. Only 3 boys opted for this alternative. Of the other 3 boys, 1 said that he desired to feel depressed for a long time afterwards; 1 said that he preferred to feel disappointed but to accept it; and 1 said that he desired to accept it and feel nothing. In question 25, on the subject of talking to teachers, 5 girls said they desired to talk to teachers quite easily (compared with only 2 boys), and 1 said she preferred to talk to the teachers rarely (compared with 2 boys). The remaining 2 boys said they would like to talk to teachers quite a lot, in preference to classmates.

The only other questions to be mentioned here are those which provoked 100% agreement among either the boys or the girls. Question 16, which elicited full agreement among the girls, who all opted for zero, has already been discussed. The only other two questions to be fully agreed upon were questions 1 and 5. In each case all 6 boys agreed that they preferred the zero category. Question 1 is on the subject of eye contact when talking. Here the boys said they would like to look at the other person about the amount which indicated interest (even if they were not really interested). Question 5 is on the subject of voice level when talking. Here the boys agreed that they desired to speak neither too softly nor too loudly - about average.

Again it has to be emphasized with this group that, although it is important that they are represented, irrespective of the number of subjects, the smallness of the group does make general observations and

comparisons with other large groups more difficult. The indications from the results, however, are interesting, and enable tentative hypotheses for the future to be made.

6.2.7 Boys and Girls: Responses According to Nationality

The Irish boys and girls differed less and over a smaller range than did the English (see Appendix 15). It has to be emphasized, however, that the Irish group was composed exclusively of grammar school children, while the English group comprised grammar, secondary modern and remedial children. It is therefore impossible to hypothesize about differences in nationality, since potential national differences are inseparable from those potentially resulting from type of school.

Ten questions on the desired questionnaire showed a difference between the Irish boys and girls of 10% or more, compared with fifteen questions where there was a difference between the English boys and girls. The range of difference in the Irish group was also much smaller (the highest difference, for question 29, being 16%) than that for the English group (where the highest difference, for question 20, was 29%). The top ten questions in order of the magnitude of difference for the Irish group were 29, 3, 6, 13, 21, 4, 24, 28, 14 and 19. For the English group the top ten questions were 20, 13, 25, 17, 16, 19, 3, 21, 24, 26 and 27. It is interesting that of these questions, 5 are common to both groups (3, 13, 19, 21 and 24). These five may provide a clue to sex differences in appropriate social skills across nationality and/or type of school.

Question 3 is on the subject of touching. Here the result is surprising. Both groups obviously show a distinct sex difference in their response to this question, but not in the same direction. The Irish girls are much happier to touch and be touched, providing it is done in a natural way, than are Irish boys. The English boys, in contrast, are much happier to touch and be touched naturally than are the English girls. It is possible that these two groups are envisaging different scenarios when they are responding to the question. For example, the English boys may be envisaging a playtime "rough and tumble" and the Irish boys may be imagining a more formal classroom situation. Alternatively, it may be that the cultural patterns operating in the two countries stimulate a different

response to touching and being touched. The former possibility needs to be closely considered, as this could be an important weakness in the questionnaire. One may need to ask each question, and then request the child (in an interview, preferably, or written form) to clarify the context which the child is envisaging when (s)he is deciding upon how to respond.

Question 13 is on the subject of unreasonable requests. Here again the boys and girls of both groups differ markedly in the answer, but in opposite directions. The Irish girls thought it more appropriate to refuse firmly than did the boys, 24% of whom desired to give in to the other person often or always. In contrast, 71% of English boys preferred to refuse firmly, compared with 45% of English girls. The remainder of these girls were spread fairly evenly between either giving in often (27%) or refusing in a quite or very unpleasant way (27%). The same comments apply here as in question 3. Further questioning of the children would be necessary to determine if this is a cultural sex difference in responding socially to a difficult situation, or whether the children have different social contexts in mind. If context is important but unclear, this would be a weakness of the questionnaire.

Question 19 is on the subject of mixing with the opposite sex. Yet again the sexes disagree, but in opposite directions according to nationality. The Irish girls almost unanimously (98%) said they desired to get on well with the opposite sex, compared with 88% of the boys. This is admittedly not actually a very large difference, but the Irish group did not vary so widely between sexes as did the English group. The English boys similarly showed a strong preference for getting on well with girls (81% chose zero), but this was in marked contrast with the English girls, only 62% of whom chose zero and 34% of whom preferred not to mix with boys or to be alone. This is a very interesting observation, and one which stimulates many questions. If this is a cultural difference then one wonders why English girls are so much less enthusiastic about getting along with the opposite sex than the other groups. Again it is essential to discover the scenarios or situations the children have in mind when answering a question such as this, in order to discover the reasons behind these varying patterns of response.

Question 21 is on response to bullying. Here again the sex differences between the two groups go in different directions. 57% of the Irish girls desired to get the bullies to stop by joking or being good at something

they would admire, compared with 44% of Irish boys. 32% of the Irish boys preferred to fight back, and this figure was reflected, but to an even greater extent, by the English boys, 50% of whom preferred to fight back and 33% of whom would choose to joke or become good at something admirable. The English girls, however, in marked contrast with the Irish girls, chose primarily to fight back (34%) or shout at the bully (24%), and only 17% opted for joking or achieving status as a means of preventing bullying. The implication here is that there may well be cultural differences either in the social situations which arise within the context of Irish and English schools, or in the children's response to those situations.

Question 24 is on the subject of initiating contact with a new class member. Here, for the first time, a similar pattern emerges for the Irish and English boys and for the Irish and English girls. In both nationalities, a high percentage of the girls (83% in both) desired to initiate contact when a chance came to do so, but not to be too "pushy". Only 15% of the Irish and 14% of the English girls desired to initiate contact immediately and to expect loyalty from the newcomer. 71% of the Irish and 67% of the English boys, however, would choose that zero alternative; and of the remainder, 28% of the Irish and 24% of the English boys desired to initiate contact immediately or as soon as possible, and to expect loyalty from the person. In this instance, in contrast with all the other situations, the boys compared with the girls seem to follow a pattern which is similar regardless of nationality.

To summarize thus far, it again has to be stressed that due to external circumstances, the composition of this population has not been sufficiently balanced to enable meaningful conclusions to be drawn. It is therefore impossible to differentiate between factors which may be contributing towards a particular pattern of results. The type of school and the nationality of the children are so interwoven that differentiation is impossible. Another major problem is ascertaining whether the context of the social situation which the child has in mind is similar across groups. This could only have been achieved had interviewing individual children proved possible (which it did not). It is my hope in the future to be able to rectify these weaknesses.

In addition to the questions which showed a large difference between girls' and boys' responses and were common to both the Irish and English groups, there are some other questions which require closer scrutiny.

These are questions 29 and 6 for the Irish group (which showed a difference of 16% and 14% respectively - the first and third largest difference in the group); and questions 20, 25, 17 and 16 for the English group (which showed differences of 29%, 23%, 21% and 19% respectively - the first, third, fourth and fifth largest differences in the group). In keeping with the general pattern already observed between the Irish girls and boys, the girls again scored much higher than the boys in the zero category of both questions 29 and 6. In question 29, 91% of the Irish girls, compared with 75% of the Irish boys, said their preference when told off unjustly was to explain the actual circumstances. The remainder of the boys were divided between the 16% who said that they desired to refuse to justify themselves (but to complain to friends) and the 9% who said that they desired to express their anger and either to refuse to give, or only reluctantly to give, an explanation. In question 6, 75% of the Irish girls compared with 61% of the Irish boys said that they desired sometimes to start a conversation with a teacher if they felt like doing so. Of the remaining children, 20% of girls compared with 30% of boys said never, or only if they had to, would they desire to start a conversation with a teacher. Once again, the impression given by these responses is that the Irish girls are more desirous of easy social functioning with adults and members of the same and opposite sexes.

The most notable difference between the English girls and the English boys was in their response to question 20, on the subject of bullying. 67% of boys in contrast with only 38% of girls said their preference was neither to bully nor be bullied. 9% of boys compared with 24% of girls desired to be a bully sometimes; and 21% of boys compared with 31% of girls preferred to be bullied sometimes. What this latter group actually means by this response can in some cases be uncovered by looking at the individual questionnaires. If a child says (s)he is actually always bullied, then to prefer to be sometimes bullied makes sense. However, some children seem actually to be bullied sometimes and also desire to be bullied sometimes. These children would need to be interviewed to ensure that the child has understood the difference between "actual" and "desired", and, if his/her understanding is adequate, to clarify the rationale behind his/her choice. Question 25 is on the subject of talking to teachers. Here the English girls responded similarly to the Irish girls. 83% of girls compared with 60% of boys said they would prefer to

talk easily at least to those teachers with whom they got on well. The remainder of the boys were divided between the 19% (compared with 10% of girls) who said that they desired not to talk to their teachers, and the 22% (compared with 7% of girls) who said that they would prefer to talk to teachers rather than to classmates. This would imply that girls tend to find conversing with adults easier than do boys, as the results for the Irish group in this instance were similar.

Questions 16 and 17 are both on the subject of responding to failure and therefore will be considered together. On the subject of reasons for failing (question 17), 59% of girls compared with 38% of boys wanted to attribute failure to themselves and other factors, depending on circumstances. 45% of boys, in contrast with 35% of girls, wanted to attribute failure mostly or totally to themselves. 7% of girls, compared with 17% of boys, wanted to attribute failure mostly or totally to other factors, rather than to themselves. On the subject of emotional reaction to failure (question 16), 69% of girls compared with only 50% of boys said they would like to respond to failure by feeling disappointed for a while, but deciding to do better next time; whereas 38% of boys compared with only 21% of girls said that they would prefer to respond by just accepting it. 12% of boys and 10% of girls said they preferred to feel depressed or disappointed for some time. This pattern is very different from the Irish one, where the majority of both girls and boys (65% in both sexes) wanted to feel disappointed but to determine to do better, and where similar percentages of both boys and girls (28% and 34% respectively) preferred just to accept it. With regard to attribution of failure, 46% of boys and 43% of girls preferred to attribute cause to themselves and other factors, partly depending on external circumstances, and 44% of boys and 49% of girls desired to blame themselves mostly or totally. This certainly seems to be one social situation where cultural differences (or possibly type of school) are markedly more influential than sex differences.

6.2.8 Overall Patterns of Answering across Nationality and School Type

From Appendix 16 it is possible to see that the maximum range of variability for 18 of the 29 questions in their zero scores on the desired questionnaire is 25% or less. This level of variability over so many

questions would seem to encourage an optimistic view with regard to discovering a consensus about what constitutes skilful behaviour between children of varying nationalities and school types. 11 of the questions, however, had a range of variability exceeding 25%. These were questions 7, 9, 10, 12, 17, 19, 20, 23, 25, 27 and 28, which are discussed immediately below. We shall then go on to discuss the seven questions (5, 6, 11, 15, 16, 17 and 29) for which the grammar school group, unusually, did not have the highest zero score of the three groups which completed the desired questionnaire.

Question 7, on the subject of starting a conversation with classmates, had 93% of the grammar school children opting for zero ("being able to start a conversation easily with almost all"). This contrasted with 69% of secondary modern children and 67% of remedial children. Based upon the tentative assumption that this difference is a genuine one, and not attributable to the unevenness of the sample, it should be noted that it could also be a difference of culture rather than type of school. It is interesting that the actual scores for the comprehensive school are quite close (82%) to the desired scores for the grammar schools, while the scores for the secondary modern and remedial groups are similarly close to each other. This may suggest that differences exist in the choice of the appropriate social skill, depending on the culture or school type involved. This would be an interesting question to discuss with the four groups concerned.

Question 9, on responding to compliments, showed 89% of the grammar school group choosing zero ("feeling very pleased and thanking the person"), and the other two groups scoring 58% and 67%. This pattern fits the general one of the grammar school being ahead of the others in the number of children opting for zero, but the difference in range is more marked than in most of the other questions.

Question 10, in contrast, has the grammar and secondary modern groups scoring remarkably similarly to each other (73% and 72% respectively), with the remedial group scoring only 42%. One cannot comment too much on this statistic, given the small number of subjects in the remedial group, but it is noteworthy that the other two groups scored so closely together. The subject of the question is "talking about oneself", and the zero option is "talk easily about yourself if someone asks, but like to show an interest in other people too". This alternative seems generally agreed across

groups and nationalities to be the most appropriate socially, and it is interesting that the actual scores for the Scottish comprehensive also tie in very closely (73%).

Question 12 again found the grammar group scoring highly (62%), with quite considerable variation between the secondary modern and remedial groups this time (49% and 25% respectively). The subject is "saying sorry to someone of your own age", and the zero option is "easy enough if you are in the wrong, but do not say it if something is not your fault". Even with the small number of subjects in the remedial group, this seems a surprisingly low response for this group, and one would like to investigate further. It is also a low percentage for the secondary modern group, and again one wonders why this should be. In certain areas of behaviour, the secondary modern group seem to have a different code of social conduct than the grammar school group, and it is these differences which are important when confronting the issue of which behaviours are appropriate ones and need to be mastered in order to function in a social world.

Question 17, on attribution of failure, has the joint highest variation of all between the three groups. The grammar school scored lower for this question (43%) in the percentage of children choosing zero than the secondary modern group (62%), though both scored higher than the remedial group (17%). The grammar group opted more towards blaming themselves for failure, but it is impossible to say if this is a function of culture (Celtic or Calvinist tradition, perhaps: it is interesting that the actual scores for the Scottish comprehensive were very close [45%] to the desired scores for the grammar schools); or type of school.

Question 19, "mixing with people of the opposite sex in class", had the grammar school children scoring highest in the zero category again, with 94% choosing the option "easily - you get on well with most of them". 62% and 67% of the secondary modern and remedial groups respectively showed a similar desire. Again the similarity between the scores of these two groups is surprising.

Question 20 yet again showed the secondary modern and remedial groups scoring similarly. 89% of grammar school children chose the zero category - preferring "never to bully nor be bullied" - contrasting with only 44% of secondary modern children and 58% of remedial children. The reader may remember from the section on differences in answers between the boys and

girls of the secondary modern school that only 35% of the girls preferred the zero option, with 30% preferring to be bullied sometimes and 30% preferring to bully sometimes.

Question 23, on the subject of response to bullying, had the secondary modern and grammar groups scoring more closely together, although all the scores were fairly low in this instance. The zero option was "try to deal with the bullies yourself and if that did not work, call a teacher". The grammar school score for this alternative was 63%, the secondary modern score 54%; the remedial group scored 33%. There was, indeed, no obvious category favoured by the majority of children. The results were spread out considerably, with "giving up if failing to deal with the bullies yourself" perhaps a slightly favoured option. This statistic may reflect the confusion which exists amongst children with regard to the appropriate strategy for dealing with bullying - it is an area of complex social skills which seems largely to be a mystery to children and adults alike.

Question 25 has the grammar and secondary modern schools scoring within about 10% of each other (85% and 74% respectively), and the remedial group scoring 58%. The subject is "talking to teachers", and the zero response was that this was achieved "quite easily, at least with those one got on well with". The small number of remedial children, and the fact that over half of them did choose zero, prevents one from drawing any conclusions about the difference in scoring patterns between the remedial and other groups in this instance.

Question 27 again shows the secondary modern and remedial groups scoring closely together (56% and 50% respectively). The subject here is "response to praise by a teacher", and the zero alternative was "feel pleased, but not let it show too much in case your classmates get jealous and tease you". It is interesting, however, to note that the secondary modern group preferred the plus side of the scale - "feel pleased and go on about it" - and the remedial group the minus side of the scale "get embarrassed and wish the teacher had said nothing". This is where having a bipolar scale is very useful. Without a bipolar scale, one might assume that two groups scoring similarly were responding to the social situation in a similar way, when in fact the opposite could be true, as in this case.

Question 28 has one of the highest differences in range of the whole questionnaire (grammar 82%; secondary modern 54%; and remedial 42%). The subject in this instance is "just (rather than unjust) punishment", and the

zero option was "accept your punishment, say you are sorry and show other people that you are". In contrast to question 27, the remedial group and the secondary modern group shared a similar pattern of response in this case. Both tended to prefer the minus side of the scale - "never show how you feel/sometimes say you are sorry but not want to".

The 7 questions where the grammar school group did not score highest in the zero category will now be considered. Before looking at each individual question, it should be pointed out that in questions 5, 6, 11, 12 and 29 there is a difference of only a few percent between the grammar school group and the highest group. The subject matter of these questions will therefore simply be noted with the scores, and questions 15, 16 and 17 will be discussed more fully.

Question 5 is on the subject of "level of speech", and the zero option was "about average - just right". The percentage for each group's zero preference was as follows: grammar school, 91%; secondary modern, 90%; remedial, 92%. Question 6 is on the subject of initiating conversation with a teacher, and the zero option - "sometimes when you feel like it" - was chosen by 65% of grammar school; 56% of secondary modern; and 67% of remedial children. Question 11, on "listening to others", had 84% of grammar, 87% of secondary modern, and 75% of remedial children preferring to "always listen when someone else is talking, but able to talk easily oneself". Question 29 had 80% of grammar, 69% of secondary modern, and 83% of remedial children preferring to respond to unjust punishment by explaining the situation and clarifying their lack of involvement.

The three questions where the grammar school group had a very low percentage in comparison with the other groups, opting for zero, were questions 15, 16 and 17. It is fascinating that the subject matter of the three questions is "trying to please people" and "response to failure". The zero option for question 15 was "try to please the people you get on well with but not everyone" and the grammar school children were the lowest of all three groups choosing this alternative. Indeed, 35% said they desired "to try to please everyone most of the time" and 27% said that they desired to "try quite hard to please most people". Of the other two groups, the secondary modern school had the majority of the children opting for zero here (nearly 60%), and no distinct predilection towards the minus side of the scale. The remedial group leant towards the minus side of the scale outside of the zero category. Similarly, question 17 had the grammar

school group scoring second out of the three groups (the remedial group was lower), and here the subject was "attribution of failure". Only 43% chose zero, regarding failure as due "to oneself in part and partly other factors - depending upon the situation" with 21% desiring to attribute the cause to themselves mostly and 25% to themselves totally. Like the grammar school group, the other groups tended towards the minus side of the scale in this question, but again the secondary modern had, by far, the highest percentage preferring zero (62%). Question 16 was somewhat different in pattern from the other two questions. Here the grammar school children had the majority of the sample preferring zero, "feeling disappointed for a while but deciding to do better" in response to failure, and with the bias towards the plus side of the scale, i.e. feeling disappointed but accepting it, rather than becoming depressed for a long time. The remedial group had 75% choosing zero. The secondary modern group had 54% preferring the zero option, with somewhat more children outside that category opting for the plus rather than the minus side of the scale.

The limitations of the sample size have already been discussed. It will therefore suffice to note at this juncture that any observations or hypotheses stimulated by these results are within the confines of those limitations. The following observations are those of considerable interest to me, and would form the basis of further investigation.

First of all, the grammar school children were consistently higher than the other groups in their choice of the zero option, which is assumed to be for present purposes the most skilful of the five options on offer. A more varied sample of grammar school children (from England, Scotland and Wales as well as Ireland) should show whether this observation is representative of grammar school children or whether it is predominantly the Irish grammar children who so frequently choose zero. If this pattern of response is representative of grammar school children, then it would be interesting to compare and contrast that particular pattern with those of other groups. One needs to know whether the grammar school group are more skilled than the other groups at skills which each group agrees are appropriate ones; or whether the skills inherent in the present questionnaire are more applicable to a grammar school group. The latter is unlikely, given that the initial group of children questioned about social behaviour in the classroom came from varying schools, and that the leaning that existed was to comprehensive and secondary modern schools. The fact that the secondary

modern group scored persistently lower throughout the questionnaire might indicate either that they are poorer at the social skills encompassed by the questionnaire, or that a different set of skills is necessary in the secondary modern setting. Such a difference in emphasis is crucial to our knowledge and understanding of the social world of the adolescent, and really one could not progress further in developing the questionnaire until such investigation was carried out and clarification obtained.

Secondly, it is fascinating to note more extensively than we have done so far the extent to which the comprehensive group's actual scores throughout the questionnaire, though usually lower than the grammar school group's, were much more similar to those of this group than to those of either of the other two groups (e.g. question 7, comprehensive 82%, grammar 93%; question 10, 73% and 73%; question 12, 68% and 62%; question 17, 45% and 43%; question 20, 82% and 89%; question 27, 81% and 82%). It is impossible to say at this stage whether this is a result of a shared Celtic heritage which predisposes both groups to possessing a similar set of social values and skills, or whether other factors are in operation. To investigate further, one would like, firstly, to make a priority of obtaining desired results for the Scottish comprehensive group as a genuine comparison; and secondly, to investigate the composition of each group more closely to determine whether social class, intelligence or culture could be factors in operation here which might be responsible for the distinct similarity between certain groups in contrast with other groups.

6.2.9 Comparison Between the Zero Scores of the Irish and English Groups

Looking at Appendix 16, it is surprising to me that there is so little variation between these two groups in many of the questions on the desired questionnaire. For example, questions 1, 3, 4, 6, 10, 11, 16, 17 and 18 have a range of variation which is 12% or less. Comparing these scores with the variance on the "type of school" results could enable us to make tentative hypotheses about the differences which might be cultural and those which might be associated more with the type of school. I say tentative because, of course, with the difficulty of obtaining an adequate

cross section of groups represented, an imbalance in the population exists, and therefore the resulting picture of how national groups actually responded could be a distorted one. No conclusion can thus be made with any degree of confidence. Within these limitations, however, those questions which displayed considerable variance across the two groups will be discussed, and the observations which can be tentatively made and could be very helpful in determining the best direction for future research will be outlined.

Two questions from the desired questionnaire had a range of variance across the two nationalities of 25% or more. These were questions 20 and 28. Question 20 showed 91% of the Irish choosing "never to bully nor be bullied", in comparison with only 55% of the English group. One suspects that particularly the secondary modern girls in this group caused the great variation in result. The reader might recall that only a third of these girls chose the zero category, while the remainder were divided almost equally between those who preferred sometimes to be bullied and those who preferred to bully. Question 28, on just punishment, had 85% of the Irish group opting for "accepting the punishment, saying sorry and showing you are", in contrast with only 55% of the English group. The remainder of the latter group was spread to either side of the scale, but with more children opting for not wanting to show any emotion rather than showing anger.

The first observation to be made here is that most of the questions on the questionnaire show little variation in terms of responses, and therefore could be those which are appropriate to this age group across different cultures. These would be the questions which should form the core of a questionnaire were it to be used in different parts of the country. The questions which show wide variation obviously need further investigation to discover why such variance occurs. Is it, for example, the result of lack of clarity in the question regarding social context, or a genuine reflection of cultural difference? The second observation concerns the difficulty of disengaging potential cultural differences from possible "type of school" differences, given the compilation of the population, but enough has been said about this problem already. Thirdly, there seem to be underlying differences (either attributable to culture or other factors) which may prove to be related to the "internal-external locus of control" debate. It had been hoped to include this dimension in the study, but it was impossible to gain possession of a suitable scale for

this age group in time. Indeed, had that been achieved, those schools which did participate may have decided against doing so, because of the additional time which would have been required. This is an area of study for the future, certainly, and one which, in view of the distinct difference here in the pattern of group response to some of the questions discussed earlier (compare, for example, questions 15, 16 and 17 in 6.2.8 above with questions 28 here) may prove fruitful.

6.3 Questions which were Exceptions to the General Pattern of Results Outlined in 6.2

6.3.1 Questions which did not have a Higher Response in the Zero Category of the Desired Questionnaire Compared with the Actual Questionnaire

With the exception of four questions, all the questions on the questionnaire had higher zero scores on the desired questionnaire than on the actual questionnaire (see Appendix 5). This would imply, firstly, that the children comprehended the distinction which they were being asked to make between their actual behaviour and how they would like to behave; and secondly, that the majority of children were also able to judge which behaviour was the most appropriate even though some believed themselves unable to behave in that way. The four questions which did not comply with this general observation are numbers 3, 13, 15 and 23.

In question 3, on "touching people", 81% chose the zero option on the actual questionnaire ("touch other people when it's natural"), with 13.4% and 2.4% choosing -1 and -2 respectively, and 2% and 1.2% choosing +1 and +2 respectively. On the desired questionnaire, the zero option dropped a little to 75%, with the +1 and +2 percentages rising a little to 5.5% and 2.75% respectively, and the -1 and -2 scores becoming 12% and 4.5%. The move from the middle option of 6% seems to be more to the plus side of the scale (with a rise from 3.2% to 8.25% over +1 and +2), with little change in the minus side (15.8% responded to either -1 or -2 in the actual questionnaire, and that percentage rose only slightly to 16.5% in the desired questionnaire). While there is a small movement towards desiring more physical contact with others, it is very small, and a greater number

of children (16.5% of the sample) desired little physical contact of the kind suggested in the questionnaire. It would be interesting, though, to ascertain if it is this particular kind of contact that this 16.5% dislike. I have observed that boys, for example, engage in a very high level of physical contact in general rough and tumble or "pretend" fights and games, and might hit another's arm to gain attention. Other forms of contact (a hand on the arm, for example), however, can produce a negative and sometimes aggressive reaction, and on occasion a verbal questioning of the toucher's masculinity.

In question 13, on "being asked to do something which is very unreasonable", 76% chose 0 on the actual questionnaire ("refuse firmly to do what the other person asks, but not in an unpleasant or rude way"), dropping to 71% on the desired questionnaire. 1.6% and 12% chose -2 and -1 (13.6% total) on the actual questionnaire, which became 1.5% and 16% (17.5% total) on the desired questionnaire. 6.5% and 3.7% chose +1 and +2 (10.2% total) on the actual questionnaire, and those figures became 7.25% and 4% (11.2%) on the desired questionnaire. Once again the difference between the figures on the two questionnaires is small, but the little there is seems to be towards wanting to facilitate the persons request, however unreasonable. It would be interesting to ascertain whether this movement could be attributed to the influence of the traditional moral ethic of self-sacrifice being "good", especially given that a large proportion of the schools in the sample still included Religious Education as part of the syllabus.

In question 15, on "pleasing people", 50% of children chose zero on the actual questionnaire ("try to please the people you get on with but not everyone"), compared with 40.5% on the desired. 29% and 16.5% (totalling 45.5%) opted for -1 and -2 respectively on the actual questionnaire, compared with 23.5% and 32% (totalling 55.5%) on the desired questionnaire. 4.5% and 0.4% chose +1 and +2 respectively on the actual questionnaire, which changed only marginally to 2.5% and 1.5% on the desired questionnaire. The 9.5% change in the zero scores of the two groups and the 5.5% decrease in the -1 group on the actual questionnaire seems to be reflected in the large increase in the -2 group on the desired questionnaire (15.5%). There is a very small change in the +1 and +2 groups on the two questionnaires - a decrease of 2% and an increase of 1% respectively on the desired questionnaire. As with question 13, this is a

movement which I would not have anticipated, and one wonders about the rationale behind desiring to please everyone most of the time. In our society we certainly place great emphasis on children's obedience and compliance. Indeed, it is interesting that the response to the upsurge in the figures on sexual abuse with the recent publicity was to teach children that it was acceptable to say "No" to an adult. It may be that as educators and parents we are failing to provide children with an adequate cognitive framework into which the learning they receive from us can be placed in context. For myself, this particular result was disturbing, given that over 55% of children desired to please everybody or most people (less than 5% made little or no effort to please), and one which I would very much like to investigate further.

In question 23, on being bullied, 79% chose the zero option on the actual questionnaire ("try to deal with the bullies yourself, or call a teacher"), but this figure dropped to 75% on the desired questionnaire. The 0.4% and 4.1% (a total of 4.5%) who chose -2 and -1 respectively on the actual questionnaire became 1.5% and 2% (a total of 3.5%) on the desired questionnaire. The +1 group (14%) did not change, but the +2 group moved from 2% on the actual questionnaire to 7.75% on the desired questionnaire. The 4% decrease in the zero score on the desired questionnaire, plus the 1% from the minus side of the scale, is reflected in the increase on the plus side of the scale. The difference in the figures on this question are small, but they are interesting. One wonders why the 5% who would prefer to call a teacher rather than attempt to deal with the situation do not "actually" do so. One would like to investigate further to see if there is stigma attached to calling a teacher, and if one had to do so, what consequences would have to be faced by the caller.

6.3.2 Questions where the Zero Score was less than 70% on the Desired Questionnaire

21 out of the 29 questions on the desired questionnaire showed 70% or more of the sample desiring to behave in the manner described in the zero option (see Appendix 10). Questions 1, 4, 5, 7, 8, 9, 11, 18, 19, 20, 25, 26 and 30 showed that over 80% of the sample chose zero on the desired questionnaire; while questions 3, 10, 13, 14, 24, 27, 28 and 29 showed that

between 70% and 80% chose zero on the desired questionnaire. With such a large proportion of the sample falling in the zero category, it seems reasonable to assume that that option proved to be the most appropriate one for that age group in that context.

Eight of the 29 questions, however, had less than 70% of the sample opting for zero (questions 2, 6, 12, 15, 16, 17, 21 and 23); and it is necessary to consider these individually, as this would suggest that the zero option for these questions may not be the most socially appropriate one.

In question 2, less than half of the sample fell within the zero range (48.5%), and only 3% and 1% scored +1 and +2 respectively. The remaining half of the sample scored -1 (29%) and -2 (18%). The trend here seems to be that one should be no more physically expressive than one's contemporaries. There is also a strong leaning in favour of minimal or no use of the hands at all. I would very much like to video children to see how much they actually do or do not use their bodies (hands in particular) in communicating; and also to show videos to the children of their peers who are doing so, in order to discover which characteristics are ascribed to those who do gesticulate more than average. It is possible, however, that no particular characteristics are ascribed to those who do use their hands expressively, and (given the problem which there seems to be with bullying, for example) that individual children simply try not to draw attention to themselves in any way. Whatever the reason, we can say that the trend towards what is regarded by the children as being desirable behaviour is very much away from gesticulation.

In question 6, more than half the sample did in fact score zero (63%), but a substantial number also scored -1 (19%). Of the remainder, 8% scored -2, 6.5% scored +1 and 3% scored +2. These last two figures show that there is a group of children, albeit a small one, who seem to feel as much or more at ease with an adult than with their peers, and this would be an interesting group to focus upon. One wonders if they are more at ease with the adult because they are failing to get on with their peers; or whether they are failing with their peers because they relate easily to an adult authority figure; or if they can in fact get on with both groups even if their preference would be for adult conversation. The general response, which I regard positively, is that the children would like to be able to start a conversation with a teacher, mostly when they would choose to do

so, and to a lesser extent if they had to. The "actual" results suggest that the desire to do so is somewhat in excess of the children's ability to initiate conversation. 45% only started a conversation if they had to, and 41% said they started a conversation if they felt like it.

In question 12, as in question 6, more than half the sample scored zero (57%), but a substantial number also scored -1 (21%) and -2 (14.5%). Only 5.5% scored +1, and 2% scored +2. This result was somewhat surprising to me, as I would not have anticipated that 35.5% of the children would prefer to be apologetic, even when there was nothing actually to apologize for. The 7.5% who would have preferred to find it difficult or very difficult to say sorry reflected a decrease of 11.5% from the 19% who actually found it difficult or very difficult to apologize. This 11.5% decrease was correlated with the rise of 6% in the zero category, 4% in the -1 category and 2.2% in the -2 category on the desired questionnaire. Why the shift should be in this direction can only be guessed at, but it is consistent with the other surprising findings mentioned in discussion of earlier questions, and again raises the issue of the extent to which we (i.e. educators and parents) are emphasizing certain values without sufficiently contextualizing them.

Question 15 has already been discussed under 6.3.1 above, because it was one of the four questions which showed a drop in the desired zero score from that of the actual questionnaire. Interestingly, this question had the lowest zero desired score (40.5%) of all the questions on the questionnaire. Only 2.5% and 1.5% (4% total) scored +1 and +2 respectively, the remainder of the sample falling on the minus side of the questionnaire (23.5% scored -1 and 32% scored -2). The figures for the plus side on the actual questionnaire were much the same as on the desired questionnaire, but the zero score was 10% higher (50%), as was the -1 score (29%). The -2 score was considerably lower. Indeed, the -2 score increased on the desired questionnaire by 16.5%, which was the same amount that the 0 and -1 scores decreased. This indicates that just under half of the children taking part wanted to try to please most people or everyone - not just those people with whom they got on quite well. A statistic such as this should cause concern, especially as this surprising result does not occur in isolation, but is in fact consistent with the unexpected pattern emerging from the earlier questions.

Question 16 is the first in this section to show a swing to the plus side of the questionnaire, although the zero score is actually still quite high (63%: there is only a change of 3% between the actual and desired questionnaires). The -2 score hardly changes (3.7% and 3% on the actual and desired questionnaires respectively); the -1 score decreases from 10% on the actual questionnaire to 3% on the desired questionnaire; the +1 score decreases from 23% on the actual questionnaire to 18% on the desired questionnaire; and the +2 score increases from 4.1% on the actual questionnaire to 13% on the desired questionnaire. The 7.7% decrease from the minus side of the scale and the 5% decrease on the +1 score (12.7% total) is reflected in the 3% rise in the zero score and the 9% increase in the +2 score. This is not a surprising result. The embarrassment, and sometimes the pain, of failure are emotions one might well wish one was unable to feel, and it is encouraging that the majority of children both actually do and desire to respond quite realistically but positively.

The zero score for question 17 was the third lowest of all those in the desired questionnaire (45%, compared with 41% on the actual questionnaire). The +1 and +2 scores were quite low (6% and 4.5% respectively, compared with 3.2% and 0.8% on the actual questionnaire). The -1 and -2 scores were both relatively high (22.5% and 22%: an increase of 4.3% on the -2 score and a decrease of 15% on the -1 score on the actual questionnaire). The 15% decrease in the -1 score on the desired questionnaire is reflected in the rise of 4% in the zero category, 4.3% in the -2 category and 3.2% and 0.8% in the +1 and +2 categories respectively. The most interesting observation here is the large number of children falling again to the minus side of the question, and the very small number who desire to be more balanced in their view according to the situation (only a 4% rise in the zero option) or to be more to the plus side (6.5% increase on the plus side). 55% on the actual questionnaire fall within this category, and 44.5% on the desired questionnaire. Perhaps it is a healthy sign to see some movement away from the minus side on the desired questionnaire, where responsibility for failure seems predominantly located in the self; but a large proportion still desire to maintain that belief. Given the pattern which seems to be emerging from the majority of the questions already discussed in this section, this result should not be surprising, but as

with the other questions, it does raise the issue of what sort of image children have of "skilful" or "desirable" behaviour, and whether it is in fact a psychologically healthy one.

Question 21 has the second lowest zero score in the questionnaire (42%), although it is considerably higher than the actual score of 25%. Here the swing in the desired questionnaire is to the plus side (13% and 31.5% scoring +1 and +2 respectively). This reflects a decrease of 13% on the actual +1 score of 26%, and a tiny increase of 0.5% on the +2 score of 31%. The -1 score on the desired questionnaire was 6% (which represented a decrease of 2.6% from the actual score of 8.6%), and the -2 score on the desired questionnaire was 7.75% (just 1.25% less than the actual score of 9%). This question provoked the largest response by far from children writing in the free space. Bullying seems from this response to be a major problem for many children, especially those who try various methods of coping with it and are unsuccessful in their attempts. Physical bullying, rather than verbal alone, may be more of a problem for boys than girls. Girls tended to describe being "picked upon", whereas boys tended to refer more to being assaulted (kicked or hit). I should point out at this stage that the children who ticked zero in question 20 ("never bullied and never a bully of other people") answered question 21 and 23 according to what they imagined they would do if they were bullied. 50% of the children said they were never bullied or never bullies on the actual questionnaire (not surprisingly, this rose to 80% on the desired questionnaire); 13% said they were sometimes a bully of other people; and 0.8% said they were always bullying other people. Quite a large proportion said they were sometimes bullied (33%), and 3.2% very unfortunate children said they were always being bullied by other people. On the desired questionnaire it was encouraging that there was no increase in the number of children wanting to be bullies. 0.5% (1 child) wanted to be "always bullying other children", and 6% (a reduction of 7% from the actual score) desired to be a bully of others "sometimes". I suspect that the 2% (4 children) who said they wanted always to be bullied were trying to be amusing. Their scripts contained drawings or unsolicited comments which implied they were adopting a particular attitude to the questionnaire generally. As to the 12% who said they desired to be bullied sometimes, I was unclear whether they meant that they did not mind being bullied sometimes (rather than always); or whether they meant they would prefer to be bullied rather than to bully; or

whether they actually derived some satisfaction from the attention which bullying brings. This again is where an interview to supplement the questionnaire would have proved invaluable.

It is particularly interesting to note in question 21 that on the desired questionnaire the two less extreme options of +1 and -1 score as poorly as -2. The two most popular options are either "fighting back" (where the desired questionnaire has virtually the same score as the actual questionnaire, perhaps implying either that those who opt for this choice find it successful or that they believe nothing else will be more effective even if it is not successful); and "trying to joke or become good at something the bullies will admire". The increase of 17% of children who desire to choose this alternative is drawn from the large decrease in the -1 option (13%) and the much smaller decreases in the -1 and -2 options (totalling 3.85%). It seems that verbal persuasion or anger alone is insufficient to deter bullies, and option +2 seemed to prove the most successful. It received more "yes" answers to the supplementary question (22), "does whichever of the above (answers) you have chosen make the bullies stop bullying you?", than any of the other options. This observation may warrant a change of strategy in therapy when considering how to respond to this very complex skill of coping with bullies. This issue really required more questions allotted to it than those included in the questionnaire, and a future form of the questionnaire would certainly compensate for this omission.

The zero score for question 23 on the desired questionnaire was relatively high (59.5%, which was an increase of 16.5% on the 43% scored on the actual questionnaire in this category). The next highest category was -1 (20%, which was a decrease of 16% from the 36% scored on the actual questionnaire). The other three categories also showed fairly low scores. -2 elicited a 2.5% response (a decrease of nearly 3% from the actual score of 5.3%); +1 showed 11% of the children opting for this alternative (a decrease of only 1% from 12% scored on the actual questionnaire); and +2 had 7.25% of the sample opting for this alternative (which was an increase of 3.5% on the actual score of 3.7%). About 80% of the children seemed in practice to opt for trying to deal with the bullies themselves, and if that failed either to give up or call a teacher. It is interesting that there was a slight increase in the number who wished they could always call a

teacher rather than attempting to deal with the situation themselves, and a large increase in the number who wished that they could call a teacher if their own efforts failed (the total of both groups came to just over 20%). The increase in these two categories correlates with the decrease of 16% in the number of children from the -1 category (those who gave up in practice if their efforts failed), the decrease of nearly 3% in the -2 category, and the 1% drop in the +1 category. From these observations it seems that the children are reluctant to call a teacher even if they desire to do so, and in practice are prepared to give up defending themselves or another person rather than have an authority figure intervene. The reasons for this could be guessed at (loss of prestige in the eyes of the peer group because authority figures are regarded as the "outsiders"; fear of drawing attention to oneself, thereby heightening the risk of being singled out within the group), but if there is one main lesson to be taken from this study, it is not to place any reliance even upon seemingly logical and coherent guesses when considering the world of the adolescent. The reasons for this observation must therefore remain a mystery for the present, until the children themselves can enlighten us.

6.3.3 Questions where the Difference between the Actual and Desired Zero Score was over 16%

These questions (20, 5, 9, 14, 6, 28, 19, 21, 23) were considered in detail (see Appendix 11) because they may throw some light on whether there are specific areas of behaviour with which children experience difficulty in practice, even when they know which is the most appropriate. Before any conclusions can be drawn about this, however, it is necessary to look at the breakdown of answers to these questions and the individual children's overall pattern of response, to see whether there are any idiosyncratic patterns of individual response that might be affecting the results. The questions where there was a difference between the actual and desired zero score of over 16% will be considered in order of the magnitude of that differential.

6.3.3.1 Question 20 (with 21 and 23)

This question has to be considered in conjunction with questions 21 and 23, even though they show a much smaller differential between the two questionnaire results, because they each provide information on the subject of bullying. Question 20 showed a 30% difference between the two zero scores, the actual being 50% and the desired being 80%. It surprised me that only half of the children in the study had never been bullied or had never bullied themselves. Given the number of children who wrote specifically (and many quite substantially) about bullying in the free space provided, it may be more of a problem than previously realised by professionals, in terms of the psychological consequences of bullying itself and the aura which surrounds it, threatening even those who are not directly victims. It is not surprising, however, that the number of children desiring never to be bullied or a bully jumps to 80% on the desired questionnaire. 33% said they were sometimes actually bullied by others, and this figure dropped by 21% to 12% on the desired questionnaire. Of the 8 children who said they were always bullied, 4 also chose the -2 category on the desired questionnaire. 13% said they sometimes bullied other people, and this dropped to 6% on the desired questionnaire. 2 children said they always bullied others, and this became 1 on the desired questionnaire. Most children then, whether bullies or bullied, desired that they should be neither a bully nor a victim of bullying. As mentioned earlier, this was particularly encouraging, as one might have anticipated a desire to be bullies from those who were actually victims, and this did not occur. The actual and desired scores of the children falling in either the -2 or +2 categories are given below, and these results will then be discussed in conjunction with the overall scores of some of those children.

<u>Subject</u>	<u>Actual</u>	<u>Desired</u>	<u>Details</u>
13	-1	+2	boy from an English grammar
37	-2	0	boy from an Irish grammar
58	-2	0	boy from an Irish grammar
149	0	-2	boy from an English secondary modern
150	-2	+1	boy from an English secondary modern

157	+2	0	boy from an English secondary modern
163	-1	-2	girl from an English secondary modern
170	+2	+1	girl from an English secondary modern
201	-2	-1	boy from an Irish grammar
204	-2	-2	boy from an Irish grammar
218	-2	-1	boy from the remedial unit of an English secondary modern
219	-2	0	boy from the remedial unit of an English secondary modern
220	-2	0	boy from the remedial unit of an English secondary modern
204	-2	-2	boy from an Irish grammar
212	-1	-2	girl from the remedial unit of an English secondary modern

The overall scores are given below for those subjects scoring at either extreme on the desired questionnaire. Subjects 163, 149, 204 and 212 scored -2 on the desired questionnaire; and subject 13 scored +2 on the desired questionnaire.

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>General</u>	<u>Peer Vote</u>
13	1 6 14 6 1	2 2 12 5 7	0 2 20 7 0	5	11/20
149	6 5 12 3 3	6 3 12 4 4	0 0 11 16 0	5	3/20
163	1 6 17 2 3	1 5 18 2 3	0 3 11 11 3	4	1/17
204	9 7 9 1 3	6 8 13 2 0	0 1 25 4 0	5	1/31
212	1 9 16 3 0	3 5 18 2 1	1 6 15 8 0	5	5/11

Subjects 163 and 149 are both placed firmly to the plus side of the scale by the teacher, though they both perceive themselves as being fairly evenly spread to either side of zero on both the actual and desired questionnaires. Neither seems to be aware that they are perceived as being very much to one extreme, and this problem of perception may account for their poor peer votes. Subject 204 seems to regard himself as being much more to the minus side of the scale than his teacher, who places him

predominantly in the middle of the scale. Not only does this child regard himself to be on the minus side, but he also desires to be very much to that side of the scale. This again raises the topic of why the attraction of that side of the scale (among a minority of children) should exist, and how we are to interpret it. Subject 212 is a girl from the remedial group who is regarded by her teacher as average on the general score, and fairly evenly spread either side of zero on those results which fall outside zero. The girl herself has almost the same number of zeros on her questionnaires as the teacher has awarded her, but places herself more to the minus side on the remaining questions on both the actual and desired questionnaires. Subject 13, the only one to opt for the +2 category on the desired questionnaire, shows a desire to be a little more to the plus side of the scale than he already is, and his teacher regards him as being averagely skilled and predominantly in the centre of the scale, leaning a little more to the plus than the minus side, but by no means excessively so. He certainly had a very high peer vote (this is an all-boys grammar school), and it may be that his actual questionnaire results, which show an even spread either side of zero, indicate an ability to adapt his behaviour according to the particular group he is with. His desire, however, seems to be to be more assertive and, rather than suffer the occasional bullying which he sometimes does, to bully the bullies instead.

In questions 21 and 23 (where there was a 17% difference and a 16.5% difference respectively between the two questionnaires), the actual score for the zero category was 25% and 43% respectively, and those figures rose to 42% and 59.5% on the desired questionnaire. It was interesting that the zero option for question 21 came third in popularity, with +2 coming first (31%) and +1 (26%) second. Only 8.6% tried to convince the bullies of the unfairness of their actions (this figure decreasing only marginally to become 6% on the desired questionnaire), and 9% just accepted it and let the bullies go ahead (this figure decreasing by only just over 1% - another puzzling finding). The most popular means of dealing with bullies, then, is to fight back, with shouting at them or trying to joke/being good at something they will admire coming second and third. In question 23, less than half the children in practice tried to deal with the situation themselves and in the event of that failing called a teacher. A surprising 36% would try to defend themselves or another person being bullied, and if that failed would give up. 12% said they would usually call a teacher, and

3.7% said they would always call a teacher. Two of the questions which included the option of calling a teacher at some stage increased on the desired questionnaire. In the zero category, 43% rose to 59.5%; in the +1 category, 12% became 11%; and in the +2 category 3.7% became 7.25%. 5.3% (13 children) said they would do nothing, and this decreased by only 2.8% to become 2.5% (5 children) on the desired questionnaire. This result ties in with the surprising result from question 20, where 8 children said they were always bullied and only 4 showed a desire to change this situation; and with the observation in question 21, that of the 22 children who just accepted the bullying in practice, 17 showed no change from that perspective on the desired questionnaire. It seems that there is a small number of children who believe that they are unable to do anything to change their situation. They have accepted it to such an extent that they are unable to believe that they can change it - some to such a degree that they are devoid of the even the desire to change their circumstances, which is so important in successful therapy of any kind.

6.3.3.2 Question 5

Question 5 had the second (joint) highest difference between the actual and desired questionnaires' zero category (25.5%). 66% of the children thought they spoke at about the correct volume, with 18% saying that they were too loud and 10.3% saying that they were too soft. 2.8% (7 children) rated themselves much too soft, and the same number rated themselves much too loud. This number actually only dropped to 3 and 4 children respectively in the desired questionnaire, which means that again we have this small minority of children who show no desire to be different. 91.5% desired to be in the zero category, and only 2.5% and 2.75% desired to be in the -1 and +1 categories respectively. The decreases in each section of 1.3% (-2), 8% (-1), 15% (+1) and 0.8% (+2), when summed, account for the increase in the zero category of over 25%. It would have been interesting to know if developmental changes occurred in this area of volume control, or whether those children who are being scolded at pre-school for speaking too loudly/softly are still being told off at primary and secondary levels for the same problem.

Below are the actual and desired scores for those subjects who scored at either the +2 or the -2 extreme. This table is followed by the overall scores of those who chose either extreme on the desired questionnaire.

<u>Subject</u>	<u>Actual</u>	<u>Desired</u>	<u>Details</u>
4	+2	+1	boy from an English grammar
11	-2	0	boy from an English grammar
48	+2	0	boy from an Irish grammar
49	-2	0	boy from an Irish grammar
149	-2	-2	boy from an English secondary modern
151	+2	-1	boy from an English secondary modern
153	+1	+2	boy from an English secondary modern
170	0	+2	girl from an English secondary modern
177	-2	0	boy from an English secondary modern
189	-2	0	girl from an Irish grammar
190	0	-2	girl from an Irish grammar
206	+2	+1	boy from an Irish grammar
208	+1	+2	boy from an Irish grammar
210	-2	-1	girl from the remedial unit of an English secondary modern
211	+2	0	girl from the remedial unit of an English secondary modern
219	+2	0	boy from the remedial unit of an English secondary modern
222	+2	n.a.	girl from a Scottish comprehensive
235	-2	n.a.	boy from a Scottish comprehensive

Subjects 149, 189 and 190 scored -2 on their desired questionnaire; while subjects 170, 153, 206 and 208 scored +2 on their desired questionnaire. Their overall scores will now be tabulated.

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>General</u>	<u>Peer Vote</u>
149	6 5 12 3 3	6 3 12 4 4	0 0 11 16 0	5	3/20
153	5 6 13 4 1	1 2 10 1 15	4 6 12 5 0	2	2/20
170	1 2 12 1 9	0 2 11 8 8	0 1 15 8 4	9	1/17
189	2 4 20 2 1	4 6 16 2 1	0 3 22 3 0	7	3/31
190	1 4 20 3 1	4 2 18 1 4	0 7 22 1 0	5	7/31
206	0 3 24 1 1	0 6 19 2 2	0 5 19 6 0	6	9/31
208	1 11 12 5 0	1 9 16 2 1	0 8 13 9 0	3	5/31

It is interesting that of the three children who desired to speak much too softly, two were girls from an Irish grammar school, and they had the highest zero scores of the group (with the exception of a boy from the same school - subject 206). Subject 149, in contrast, had low zero scores on both his actual and desired questionnaires and on his teacher questionnaire. The latter placed him very much on the plus side of the scale, though he sees himself as being fairly evenly spread either side of zero. Since the teacher did not award him even one -1 or -2 result, it seems unlikely that his view of himself (and desire to remain that way) is accurately reflected in his choice of the -2 category.

Subject 189 showed a desire to move a little more to the minus side of the scale generally, with 190 desiring to move only one question to the right and one to the left of zero. Subject 189's teacher general score was quite high (7), and 190's was average (5), but 189's peer vote was lower than 190's. It is possible that these two girls view speaking softly as a positive attribute which may be related to a tendency towards a traditional, sometimes puritanical, perspective of behaviour which has been observed at times throughout this resumé of the questions in the questionnaire. Asking these children to provide adjectives associated with people who speak very loudly/softly may have proved interesting.

Of the four children who desired to be at the other extreme (+2), 3 were boys and one was a girl. Subject 170 (a girl) is already to the plus side of the scale according to both her actual questionnaire and that of the teacher, but she desires to be much more to that extreme. Surprisingly perhaps, she is awarded a very high general score by the teacher (9), which

is an interesting result in itself, but as one might anticipate having considered the overall pattern of results, she has only one peer vote out of 17.

Subjects 153 and 208 both have low zero scores across the whole range of results, including their general score and peer vote. They both described themselves as in the +1 category on the actual questionnaire, but desired to be even more extreme. Subject 206 is interesting in that his zero scores, general score and peer vote are all good. Indeed, this question is the only question in which he placed himself in the +2 category on the actual questionnaire, and one of only two questions on the desired questionnaire where he chose +2. As his general score is above average and his peer vote high, one has to conclude either that this is the appropriate behaviour in his social context, or that because his other skills are so good, this one social deficit does not affect the overall impression of skilfulness which he displays.

6.3.3.3 Question 9

This question tied with question 5 as the second highest difference between the two questionnaires in the zero category (25.5%). 58% said they responded to compliments by feeling pleased and thanking the person (this rose to 83.5% on the desired questionnaire), while 34.5% said they felt very embarrassed but deep down were quite pleased (this dropped to 11% on the desired questionnaire). 5.7% said they did not thank the person because they knew they deserved the compliment (this dropped to 1.5% on the desired questionnaire interestingly); no-one said that they did not thank the person and thought they should get more compliments (though, strangely, 5 children did opt for that alternative on the desired questionnaire); and 4 children were so embarrassed that they wished the person had said nothing (this number remained the same on the desired questionnaire).

The four subjects who scored -2 on the desired questionnaire were subjects 60, 184, 212 and 215. Those scoring -2 on their actual questionnaires were subjects 75, 150, 155 and 161. The children who scored -2 on the desired questionnaire were thus different from those who had similar scores on their actual questionnaires. The five children who scored

+2 on the desired questionnaire were subjects 3, 5, 150, 153 and 177. No subject scored +2 on the actual questionnaire. A resumé of all the scores can be found below.

<u>Subject</u>	<u>Actual</u>	<u>Desired</u>	<u>Details</u>
3	+1	+2	boy from an English grammar
5	+1	+2	boy from an English grammar
60	-1	-2	boy from an Irish grammar
75	-2	0	boy from an Irish grammar
150	-2	+2	boy from an English secondary modern
153	0	+2	boy from an English secondary modern
155	-2	-1	boy from an English secondary modern
161	-2	-1	girl from an English secondary modern
177	0	+2	boy from an English secondary modern
184	-1	-2	girl from an Irish grammar
212	0	-2	girl from the remedial group of an English secondary modern
215	0	-2	girl from the remedial group of an English secondary modern

As a matter of interest, only three subjects scored +1 on the desired questionnaire, and they were numbers 39 (a boy from an Irish grammar school who scored 0 on his actual questionnaire); 131 (a girl from the same school who scored 0 on her actual questionnaire); and 191 (a boy from a different Irish grammar school who scored +1 on his actual questionnaire).

It was interesting to consider the zero scores on all three questionnaires and the general and peer vote score for those subjects who desired to be +2 or -2 on the desired questionnaire. A breakdown of the overall results for these two extreme groups is provided below.

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>General</u>	<u>Peer Vote</u>
3	0 2 18 7 1	1 2 13 6 6	0 0 17 12 0	5	2/20
5	2 3 17 5 1	3 3 14 1 7	0 1 12 16 0	4	3/20
60	1 9 11 6 2	9 5 13 1 1	0 0 27 3 0	9	7/9
150	8 5 7 4 5	0 0 9 7 13	5 9 12 1 0	3	2/20
153	5 6 13 4 1	1 2 10 1 15	4 6 12 5 0	2	2/20
177	1 4 18 4 0	2 3 17 5 2	0 7 20 1 0	7	1/17
184	0 2 27 0 0	11 4 11 3 0	0 3 25 2 0	6	4/31
212	1 9 16 3 0	3 5 18 2 1	1 6 15 8 0	5	5/11
215	3 5 21 0 0	2 5 21 1 0	0 9 17 4 0	7	7/11

It is fascinating to observe that those children desiring to be "very embarrassed" (-2) all have average or above average general scores, and three have extremely high peer votes. In contrast, the group choosing +2 on the desired questionnaire all have poor peer votes, and only two have an average or above average general score. The first group also all desire to remain leaning towards the minus side of the scale, or to be much more to that side, whereas all of the second group desire to be more to the plus side of the scale, and some excessively so. It would be enlightening to ask both of these groups of children which personality attributes they associate with the behaviour described in the +2 and -2 categories, in order to ascertain if the group desiring to be to the plus side believe that that sort of behaviour is positive social behaviour which will enhance their social status, or whether they are deliberately flouting social mores. This is obviously an important piece of information, as one's therapeutic strategy would be very different in the two cases.

It is particularly valuable to have such a range of scores. Any one category by itself might prove puzzling, but the overall picture which is provided by the whole range of results reveals clues as to why certain individual responses seem peculiar (as in the case of the five children above who desired to be in the +2 category when no-one had chosen that option on the actual questionnaire). It is also interesting to note that of the 4 children in the first group opting for the -2 score, 1 was a boy and 3 were girls; while two were from Irish grammar schools, with the other

two from the remedial group. Of the 5 who answered +2, all were boys; 2 were from English grammar schools and 3 were from English secondary modern schools.

6.3.3.4 Question 14

This question showed a 23% difference between the two zero scores. 55% chose zero, 19% chose +1, nearly 5% chose +2, 20% chose -1 and 1.2% chose -2 on the actual questionnaire. On the desired questionnaire the zero figure rose to 78%, and the -1, +1 and +2 figures decreased to 9.5%, 6.5% and 2.75% respectively. This is as one would have anticipated, but the -2 score increased to 3%, which was a rise from 3 to 7 children. Subjects 71 (a girl from an Irish grammar school who scored 0 on her desired questionnaire), 171 (a girl from a secondary modern who scored -1 on her desired questionnaire) and 243 (a boy from a Scottish comprehensive school for whom we have no desired score) were the 3 children who scored -2 on the actual questionnaire. Subjects 6 (a boy from an English grammar school who scored -1 on his actual questionnaire); 48 and 67 (boys from an Irish grammar school who both scored 0 on the actual questionnaire); 161 (a girl from an English secondary modern school who scored 0 on the actual questionnaire); 152 (a boy from the same school who scored +1 on his actual questionnaire); and 180 and 184 (both girls from an Irish grammar school who scored 0 on their actual questionnaire) were the subjects who scored -2 on the desired questionnaire.

It is interesting that none of the children who chose -2 on the actual questionnaire also chose -2 on the desired questionnaire. Two of the three desired scores we have indicate their desired option to be zero. Of the 7 who desired to be in the -2 category, 2 also chose -2 on either the desired or actual questionnaire in question 9: that is, subjects 161 and 184. Their overall scores are given under question 9 and will not be repeated here. Of these 7 children, 4 were boys and 3 girls; 5 were from grammar schools (4 of these pupils being Irish) and 2 were from an English secondary modern; and 5 of the children scored 0 on their actual questionnaires, with one choosing -1 and the other +1. The detailed description of each of these children's scores is provided below.

<u>Subject</u>	<u>Actual</u>	<u>Desired</u>	<u>Details</u>
3	+1	+2	boy from an English grammar
6	-1	-2	boy from an English grammar
12	+2	0	boy from an English grammar
48	0	-2	boy from an Irish grammar
67	0	-2	boy from an Irish grammar
71	-2	0	girl from an Irish grammar
126	+2	+1	boy from an Irish grammar
135	+2	+1	boy from an Irish grammar
139	+2	0	girl from an English secondary modern
145	+1	+2	girl from an English secondary modern
150	+2	+2	boy from an English secondary modern
151	+2	+2	boy from an English secondary modern
152	+1	-2	boy from an English secondary modern
153	0	+2	boy from an English secondary modern
157	+2	0	boy from an English secondary modern
161	0	-2	girl from an English secondary modern
170	+2	+2	girl from an English secondary modern
171	-2	-1	girl from an English secondary modern
173	+2	0	boy from an English secondary modern
175	+2	0	boy from an English secondary modern
180	0	-2	girl from an Irish grammar
184	0	-2	girl from an Irish grammar
197	+2	+1	boy from an Irish grammar
218	+2	-1	boy from the remedial unit of an English secondary modern
243	-2	n.a.	boy from a Scottish comprehensive

Given the large number of subjects listed above, it would be difficult to compare the overall scores of each of them in detail, so again only those who scored +2 or -2 on the desired questionnaire will be considered below, although observations will be made with reference to the others later.

<u>Subject</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>Gen.</u>	<u>Peer</u> <u>Vote</u>
3	0 2 18 7 1	1 2 13 6 6	0 0 17 12 0	5	2/20
6	1 8 12 5 2	8 6 7 1 6	0 11 18 0 0	5	3/20
48	1 2 16 7 3	5 4 18 1 1	1 2 13 12 2	4	7/9
67	4 5 18 1 1	2 2 22 2 1	0 8 20 0 0	6	4/8
145	1 4 18 5 1	5 4 15 3 2	0 1 9 11 6	8	6/20
150	8 5 7 4 5	0 0 9 7 13	5 9 12 1 0	3	2/20
151	1 4 9 9 6	1 8 14 4 2	0 1 11 14 1	4	5/20
152	1 5 14 6 3	2 4 18 3 2	1 4 22 1 0	6	5/20
153	5 6 13 4 1	1 2 10 1 15	4 6 12 5 0	2	2/20
161	9 11 3 4 2	7 11 4 4 3	0 7 21 0 0	5	5/17
170	0 1 12 1 9	0 2 11 8 8	0 1 15 8 4	9	1/17
180	0 5 22 1 1	6 5 15 2 1	0 4 26 0 0	7	7/31
184	0 2 27 0 0	11 4 11 3 0	0 3 25 2 0	6	4/31

It is interesting that of the above 13 pupils, 8 had a lower zero score on the desired questionnaire than on the actual; and the zero score in one or both of the questionnaires for each pupil was lower than average. The general scores varied considerably, as did the peer vote. The four lowest peer votes were all given to subjects in the second section (those who had scored +2 on their desired questionnaire), and 3 subjects in that section had a general score of 4 or less, compared with one subject scoring 4 in the first section (those choosing -2 on their desired questionnaire). It is possible that those children desiring to be in the -2 category are a little more sensitive to the effect of their behaviour on others, and therefore are marginally more skilled socially than those desiring to fall in the +2 category. The -2 group may also be composed of the hypothetical minority postulated at various earlier stages in this conclusion, who seem to desire to be very restrained in the expression of their social selves.

6.3.3.5 Question 6

This question showed a 22% difference between the two zero scores. Only 41% chose the zero option on the actual questionnaire, and this rose to only 63% on the desired questionnaire. 4.5% and 1.6% opted for +1 and +2 on the actual questionnaire respectively, which rose fractionally to 6.5% and 3% on the desired questionnaire; and 45% and 7% chose -1 and -2 respectively on the actual questionnaire, which became 19% and 7.25% on the desired questionnaire. It was interesting that more children chose -1 on the actual questionnaire than chose zero, and although the increase in the zero category was substantial, it was still one of the lowest zero scores throughout the desired questionnaire. It is possible that conversing with the teacher may have consequences for a child's standing with the peer group, and that this is one reason that the desired 0 score is not very high; or it may be that children prefer not to initiate contact with an authority figure (or any adult who is not already emotionally close to the child). It was also interesting that the -2 score remained almost exactly the same. 17 children chose -2 on the actual questionnaire and 16 children on the desired questionnaire; but as with other questions mentioned earlier, each group was composed of different children on the whole. The subjects who chose -2 on the actual questionnaire were numbers 11 (a boy from an English grammar school); 24, 61, 89 and 110 (girls from an Irish grammar school); 30, 39, 86, 113 and 197 (boys from an Irish grammar school); 149 and 155 (boys from an English secondary modern school); 161, 165 and 171 (girls from an English secondary modern school); 221 (a girl from the remedial unit of an English secondary modern school); and finally 227 (a girl from a Scottish comprehensive school). The subjects who chose -2 on the desired questionnaire were 18, 20 and 21 (boys from an English grammar school); 27, 28, 30, 197 and 205 (boys from an Irish grammar school); 110 and 189 (girls from an Irish grammar school); 145, 147 and 161 (girls from an English secondary modern school); 149 and 153 (boys from an English secondary modern school); and 218 (a boy from the remedial unit of a secondary modern school). Subjects 30, 110, 149, 161 and 197 were the only ones who chose -2 on both questionnaires, so five children actually never tried to start a conversation with a teacher and were happy with that. Of the remaining 11 who scored -2 on the desired questionnaire, 8 scored -1 on the actual questionnaire (this group sometimes started a

conversation, but only when they had to, and would have preferred never to have to); and the other 3 children scored 0 on the actual questionnaire. These three children who actually started a conversation with the teacher when they felt like it, but desired never to do so, are interesting because one wonders why, if they have the social skill to initiate such a conversation, they would prefer not to use it. Could it be that the peer group would disapprove? If that were the case, however, one would expect more than just three children to choose -2, and more than just 11, who could actually start the conversation if they had to, to opt for -2. The overall scores for the three children were considered in order to throw some light on the subject, and they are as follows.

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>General</u>	<u>Peer Vote</u>
145	1 4 18 5 1	5 4 15 3 2	0 1 9 11 6	8	6/20
147	0 6 18 5 0	3 6 16 2 2	0 0 7 14 6	6	5/20
205	0 8 20 1 0	2 2 24 0 1	1 4 12 13 0	5	2/31

Subjects 145 and 147 view themselves as being moderately in the centre of the actual questionnaire, with the remaining questions being answered fairly evenly either side of zero, but they both desire to be more to the minus side of the scale. The teacher questionnaire assesses them as both being much more to the plus side of the scale, but the teacher does give them good general scores, and their peer vote is good also. It may be that, even though they do not perceive themselves as being as much to the plus side as the teacher would have them, they are aware that their behaviour needs to be restrained somewhat. Given their fairly good general score and peer vote, it is possible either that they are succeeding in curbing their behaviour, or that their more exuberant behaviour is in fact desirable in that particular context, and therefore that their desire to be more to the minus side could lead to a lessening in their popularity. Subject 205 viewed himself as being very much in the middle of the scale and somewhat to the minus side; he desired to be more in the middle, with the remaining answers distributed to the minus side of the scale also. His teacher, however, views him as being very much to the plus side of the scale, and his peer vote is very low, so there is a possibility that his perception of his behaviour is faulty.

6.3.3.6 Question 28

This question, like question 6, showed a 22% difference between the two zero scores, although a higher percentage here chose zero. 53% chose 0 on the actual questionnaire, and this rose to 75% on the desired questionnaire, indicating perhaps that it is much more difficult to say sorry for something you have done than to feel it. 17%, a surprisingly high number, chose +1 on the actual questionnaire (dropping to 6% on the desired questionnaire). This makes one wonder whether the show of anger is for the benefit of retaining one's personal prestige in the eyes of the peer group or the teacher; or whether it is a genuine expression of feeling, but a feeling which 11% would prefer not to experience, or perhaps at least to avoid showing. 3.7% chose +2 (which stayed almost the same, at 4%, on the desired questionnaire - a finding which seems strange when one has been justly chastised); 23.5% chose -1 (this dropped to 8.5% on the desired questionnaire); and 1.2% chose -2 (which surprisingly rose to 6.5% on the desired questionnaire - another strange finding).

The subjects who opted for -2 and +2 on the desired questionnaire (9 children chose +2 on both the actual and desired questionnaires; 3 children opted for -2 on the actual, rising to 14 on the desired questionnaire) were as follows.

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Details</u>
5	-1	-2	boy from an English grammar
7	-1	+2	boy from an English grammar
13	-1	-2	boy from an English grammar
20	0	-2	boy from an English grammar
28	-1	-2	boy from an Irish grammar
31	-1	-2	boy from an Irish grammar
82	+2	0	girl from an Irish grammar
90	-2	0	girl from an Irish grammar
93	+2	0	boy from an Irish grammar
117	+1	-2	boy from an Irish grammar
135	+2	+2	boy from an Irish grammar
139	+2	0	girl from an English secondary modern

145	+2	-2	girl from an English secondary modern
147	-1	-2	girl from an English secondary modern
149	-1	+2	boy from an English secondary modern
150	0	+2	boy from an English secondary modern
153	-2	+2	boy from an English grammar
157	+2	0	boy from an English secondary modern
159	+2	0	boy from an English secondary modern
167	+2	-2	girl from an English secondary modern
169	+1	+2	girl from an English secondary modern
173	+1	+2	boy from an English secondary modern
174	+1	-2	boy from an English secondary modern
175	+1	-2	boy from an English secondary modern
184	0	-2	girl from an Irish grammar
190	+2	+2	girl from an Irish grammar
213	0	-2	girl from the remedial unit of an English secondary modern
218	0	-2	boy from the remedial unit of an English secondary modern
217	0	+2	boy from the remedial unit of an English secondary modern
240	-2	n.a.	boy from a Scottish comprehensive

As with the earlier questions, it is evident that a different group of children scored +2 on the actual and desired questionnaires. Of the 9 in each category, only two subjects (135 and 190) chose +2 to describe how they actually are and desire to be. Of the remaining seven who chose +2 on their actual questionnaire, five desired to be in the zero category and two desired to be at the other extreme (-2). Of the remaining seven who chose +2 on their desired questionnaire, one believed himself to be in the -2 category on the actual questionnaire; two placed themselves in the -1 category (these three subjects may have been over-compensating in wanting to alter their behaviour); two fell into the +1 category; and two scored 0 on the actual questionnaire. The latter four subjects (150, 169, 173, 217) seemed particularly unusual, and therefore their overall results were consulted.

Subject 150 scored only 7 zeros on his actual questionnaire and 9 on his desired questionnaire. He perceived himself to be very much to the minus side of the scale, and desired to be much more to the other extreme. The teacher questionnaire confirmed the boy's own perception that he was very much to the minus side of the scale, and he was awarded a general score of only 3, with his peer vote only 2/20. Subject 169's zero scores were much higher than the previous subject - 20 on the actual questionnaire, dropping slightly to 18 on the desired. The teacher questionnaire again confirmed the girl's own perception that she was slightly to the minus side of the scale, and she herself showed a very slight inclination to be towards the plus side. Indeed, so slight was the inclination that she scored only two +2's on her desired questionnaire. The teacher awarded an average general score, and her peer vote was 3/17. Subject 173 scored 18 zeros on his actual questionnaire but this dropped considerably to 10 on the desired questionnaire. The teacher awarded 13 zeros, all but one of the remaining scores being to the plus side of the scale. The boy showed some awareness of this tendency in his actual responses, but his desired scores were almost evenly divided between the plus, minus and zero categories of the questionnaire. A little surprisingly, the teacher awarded a general score of 8, but his peer vote was only 2/17. Subject 217 had the joint highest zero score on his actual questionnaire in the remedial group (21), which dropped slightly to 18 on his desired questionnaire. Interestingly, his general score and peer vote were very good (8 and 7/11 respectively) but his perception of how he actually behaved was very different from the teacher's. He viewed himself as being more to the minus side of the scale, while the teacher (apart from 9 questions) placed him firmly on the plus side.

Of the 3 children scoring -2 on the actual questionnaire, one desired to be in the zero category and the second in the +2 category. The third was from the Scottish sample, for whom there is no desired data. None of these three subjects also scored -2 on the desired questionnaire. Of the 14 children who did opt for -2 on the desired questionnaire, 5 had chosen -1 on the actual score, 4 had chosen 0, 3 had opted for +1, and 2 for +2. The latter 5 may again have been desirous to alter their behaviour so much that they over compensated.

On the whole, the zero scores for all these children seemed to be fairly consistently below the average for their group, particularly on the desired questionnaire. The exact number of zeros scored in each category is given below.

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>Gen. Peer</u> <u>Vote</u>
5	2 3 17 5 1	3 3 14 1 7	0 1 12 16 0	4 3/20
13	1 6 14 6 1	2 2 12 5 7	0 2 20 7 0	5 11/20
20	0 8 17 2 1	2 3 21 1 1	0 13 16 0 0	5 4/20
28	4 12 11 1 1	6 8 13 0 2	0 9 18 3 0	5 5/9
31	2 8 15 3 1	7 6 12 0 4	0 1 28 1 0	10 5/9
117	0 3 14 10 2	1 3 21 0 4	0 5 5 14 6	4 3/9
145	1 4 18 5 1	5 4 15 3 2	0 1 9 11 6	8 6/20
147	0 6 18 5 0	3 6 16 2 2	0 0 7 14 6	6 5/20
167	1 4 16 4 4	3 2 21 2 0	1 4 23 0 0	6 3/17
174	0 4 20 4 1	4 6 8 3 7	0 1 19 8 0	8 3/17
175	0 4 17 5 3	4 7 9 3 6	0 2 21 5 0	8 4/17
184	0 2 27 0 0	11 4 11 3 0	0 3 25 2 0	6 4/31
213	0 7 20 2 0	2 6 19 2 0	0 11 11 8 0	6 6/11
218	2 7 11 5 4	9 10 10 0 0	0 3 2 24 1	5 5/11
7	1 3 17 6 1	2 0 21 4 1	0 0 29 0 0	10 4/20
135	1 4 17 3 4	0 1 22 3 3	1 6 14 5 1	5 7/9
169	1 7 20 1 0	6 2 18 1 2	1 5 22 0 0	5 3/17
149	6 5 12 3 3	6 3 12 4 4	0 0 11 16 0	5 3/20
150	8 5 7 4 5	0 0 9 7 13	5 9 12 1 0	3 2/20
153	5 6 13 4 1	1 2 10 1 15	4 6 12 5 0	2 2/20
173	0 4 18 5 2	4 5 10 5 5	0 1 13 13 1	8 2/17
190	1 4 20 3 1	4 2 18 1 4	0 7 22 1 0	5 7/31
217	1 6 21 1 0	3 6 18 1 1	0 2 7 18 3	8 7/11

In the group which chose -2 on their desired questionnaire, the peer votes were high except for subjects 5, 20 and 184. Only two children had below average general scores (both scoring 4), and they were subjects 5 and 117. Both children were placed to the plus side of the scale by the

teacher in the teacher questionnaire. On the whole, the actual and desired zero scores for this group remained much the same, only varying by two or three, except for subjects 117 (who scored 14 on the actual and 21 on the desired), 167 (who scored 16 on the actual and 21 on the desired), 174 (whose zero score dropped from 20 on the actual to 8 on the desired), 175 (whose actual score similarly dropped from 17 to 9) and 184 (whose score also dropped from 27 to 11). The group also leaned to the minus side of the desired scale when their results outside the zero category are observed (apart, that is, from subjects 117 and 174, whose desired scores were evenly spread outside the zero category; and subjects 5 and 13, whose results tended towards the plus side of the scale).

The group who scored +2 on the desired questionnaire for this question varied somewhat more. Two had high peer votes, two had average peer votes and the remaining five were below average. Only two of the group were below average on the general score (150 and 153, who scored 2 and 3 respectively). Regarding the zero scores for this group, as with the previous group, there was generally little difference between the actual and desired figures. Most had three or less of a difference between the two scores, except for subjects 7 (whose score changed from 17 to 21), 135 (whose score rose from 17 to 22) and 173 (whose score dropped from 18 to 10). In the pattern of results falling outside the zero category there was more variation than with the first group. Four of the children leaned to the plus side of the scale generally (subjects 7, 135, 150 and 153); subjects 169 and 217 leaned to the minus side; and 149, 173 and 190 were evenly spread to both sides of the scale.

The -2 group seems to have somewhat higher and more consistent scores overall than the +2 group, although as always there are exceptions and these have been noted above. The overall scores have again proved valuable in interpreting a child's seemingly bizarre response to an individual question. For example, we can see that there are some children who are aware that their behaviour is too much to one side of the scale, and therefore over-compensate by desiring to be at the other extreme. There are those who already lean to one side, and desire to be even more at that extreme; and there are a very few who believe themselves to be in the centre, but desire to be at an extreme. The teacher questionnaire is useful here in confirming or disagreeing with the child's perspective, and the general and peer votes indicate the degree of success or failure the

child is having. It is particularly important to know whether an extreme result in one question is indicative of an overall pattern of extreme behaviour (and to ascertain whether that behaviour is rendering the child isolated or rejected socially); or whether it is out of character, and therefore probably due to specific circumstances of which we are unaware.

6.3.3.7 Question 19

There was a 17.5% difference between the actual and zero scores on this question, and both were quite high. The actual zero score was 69%, which rose to 86.5% on the desired; the -1 score was 24% on the actual, dropping to 10% on the desired; the -2 score was 2.4% on the actual dropping to 1.5%; the +1 score was 4.1% dropping to 2% on the desired; and the +2 score was 0 on the actual, which became 0.5% (1 child) on the desired questionnaire.

It was encouraging that so few children scored at either extreme in this question about relationships with the opposite sex. Most children seem to have a healthy desire to get on well with the opposite sex, and most seem to achieve this desire, with just over a quarter experiencing difficulty in the real life situation. The 22 children who opted for -1 on their desired questionnaire could be reasoning that they would still prefer not to mix with the opposite sex, perhaps because of the risks to one's status within the peer group or to one's own personal feelings, but it is less easy to imagine why 4 children would prefer the +1 category on the desired questionnaire. Even more bizzare is the observation that three children chose -2 and one chose +2 as their desired options. These seem very unusual results, and it therefore seems a good idea to look at the overall scores more closely in these instances. The actual and desired scores are presented below, and there then follows a tabulation of their overall results.

<u>Subject</u>	<u>Actual</u>	<u>Desired</u>	<u>Details</u>
141	+1	+1	girl from an English secondary modern
150	0	+2	boy from an English secondary modern
151	0	+1	boy from an English secondary modern
192	-1	+1	boy from an Irish grammar
199	-1	+1	boy from an Irish grammar
204	-1	-2	boy from an Irish grammar
214	0	-2	girl from the remedial unit of an English secondary modern
218	-1	-2	boy from the remedial unit of an English secondary modern

Overall scores

<u>Subj.</u>	<u>Actual</u>	<u>Desired</u>	<u>Teacher</u>	<u>Gen.</u>	<u>Peer Vote</u>
141	1 7 16 4 1	0 5 17 6 1	0 6 20 1 0	4	2/20
151	1 4 9 9 6	1 8 14 4 2	0 1 11 14 1	4	5/20
192	1 4 23 1 0	2 2 24 1 0	0 3 8 19 0	5	2/31
199	8 14 5 1 1	6 5 16 1 1	0 1 27 2 0	7	1/31
150	8 5 7 4 5	0 0 9 7 13	5 9 12 1 0	3	2/20
204	9 7 9 1 3	6 8 13 2 0	0 1 25 4 0	5	1/31
214	3 11 14 0 1	7 4 15 1 2	1 15 2 11 1	4	3/11
218	2 7 11 5 4	9 10 10 0 0	0 3 2 24 1	5	5/11

All these children show some irregularity in their pattern of scores, particularly 150, who has the lowest actual and desired zero scores of all the subjects. Even where the teacher questionnaire and general score are average to good (subjects 199 and 204), the children's own zero scores on the two questionnaires are low. These are the children one would want to look at more closely, preferably videotaping their behaviour, in order to identify how accurately they are perceiving it and to ascertain, firstly, if there is a problem and secondly, at which level the problem is occurring (e.g. perception, lack of knowledge of what is appropriate, etc.).

6.3.4 A Summary of the Questions with the Highest Number of Extreme Responses

The following questions incurred the greatest response (in descending order) at either extreme of the scale.

The Actual Questionnaire

<u>Question</u>	<u>Subject</u>	<u>Ranking</u>	<u>No. of responses</u>	<u>Score</u>
21	Response to bullying	1	76	+2
17	Attribution of failure	2	43	-2
15	Pleasing people	3	40	-2
12	Saying sorry	4	30	-2
2	Gesticulating when talking	5	25	-2
21	Response to bullying	6	22	-2
4	Smiling	7	18	+2
6	Starting a conversation with a teacher	8	17	-2

The Desired Questionnaire

<u>Question</u>	<u>Subject</u>	<u>Ranking</u>	<u>No. of responses</u>	<u>Score</u>
15	Pleasing people	1	71	-2
21	Response to bullying	2	69	+2
17	Attribution to failure	3	48	-2
2	Gesticulating when talking	4	40	-2
12	Saying sorry	5	32	-2
16	Response to failure	6	29	+2
21	Response to bullying	7	17	-2
23	Action when bullied	7	17	+2

The first observation to be made is that of the 7 questions evoking an extreme response from the population on either questionnaire (counting question 21 as one question, since it occurs in both lists), 5 occur in both questionnaires (questions 21 [at both extremes], 17, 15, 12 and 2). All these questions show a predilection toward the minus side of the scale on both the actual and desired questionnaires, though as noted earlier, it is not usually the same children who choose the same extreme on both questionnaires. These questions need to be carefully considered when improving the questionnaire, to ascertain if the questions themselves may be encouraging a bias to one particular side; or if the particular composition of the sample might explain this bias; or whether the children who respond in this way do so consistently over all their scores, and have characteristics which mark them out as different from the majority of other children. If so, are they any more or less popular with peers and teacher than the majority who respond consistently in the middle category?

These results confirm the tendency noted above, when drawing conclusions from individual questions, that the children scoring outside the middle section of the questionnaire in the sample tended very much to favour the minus side of the scale in both their actual and desired behaviour. This for me is one of the most interesting observations of the study. One would very much like to discover the characteristics associated with favouring the minus side of the scale. Earlier, I described a "puritanical" streak which seemed to be emerging amongst some children, who desire to be very quietly spoken; unresponsive in class; apologetic even when there is no cause; unforthcoming about themselves; to listen rather than to talk; to give in to unreasonable behaviour; to please everyone most of the time; to attribute blame for failure to themselves alone; to accept being bullied; and to accept unjust punishment. This is, of course, a minority of children; but it is a fascinating minority, which needs further investigation.

6.3.5 The Total Number of Zeros Scored on Both the Actual and Desired Questionnaires

Below are the figures given for the total number of zeros scored by each child on both the actual and desired questionnaires. This data can be found in its raw state (and inclusive of the -2, -1, +1 and +2 scores) in Appendix 3, where the scores across the spectrum are provided for each child. The maximum number which could have been scored by a child is 29.

<u>Total no. of zeros</u>	<u>No. of children with this 0 score on the actual questionnaire</u>	<u>No. of children with this 0 score on the desired questionnaire</u>
1	0	0
2	0	0
3	1	0
4	0	1
5	1	0
6	0	0
7	2	1
8	2	3
9	3	2
10	3	3
11	8	4
12	12	6
13	6	6
14	11	3
15	11	5
16	14	8
17	26	6
18	24	11
19	7	13
20	21	10
21	15	18
22	18	16
23	16	22

24	9	18
25	4	19
26	4	16
27	3	9
28	0	8
29	0	13

As anticipated, the zero scores on the desired questionnaire are higher than those on the actual questionnaire. This is interesting, in that it suggests that children can differentiate between how they actually are behaving and how they would like to behave. This is a significant finding, which shows that at least some children may know what constitutes socially skilled behaviour and desire to behave in that way, but for some reason are unable to do so. The problem with these children lies neither in their perception of themselves, nor their knowledge of skilled behaviour, but in the appropriation of that behaviour.

The scores, grouped into categories of five, are presented below.

<u>Number of</u>	<u>Number of subjects</u>		<u>Number of subjects responding in that</u>	
<u>zeros</u>	<u>responding in that</u>		<u>category on the desired questionnaire</u>	
	<u>category on the actual</u>			
	<u>questionnaire</u>			
0-5	2	0.90%	1	0.45%
6-10	10	4.50%	9	4.00%
11-15	48	21.00%	24	11.00%
16-20	92	41.50%	48	21.00%
21-25	62	28.00%	93	42.00%
26-29	7	3.00%	46	20.00%

Just under half of the sample fall into the 16-20 range on the actual questionnaire, and a similar number fall into the 21-25 range on the desired questionnaire. These figures are particularly important when one is considering a child's overall performance. Using the above guide it is possible to compare his/her number of zeros with that of the group as a whole, and this is done in the cases where individual children have responded at one extreme or the other in various individual questions.

It is also possible to identify how many children have very poor zero scores on either or both questionnaires, and also those with exceptionally high scores. For example, looking at the list of zero scores, it is evident that one subject scored only three zeros on his actual questionnaire. Referring to the raw data, that subject is identified as 161; and from her range of scores it is apparent that she was also the subject who scored only 4 zeros on her desired questionnaire. Thus, the questionnaire results are of value on two fronts - in clarifying the most common or "normal" range of scoring, and in identifying the children who deviate from that range.

6.3.6 Children who Scored 4 or Below on the Teacher General Score

It is my contention that the questionnaire designed and used in this study, along with the teacher version of the questionnaire, the teacher general score and the peer vote, enables us to obtain a fairly detailed personality profile of each individual child. To corroborate this belief, there follows an analysis of 35 children who scored 4 or below on the teacher general score, in comparison with the others in their group (cf. Appendix 3).

6.3.6.1 Teacher 1: Subjects 5 and 9

Teacher 1 gave these two pupils 4 and 3 respectively as a general score, and their peer votes were 3/20 and 2/20 respectively. Three other children should be considered alongside these. Subjects 3, 15 and 16 scored 2/20 or below on their peer votes, 2 of them scoring 5 and one 8 from the teacher. Subject 16, who scored 8 on the general score and 29 zeros on the teacher questionnaire, also scored 24 zeros on his actual score and 25 on his desired score; but he only obtained 1 peer vote. Subjects 3 and 15 were both assessed by the teacher as being to the positive side of the scale, which was confirmed by the actual questionnaire scores of both children, though subject 3 desired to be even further to this extreme. Subject 15 showed a desire to be more to the negative side of the scale. This teacher also rated subjects 5 and 9 as being very much

to the positive side of the teacher questionnaire, subject 9 excessively so. The suspicion might arise that this teacher consistently gave children to the plus side poor general scores and those to the negative side good general scores, but this would be unfounded. He in fact gave low general scores to those who scored very much to either extreme. Subject 9 perceived himself as being very much in the centre of the scale, though he desired to be more in the middle or to the negative side, like subject 15. Subject 5, however, perceived himself as being spread across the scale fairly evenly to both sides and marginally more in the middle. He desired (like subject 3) to be more to the positive end of the scale.

Interpretation of these observations would have been facilitated by the possession of natural observation data, either on videotape or at least in note form. It is possible to suggest explanations as why these boys have obtained the scores they have, but this is merely speculation. Subject 3 might be a child who, while acknowledged by the teacher to be to the positive side of the scale, is sufficiently civil to the teacher and other children in the teacher's presence to merit an average general score. To the other boys, when unobserved by staff, he might be over-boisterous, spoiling games etc., or even aggressive. Subject 5 is something of a puzzle. He is assessed by the teacher as being somewhat to the positive side of the scale, but sees himself as being spread out across the scale (though marginally more in the centre than at extremes), and desires to be even slightly more at either extreme. This child may not possess a fully comprehensive understanding of which behaviours are socially desirable and which are not. Subject 9 might be a child who knows which behaviours are skilful, and perceives himself to be in the middle of the scale, but is wrong in his assessment of himself. Subject 15 could be a child who is too much to the positive side of the scale, knows that he is not well liked by his peers, and wants to be more to the negative side, but is unable to behave in the way he desires. Subject 16 is a mystery. His actual and desired scores and his teacher questionnaire scores all show mostly zeros scored, and his general score was 8; but he only obtained one peer vote. Further investigation is necessary. It is possible that he is a very competent child who prefers to have a close relationship with one person rather than several.

6.3.6.2 Teacher 2: Subjects 24 and 30

Teacher 2 gave subject 24 a score of 4 on the general scale and subject 30 a score of 3. Both subjects obtained 3/9 peer votes, which were the lowest scores in the class. Subject 24 scored 20 to the minus side of zero, and subject 30 21 to the plus side of zero, on the teacher questionnaire. Subject 24's actual questionnaire agreed with that assessment, but her desired questionnaire showed that she wants to be in the middle section, scoring mainly zeros. Subject 30, however, though desiring to be in the middle, perceived himself to be at the extreme minus side of the scale. Here we have one girl whose assessment of herself agrees with that of her teacher, and who knows which behaviours are in fact appropriate, but is unable to behave in that way. We also have a boy who knows which behaviours are appropriate, but whose assessment of himself is totally in opposition to that of his teacher.

6.3.6.3 Teacher 3: Subject 39

Teacher 3 gave this boy a general score of 4 (the lowest grade given), but in contrast, his peers awarded him 7 votes out of 8. Only one other girl in the class received a higher score from her peers. The teacher questionnaire suggests that the teacher regards him as being much inclined to the minus side of the scale; and the boy's actual questionnaire score supports this, though the boy desires to be at the other extreme of the scale. It is also interesting that three other children in that class who obtained a general score of 9 (the highest awarded) conversely scored the three lowest peer vote scores, with the exception of one girl who obtained a general score of five but only 1 vote out of 8 from her peers. The teacher gave those two girls and one boy very high zero scores in the teacher questionnaire, as might be expected; but interestingly, the children themselves had the three lowest actual questionnaire scores in the class. Two of them had the lowest desired scores in the class, though it should be added that these were quite high when compared with the entire sample.

It seems from these results that the children who are assessed as skilful by the teacher do not regard themselves as such, an opinion shared by their peer group. Their zero "desired" scores are all higher than their actual scores, which would suggest that they all wanted to change and knew in what ways they needed to change, but perhaps felt unable to do so. Similarly, it is possible that subject 39 is aware of which skills constitute skilful behaviour, knows which skills he is deficient in, and wants to behave differently, but is unable to do so. However, perhaps because he is a socially perceptive child, and/or because he is at the less obtrusive end of the scale in terms of his behaviour, and/or because the other children know he is liked less by the teacher and feel supportive, he has succeeded in being the most popular boy in the class.

6.3.6.4 Teacher 4: Subject 48

Subject 48 received a general score of 4 from the teacher, the lowest in the class, but like subject 39 he also received a high peer vote, 7 out of 9. Only one boy and two girls scored higher. The teacher questionnaire reveals that his teacher regards him as being too much to the positive side of the scale. Once again the child's own assessment of his behaviour accords with this, and his desire questionnaire shows that he would like to be more in the middle and towards the other extreme of the scale. Of the ten children in the class, 7 received a general rating of 7 or over from the teacher, and, correspondingly, all of them were awarded a high number of zeros on the teacher questionnaire. Of the three remaining children, the two to whom were given general scores of average or below also obtained a low number of zeros on the teacher questionnaire; and the remaining child, who scored 6 on the general scale, had a well below-average number of zero scores on the teacher questionnaire. Of those 7 children given high general scores, 3 were popular with teacher and peers, 3 were popular with the teacher but extremely unpopular with their peers, and one was extremely popular with the teacher (scored 10), but was only averagely popular with her peers.

6.3.6.5 Teacher 5: Subjects 51, 54, and 57

This teacher gave the above subjects general scores of 4, 4, and 3 respectively, and exceptionally low zero scores on the teacher questionnaires. The two girls appear to be very much to the minus side of the scale, and the boy very much to the positive side. This suggests that the teacher is not equating a particular leaning towards one side of the scale with skilfulness and a propensity for the other direction with unskilfulness. The peer votes for the subjects were 4, 2, and 6 out of nine respectively. Subject 51, although rated poorly by the teacher, had an actual score of 22 zeros, a desired score of 29 zeros and an average popularity amongst her peer group. Subject 54 had the third lowest actual score, a desired score of one less than that (the lowest but one in the class) and, jointly with subject 53, the lowest peer vote in the class. Subject 57, though also rated poorly by the teacher, had an actual score of 18, a desired score of 25 and above average popularity amongst his peers.

As with the other classes, some interesting observations emerge here when these three subjects are compared with the rest of the class. Subjects 52 and 60 are the two most popular children in the class, and they score 10 and 9 respectively on the teacher general scale, yet their actual and desired scores differ markedly. Subject 52 has an actual score of 23 and a desired score of 28, while subject 60 has an actual score of 11 and a desired score of 13 - the lowest in the class. It is possible that subject 51 finds difficulty in relating easily to adults (or perhaps this adult in particular), but has no such problems in relating to the other children. It is interesting to note that she knows that she tends more to the minus side of the scale and desires to be exclusively in the middle. In contrast subject 53, who also leans somewhat to the minus side of the scale, and also desires to be more in the middle (though to a much lesser extent than subject 51), is viewed as very skilled by the teacher, but along with subject 54 has the lowest peer rating in the class. Perhaps she is incorrectly perceiving herself to be towards the minus side of the scale. The teacher gave her the highest zero score in the class on the teacher questionnaire - but perhaps to her peers she appears differently. She is one of those children from the study that I would have liked to look at more closely, both formally in the classroom and informally with the peer group. Another child who would also have been fascinating to look at in

more depth is subject 52. This child is popular with teacher and peers, and scored the highest number of zeros both in her actual and desired questionnaires. Likewise, further information about subject 54 would be most welcome. She is viewed by the teacher as being too much to the minus side of the scale, and is also extremely unpopular with peers. She seems to be aware of this tendency, but either doesn't want to be different or perhaps cannot conceive of being different in her behaviour. Subject 57 is viewed as being too much to the positive side of the scale in the teacher's eyes, agrees with this assessment, and desires to be very much in the middle range. Perhaps because of this (we cannot tell without further information) he is popular with his peers. Subject 60 is another child whom it would be extremely interesting to study further. He is very popular with both teacher and peers, but has by far the lowest zero scores of the class on both his actual and desired questionnaires. He perceives his behaviour as being somewhat extreme in both directions on the scale (though marginally more to the positive side), but desires to be more in the middle and towards the minus side of the scale. The three non-zero scores given by the teacher are indeed to the positive side of the scale, but he seems to perceive himself as much more extreme than that, and desirous to be more at the other extreme. It is possible that this child is overly critical of himself, and that his actual behaviour is in fact very skilful. He is another child whom it would have been interesting to see on videotape or operating in his natural surroundings.

6.3.6.6 Teacher 6: Subject 68

The general score of 4 which the teacher ascribed to this subject is the lowest in the class, as is the peer vote (3 out of 8). His zero score on the actual questionnaire is 13, and on his desired questionnaire it is 15. Interestingly, and at first sight somewhat confusingly, the number of zeros on the teacher questionnaire for this subject is not the lowest in the class. Five other children have a zero score equally low or even lower. However, looking more closely at the data, it becomes apparent that all the other children fall towards the negative side of the scale, and that this one boy falls to the positive side of the scale. This would suggest that the more reserved children, even though they are rated as

having even fewer zero scores, are regarded as more skilful by this particular teacher. It is also interesting that all the other children are of average or above average popularity amongst their peers, and all of them have zero scores on their desired questionnaire which are quite high. Only one of them (subject 63) has an actual zero score which is lower than subject 68 (11), but the number of zeros on her desired questionnaire is 25.

Unlike all the other children in the class, subject 68's assessment of himself does not agree with that of the teacher. He views himself as being too much to the minus side of the scale and desires to be more to the plus side, whereas his teacher views him as too much to the positive side already. The unpopularity with both teacher and peers of this boy would lead us to wonder if his assessment of himself is faulty. If that is the case, then any attempts made by him to change his behaviour in order to "rectify" the perceived imbalance could cause even further isolation.

6.3.6.7 Teacher 8: Subjects 79, 86, 87 and 88

The teacher gave these children general scores of 4, 4, 2 and 3 respectively; and they scored 4 out of 9, 6 out of 9, 5 out of 9 and 5 out of 9 on their peer vote scores. Their zero scores on the teacher questionnaire were 11, 12, 5 and 14 respectively. The number of zeros they scored on the actual and desired questionnaires respectively were as follows: 17, 17, 21 and 23; and 24, 28, 29 and 29. It seems surprising that children who appear to possess a knowledge of appropriate social skills should score so poorly on the teacher assessment. However, again it is useful to consider the children's results in the context of the class pattern. All four children are viewed by the teacher as being too much to the minus side of the scale. Subjects 81 and 85, for example, are very much to the plus side of the scale, and receive average or above average ratings. Having said that, it has to be pointed out that subjects 82 and 83 are assessed by the teacher as also being to the minus side of the scale, but their general ratings are 7 and 6. They do not lean so much to the minus side as subjects 79, 86, 87 and 88; but nonetheless, there do seem to be some factors at work here which are not explicable without explanation from the teacher. It is interesting that the three pupils who

were given fairly high peer votes (subjects 86, 87 and 88) all had almost perfect desired scores, and that the one whose desired score was one of the lowest in the class (subject 79) also had the lowest peer votes of the four subjects. The children in the class with the lowest peer vote of all were subjects 82 and 83 (mentioned above). Of great interest is the observation that subject 83, with the lowest peer vote, also has the lowest desired score in the class. However, subject 82 scored an average number of zeros on his desired questionnaire, but was still lower than average on peer popularity. This result is outside the general pattern for this class, where it seems that the more in the middle of the scale a child desires to be the more likely (s)he is to be average or above average in popularity; whereas the lower the number of zero scores on the desired questionnaire, the more likely (s)he is to be average or below average in popularity.

These four children all agree with the teacher's assessment of them as leaning to the minus side of the scale, though they do not perceive their lean as being as substantial as that ascribed to them by their teacher, and they want to be more in the middle of the scale. The teacher seems generally to have an aversion to children who appear too reserved and less vociferous, so a poor general rating might be accounted for in terms of adult preference, taking the results as a whole. The awareness of their social skills and deficits and their desire to behave differently would also account for the level of popularity they enjoy, which is not immense, but average or above. It is also fascinating that the only child in the class who enjoys a perfect general rating of 10 from the teacher and also a perfect 9 out of 9 peer rating is the only child to have the highest number of zeros in both his actual and desired questionnaires. Children like this are the ones from whom we can learn which qualities they possess to enable them to operate with such success in both the adult and peer spheres.

6.3.6.8 Teacher 11: Subject 117

The teacher awarded this child a general score of 4 and a correspondingly low number of zeros on the teacher questionnaire (5). The child also obtained a peer vote of 3 out of 9, which is the third lowest in the class; and the number of zeros on his actual and desired questionnaires were 14 and 21 respectively. Looking at the four lowest general scores in

the class, it is apparent that two of those children lean to the positive side of the scale and two to the negative side, so the teacher seems not to have a particular aversion or liking for either extreme. Subject 117, according to the teacher, is too much to the positive side of the scale, and indeed the child's own assessment agrees with this. He also desires to be more in the middle, though the number of zeros scored on his desired questionnaire is the joint lowest but one in the class. The only number of zeros on the desired questionnaire lower than that is that of subject 113, and his peer rating is even lower than 117's. The subject with the highest number of zeros on both her actual and desired questionnaires (subject 112) also enjoys the highest general rating from the teacher and the joint highest peer rating. The lowest peer rating in the class, however, belongs to subject 116. He is an interesting subject because he assesses himself as too much to the minus side of the scale, but is assessed by his teacher as being too much to the plus side - though in spite of this, he is awarded a general grade of 6 by the teacher. He wants to be more in the middle and towards the plus side of the scale. It is possible that here we have a child who is perceiving himself inaccurately, and therefore that any attempts by him to redress the balance could cause further alienation amongst his peers. This child seems to have a reasonable knowledge of which skills are appropriate, but is assessing inaccurately his own behaviour in the context of that knowledge.

6.3.6.9 Teacher 12: Subjects 121 and 124

These two children were both awarded a general score of 4 (the lowest in the class), and the two lowest peer votes in the class (0 and, jointly with two others, 2). They were also given the lowest number of zeros in the class on the teacher questionnaire (15 and 14 respectively, the next lowest being 24), with both children being judged as very much to the minus side of the scale. The actual and desired scores of the two children are very interesting. Subject 121 has the lowest number of zeros in the class on her actual questionnaire (15), and the rest of her scores are equally divided between the minus and plus sides of the scale. She does not perceive herself, like her teacher, to be towards the minus side of the scale. Her desired questionnaire shows a much higher number of zeros, 23,

which is joint lowest but one in the class, but still a major move in the appropriate direction from her actual questionnaire. Subject 124 has one of the highest number of zeros on his actual questionnaire in the class, and the fourth highest number of zeros on his desired questionnaire.

It is possible that the first subject, 121, is perceiving herself in a way which no-one else does. In her desired questionnaire she wants to be more to the middle and minus side of the scale, a propensity which her teacher regards as already being extreme. Sadly, she is also without friends in the class, which would suggest corroboration of the teacher's low general rating. Subject 124 is also regarded as being too much to the negative side of the scale and while his actual assessment shows that he regards himself as being predominantly in the centre, he also desires to be more to the centre and plus side of the scale. He at least has two friends in the class, even though the teacher rates him equally as poorly as 121.

Looking at the rest of the class, it is interesting to consider that all 4 children who are extremely popular with their peers and teacher (120, 125, 127 and 128) have perfect or near perfect zero scores on the teacher questionnaire, and desire to be either in the middle of the scale or slightly in the opposite direction from that which they believe themselves to be. Perhaps these children have an accurate view of themselves, or perhaps they are too critical, but their knowledge of social skills seems good and they may possess the ability to monitor their behaviour and make subtle, finely executed adjustments in the opposite direction to compensate for what they regard as excesses in their behaviour. Having said that, it also has to be pointed out that of the two other children with low peer votes (119 and 123), 119 also shows a desire to be more to the opposite side of the scale than that on which he views himself to be; so there are exceptions to the above generalisation. Interestingly, his teacher confirms his view of himself as being a little to the minus side, but still gives him a general score of 7. The other boy, 123, desires to be somewhat more in the middle of the scale, having assessed himself as too much to the minus side; and indeed, the teacher perceives him to be central, with a general score of 8. The four children popular with their peers and teacher, the two children unpopular with peers but popular with the teacher, and the two who are unpopular with both peers and teacher, would all need to be looked at more closely in order to discover which skills, or skill deficits, are present in each group.

6.3.6.10 Teacher 13: Subject 132

Subject 132 was awarded a general score of 3 by the teacher (the lowest in the class) and has a peer vote of 0. His teacher regards him as being too much to the minus side of the scale (he scored only 9 zeros on the teacher questionnaire), and he regards himself as being somewhat too much to that extreme, and desires to be a little more in the middle (18 zeros on his actual and 21 on his desired questionnaire). It is possible that his assessment of himself is inaccurate, but at least he desires to move in the right direction, i.e. more towards the middle. Subject 138 in this class is a very interesting comparison. He has one of the highest teacher general scores and one of the highest number of zeros on the teacher questionnaire, and yet he has the next lowest number of peer votes in the class (2). Looking at his questionnaire results, it is apparent that he views himself to the negative side of the scale, which is confirmed by his teacher, but desires to be more at the other extreme than in the middle. Perhaps here we have a child whose perception of his deficits is an accurate one, but who either cannot adjust his behaviour to compensate, or over-compensates, behaving too much to the other extreme. A videotape of his behaviour in an informal setting would be invaluable. The child in this class with the highest teacher general score of 8 and the highest number of zeros scored (22) on the teacher questionnaire is subject 137. His peer vote, however, is only 3 out of 9. He views himself as being a little to the minus side of the scale, but surprisingly his desired scores are almost the same as his actual ones. It is possible that this child is either assessing himself accurately and does not want to change - he may be content with the few friends he has -; or that he is assessing himself accurately, but does not know what aspects of his behaviour cause him to have few friends; or that he is assessing himself wrongly. The latter seems the least likely, because of the teacher's view of him; but it is possible he might be trying too hard to please the teacher and thus alienating his peers. With children like this more information is needed to complete the picture of their social ability in the class.

6.3.6.11 Teacher 14: Subjects 141, 143, 148, 150, 151, 153 and 157

With the exception of two out of the above seven, all the children here tend towards the minus side of the scale. The two exceptions mentioned, however, suggest that the teacher is not showing a predilection for one particular type of personality.

Of the seven children, subjects 151 and 157 were awarded the best teacher general scores (4 for each child) and they also had the highest peer votes (5 and 4 out of 20). Subject 151 scored 9 on his actual questionnaire and 14 on his desired, while subject 157 scored 12 on his actual questionnaire, compared with 29 on his desired. It should be noted that although there is little improvement in subject 151's zero scores when comparing the two scales, his "actual" results indicate a strong leaning to the plus side of the scale, which is corroborated by the teacher's analysis. He desires, however, to be more in the middle and to the minus side of the scale, so his assessment of himself and the ways in which he desires to change seems accurate and appropriate.

The three children who scored most poorly on both the teacher general score and the peer vote were subjects 148, 150 and 153. They scored 3, 3, 2 respectively on the teacher general scale, and 1, 2, 2 on the peer vote. The teacher questionnaire results showed that all three were regarded as being very much to the minus side of the scale. 150 and 153 had the lowest zero scores in the class on both the actual and desired questionnaires - 7 and 9 respectively for subject 150, and 13 and 10 for subject 153. Both subjects 150 and 153 viewed themselves as being too much to the minus side of the scale (a perception corroborated by the teacher in both cases), and both desired to be at the other extreme rather than in the middle. Subject 148 is interesting, in that she views herself as being a little too much to the minus side of the scale (once again, a view which corresponds almost identically to that of the teacher), but is happy with that, and even desires to be very slightly more to that side of the scale. She may be a quiet girl who is happy with only one best friend and has no desire for other companions. The other interesting observation is that while the teacher gives her a zero score of 18 on the teacher questionnaire, she is given a general score of only 3; whereas subject 147 obtains a zero score of 7 and is given a general score of 6.

Subjects 141 and 143 were both given general scores of 4 by the teacher, but scored only 2 and 0 on the peer vote respectively. Subject 143's zero scores on the actual and desired questionnaires (21 and 29) seem at first glance to suggest a skilled child, and the zero peer vote seems puzzling. On closer observation, however, it appears that it may be the child's perception of himself which is the problem, rather than his knowledge of social skills. On his actual questionnaire he sees himself mostly in the middle of the scale, the remaining scores being evenly balanced either side of zero. His teacher, on the other hand, assesses him as being very definitely to the minus side of the scale; indeed, he has the second highest score on the minus side in the class. The child may not understand, or perhaps realise, his unpopularity. Subject 141's zero scores are 16 and 17 for the actual and desired questionnaires respectively. The remainder of his actual responses are spread either side of the middle range, but lean slightly more to the minus side (which is corroborated by the teacher questionnaire); and his desired score is slightly more to the plus side of the scale. It may be that this child is a little more accurate in his perception of himself, but less aware of what constitutes skilful behaviour.

It is important to note at this juncture that this teacher's correlation between the scores given on the teacher questionnaire and the general score are unusually inconsistent compared with the other teachers. It may be that this teacher thought that characteristics which were not covered by the questionnaire also needed to be taken into account when giving a general score, and this possibility would need to be investigated in order to improve the questionnaire for future use. On the other hand, there may be reasons unknown to me why the teacher was unable to function consistently. Only an interview with individual teachers would have enlightened us, and this was not possible.

6.3.6.12 Teacher 15: Subject 163

Subject 163 has the lowest teacher general score (4) and the second joint lowest peer vote in the class (1 out of 17). The teacher questionnaire assesses her as being too much to the plus side of the scale, but the girl herself believes she is slightly more to the minus side -

though this tendency to one side of the scale is marginal, as her scores are fairly evenly spread either side of her zero score (17 for the actual questionnaire, and 18 for the desired questionnaire). Only one response differed in her two questionnaires, which would suggest that she was happy with herself. She certainly did not regard herself as being to the plus side of the scale to the extent which the teacher indicated. It may therefore be that this girl's perception of herself and/or perhaps also her knowledge of social skills may be the cause of her lack of popularity.

There were four other children in the class who had very poor peer votes: subject 170, a girl, and subjects 173, 176 and 177, all boys. Surprisingly, the four were awarded the highest general scores in the class by the teacher - 9, 8, 9 and 7 respectively. They did not all, however, obtain the highest number of zero scores on the teacher questionnaire. The first three of the four subjects all scored poorly on the number of zeros obtained, leaning heavily to the plus side of the scale, and only the fourth subject had one of the highest zero scores in the class, his remaining responses tending to the minus side of the scale. Subject 170 assessed herself in accordance with the teacher's indication that her behaviour was more to the plus side of the scale, but she desired to be even more to that extreme. Subject 173 thought himself to be in the middle of the scale with a slight leaning to the plus side, but desired to be much less in the middle, and preferred to be evenly spread to the plus and minus side of zero. Subject 176 viewed himself as being in the middle with a leaning to the minus side of the scale, and desired to be slightly more to the plus side. Subject 177 again viewed his behaviour as being predominantly in the middle of the scale, with the remaining responses evenly spread either side of zero. His desired scores were almost the same as his actual scores, with a very slight leaning to the plus side. As with subject 163, it is possible that these four children have difficulty in perceiving themselves as others see them. It is also possible that a knowledge of what constitutes skilful behaviour is lacking. This does not explain, of course, why the teacher is so positive about their behaviour and regards it as so exceptionally competent, while the peer group react so negatively to these children. It is possible, to take just one example, that the children may be more communicative in class compared with the other children, but that this very characteristic might alienate them from

their peers. Had we been able to view their behaviour for ourselves in the natural setting, it might have been possible to gather clues which would have aided us in obtaining a solution to the mystery.

6.3.6.13 Teacher 16: Subjects 178, 182, 197, 200 and 208

The teacher general scores for the above children were 3, 4, 2, 3 and 3 respectively. The number of zero scores they obtained on the teacher questionnaire were the lowest in the class: 5, 10, 4, 10 and 13. It should be noted here that subjects 192 and 207 also obtained low zero scores of 8 and 12 respectively, but both were given a slightly higher general score of 5. An explanation of this might be that all the remaining scores were either under the -1 or +1 column and neither subject had any +2 or -2 scores. The peer votes of the five children under consideration were mixed: 4, 0, 6, 0 and 5 out of 31. Eighteen children scored 5 or over, 14 scored 4 or less. Only two children in the class scored zero (subjects 182 and 200). The other three children had reasonable or good peer votes.

Subject 178 is assessed by the teacher as being much too much to the minus side of the scale, and her actual questionnaire shows her to be aware of this leaning, but believing herself to be fairly in the middle of the scale. Her desired questionnaire reveals that she would like to be much more in the middle of the scale. Her knowledge of social skills seems to be good. Her perception of herself may or may not be an accurate one. It is possible that it is only with the teacher that she is much too inhibited, and that informally with her peers she may function quite easily.

Subject 182 is again assessed by the teacher as being excessively to the minus side of the scale, and the child's own perception is very much in accordance with this. She desires to be more in the middle of the scale, so her perception of herself and her knowledge of skilful behaviour seem accurate; but as she has no peer votes at all, it may be that she is unaware of how to translate her desired behavioural responses into action.

Subject 197 has the lowest general score and the lowest number of zeros on the teacher questionnaire in the class, but is popular with his peers. The teacher distributes his scores evenly either side of zero which, combined with such a low zero score, would suggest that his behaviour is

usually extreme, but not consistently to one extreme or the other. The boy's own perception of his behaviour is in accordance with the teacher's, and his desired responses are almost identical; so it may be that he has found that extreme behaviour makes him popular with some of his peers and therefore, even if it makes him less popular with his teacher, that he has decided to stick to that formula. This is an interesting set of results, which would prove even more interesting if we had direct observation data.

Subject 200 (like subject 182) is assessed by the teacher as being much too much to the minus side of the scale, and his own perception supports this. He also desires to be very much in the middle of the scale, so again his appraisal of himself and his knowledge of social skills seem accurate. He may, however, be finding it impossible to translate that knowledge into action, as he also has a peer vote of zero.

Subject 208, according to the teacher questionnaire (apart from his 13 zero scores), is spread fairly evenly either side of zero. His own questionnaire results show that his perception of himself is similar to that of his teacher, though he believes himself to have a slightly greater leaning to the minus side of the scale. He desires to be a little more in the middle of the scale, but no penchant for dramatic change is indicated. It may be that this child (like subject 197) has found that his extreme social responses impress at least some of his peer group (his peer vote was 5), and therefore that he is happy to maintain that behaviour pattern.

6.3.6.14 Teacher 17: Subjects 210, 214, 216 and 219

Teacher 17 was responsible for the remedial group in the sample, and while none of this group were given exceptionally high general scores, the above subjects were the lowest in the class, scoring 4, 4, 3 and 2 respectively. Three of the four (210, 214, 219) also had the lowest peer votes in the class (0, 3, and 1 out of 11 respectively). Subject 216 had an average peer vote. The teacher questionnaire results were in accordance with the general scores for each child: the children were awarded zero scores of 6, 2, 1 and 1 by the teacher. Looking at the pattern of responses on the teacher questionnaire, it is apparent that subject 210 is excessively to the minus side of the scale; subject 214 is fairly evenly spread either side of zero, but tends a little more to the minus side;

subject 216 is entirely to the minus side of the scale; and subject 219 is almost exclusively to the plus side of the scale. Their actual and desired questionnaire scores were mostly high - certainly comparable to all the other children in the sample.

Only subject 210 (who obtained no peer votes) had a very low zero score (8) on her actual questionnaire, and this remained the same on her desired questionnaire. She concurred with her teacher that she was too much to the minus side of the scale, and although her desired questionnaire showed a desire to move from -2 responses to -1 responses, this obviously did not affect her zero score. She may have an accurate perception of how others view her, and may also know in what direction she needs to change her behaviour, but perhaps she is unable to adapt her social responses to real situations.

Subject 214 viewed himself as being very much to the minus side of the scale, and his desire to change was slight (only three responses differed between the two scales). This child does not seem to possess an accurate view of himself, and also shows no clear idea of the way in which he needs to change his behaviour. He does have three peer votes, however, so he is not without friends in the class, unlike subject 210.

Subject 216 scored 16 zeros on both the actual and the desired questionnaire. The remaining responses were almost all to the minus side of the scale, concurring with the teacher's assessment, and her desired questionnaire showed only a very slight movement to the plus side of the scale (i.e. in three responses). As with subject 214, this child also has friends in the class (5 peer votes). Although they are both regarded by the teacher as being too much to the minus side of the scale, it may be that, while they experience great difficulty relating to adults and/or in public, they have much less difficulty with peers.

Subject 219 scored 15 and 18 zeros on his actual and desired questionnaires, the remaining responses falling mainly (but not exclusively) to the plus side of the scale. His desired questionnaire showed a difference in only 3 responses, 2 from the plus side to the middle and one from the minus side. This boy seems to have some idea that he tends to the plus side of the scale, but his teacher regards him as almost exclusively so (only 2 responses are 0 or -1); and he obtained only one peer vote. It may be the child is not viewing himself accurately, but the relatively high number of zeros scored on his desired questionnaire

suggests that he is aware of what constitutes social skills. It is interesting that this child with the lowest peer vote and teacher general score was the only child tested who was subsequently taken out of the school and placed in a Special School, against the wishes of the teacher. The teacher argued that he had the ability to function both socially and academically within the main school system, and that he could also discipline himself to achieve what was required of him when he was motivated to do so. In spite of her assessment, the decision to send him to a Special School was taken before the questionnaires were given. This was unfortunate, since the results of the questionnaire would have supported the teacher's view that the child did possess a knowledge of social skills comparable to many children in mainstream secondary education.

6.3.6.15 Conclusion

In writing the individual analyses of the children with low teacher general scores, and comparing their profiles with others in the class, it seemed to me that a fuller picture of each child was emerging than that which would have been possible had a uni-dimensional scale been utilized. When all the material gathered on each child is correlated, it is possible to see how the child perceives him/herself in comparison with how (s)he would like to be; to identify possible specific skill deficits; and to assess whether the child's view is in harmony or disharmony with that of the teacher. One can also obtain an idea of the child's standing within the peer group. In addition, one is also able to look for a general pattern on the part of individual teachers, comparing his/her overall pattern of scoring in order to identify a bias or preference for one side of the scale in comparison with the other. It is also possible to see if general scores correlate consistently with responses on the teacher questionnaire. Indeed, as a result of this it was evident in this study that one or two teachers' results did not correlate across this dimension as consistently as one would expect, and therefore that there may have been certain aspects of behaviour which these teachers regarded as significant, but which were omitted in the questionnaire. Interviews with the teachers would have clarified this, and it is unfortunate that this was not

possible. Such clarification is essential if the questionnaire is to be improved. On the basis of the child's overall profile, which includes the information obtained from his/her teacher and peers, it was possible to focus on specific children and generate further hypotheses about the individual child's behaviour. One hopes that those hypotheses could then be progressively refined by observing the child and talking to him/her, until one felt confident in locating the area of difficulty (e.g. knowledge of appropriate social skill; identification of context; execution of skill; withdrawal if failing; failure in monitoring, etc.). Subsequently one could focus on potential strategies for rectifying that specific problem. The use of the questionnaire format in conjunction with the other information obtained therefore seems to be of great value in providing a picture of each individual child.

6.4 Video Assessment

A video of eight of the Irish grammar school children was viewed and commented upon by three Cambridge school children of similar age. No statistical analysis was carried out on such a small sample as the primary aims were simply to:

- i) observe the advantages and problems of using the video as a medium of observation with this age group (6.4.1);
- ii) record the comments of the observers in the hope of attaining further insight into their way of thinking (6.4.2);
- iii) look for any correlation between the scores of the children being observed, or patterns which emerged from the results of the large sample, with the comments of the observers (6.4.3); and to
- iv) try to improve the questionnaire from the comments made by the children on the video (6.4.4).

The format of the observation and the questions, which were designed to elicit comment without leading the commentators, can be found in Appendix 17.

6.4.1 The Advantages and Problems of Using the Video as a Medium of Observation

Although a teacher skilled in the use of the video camera operated the machine throughout, attempting to gain close-ups of the children to supplement the more frequently used long shots, and producing a very good piece of film given the limitations of equipment and space, it was still difficult to monitor everything which one would have liked to. It is only after experiencing the limitations of using a camera that one appreciates how sophisticated is the human eye and brain in perceiving so much detail with such rapidity. The presence of a teacher in the first part of the film asking what the children thought of the questionnaire did provide structure - the children talked individually to the teacher, and one could hear what was being said clearly. This also enabled the children to adapt to the presence of the camera, so that when the teacher did leave the room, they clustered together talking and laughing as if uninhibited by the presence of a person with a camera in the room. During this period when the teacher was absent, however, it was very difficult to hear any of the verbal communication between the children, because they did all talk at once. It was nevertheless interesting to see how the girls immediately huddled together in a group and the boys remained external to this huddle of females, not clustering together themselves. It seems clear that if this method is to be used successfully, more than one camera is necessary. A combination of continuous long shots of the group would need to be married with close-ups of individual children - and the sound production would have to be vastly better than on this video, where much information was lost because of noise interference.

6.4.2 The Comments of the Observers

The comments made by the observers in their scripts revealed perhaps more about themselves than about the children they were assessing! One boy responded by liking those who were "tidy" and "intelligent" and disliking those who were "untidy", "slouched in chair", "bit fingernails" or were "generally annoying". The girl observer liked those who "laughed a lot" and disliked those who were "very serious" or "thought a lot of

themselves". Interestingly, she disliked most a boy on whom she provided no negative comments. Why this is so is a mystery - perhaps there was nothing specific she disliked (a significant finding if that were to be the case), or perhaps she was unable to find the words to say what she disliked. The third judge was more informative in his comments and more specifically perceptive about the children on the tape. He assessed positively those children who "laughed a lot", "looked happy", "looked at the speaker" and at whom the others looked when the subject was talking. His negative comments were "looked unhappy", "sat solemnly", "said nothing", "no one looked at him when he talked" and "bit of a poseur".

Having no sound at first and then including what was said produced some, but only a little, difference in the scores for each of the children. The first judge rated 5 children lower without sound than with; the second judge rated 1 child lower; and the third rated 2 children lower. It is interesting that all of the changes made in the scores when sound was added occurred in favour of the children. This may indicate that even if the child is socially at a disadvantage from his/her non-verbal communication, his/her verbal ability could be useful in improving the overall impression of skilfulness with the peer group - something which could be useful to bear in mind when formulating therapy strategies.

6.4.3 Correlation between the Scores of the Children being Observed, or Patterns which Emerged from the Results of the Large Sample, with the Comments of the Observers

One of the most surprising observations which was apparent from the scripts of the observers was that although two were male and one female, all three chose girls as the most popular person and boys as the least popular person from the group of eight, and each chose different boys and girls in both cases. Girls were also rated consistently more highly than boys by all three judges. This was very interesting, as it reflected the general pattern of results found in the large sample where girls generally appeared to be more at ease socially than boys (perhaps with the exception of the secondary modern group of girls).

Looking at the scores out of ten awarded by the three judges in comparison with the peer rating of each subject and the teacher rating, one is struck by the general similarity of the scores between the judges and the peer group (there is less similarity with the teacher scores). Subject 179 (Trudi) is given the lowest of the girls' scores by two of the judges, and her class peer vote is also the second joint lowest in the class. The negative comments about her from the two judges were that she seemed "very serious" and "she just sat there solemnly and said nothing"/"seemed shy". The third judge, who awarded her the same score (8) as three of the other girls, said she was "tidy" (with sound) and "intelligent and tidy" (without sound).

The boys' scores seemed to be somewhat more random and less consistent than the girls. Subject 199 (Sean) was awarded similar scores by all three judges (6, 6 and 5), and the only comments we have about his demeanour are one positive ("he talked, looked happy and looked at whoever was talking") and one negative ("slouches in chair") from the third judge. Surprisingly, however, he has the joint second lowest peer result in the class (1), but a good teacher score (7). The other interesting observation to be made about the boys' scores is that subject 198 (Christopher) is awarded low scores (2) by both male judges and is given a 5 (the lowest score she awards in the "with sound" condition) by the girl judge, who describes him negatively ("thinks a lot of himself"). His peer vote, however, is average for the class (5 out of 31) and his teacher score is good (8). This is interesting because all three judges had negative remarks to make about this boy ("generally annoying"; "when he talked no one looked at him and he was a bit of a poseur"). It would be interesting to know if the presence of the camera affected his behaviour; whether different criteria according to nationality or school type were in operation; or whether the 5 boys from the class who selected him as a friend were similar to him in personality. The final interesting observation to be made here is that subject 197 (William) receives the only actually contradictory comments from the judges. Judge 2 describes him as "unhappy - said nothing" and gives him a score of 2, in contrast with judge 3, who describes him as having a "nice personality" and gives him a score of 7. It is possible that because he did not contribute to the conversation, no affirmation nor refutation of the impression created by the "without sound" condition was available and therefore that one judge,

who perhaps liked his lack of assertion, responded favourably to his non-verbal communication, while the other responded negatively because he seems to like happy-looking peers who interact with others well. One again is forced to acknowledge the complexity of assessing social skill when the observer and his/her perception and personality are so intertwined with the skills or skill deficits of the observed.

6.4.4 Improvements to the Questionnaire

The comments and criticisms provided by the children on the video about their impressions of the questionnaire were insightful and of great value. Some of the issues which were raised merit further consideration in considering the use of questionnaires generally and the usefulness of this one in particular. Before going on to consider these issues, however, a brief comment will be made about two positive observations made by the children. They generally agreed, firstly, that they had been made to think about some aspects of their behaviour which they had not previously considered; and secondly, that their experience had made them want to change certain aspects of their behaviour. This was encouraging, as one wonders if the realisation by the child of how (s)he appears to others might of itself provide a stimulus or desire for change. The role of the therapist would then be to facilitate further appreciation of others' perspectives and explore with the child how change can occur.

The first generally agreed criticism of the questionnaire was that the range and context of the scale were insufficient. Some children described specific questions where they were unsure which option to tick because a difference in situation would have elicited a different response. In the case of bullying, for example, some said they would intervene if they could bring their friends along to help, but might not by themselves.

A second generally agreed criticism was that some questions were too "obvious". When discussing those that appeared obvious to them, however, it became apparent that they disagreed amongst themselves. For example, one boy said it was obvious, if you saw someone being bullied, that your natural instinct would be to help. When challenged by the others he said he thought it was still the obvious course of action to adopt, regardless of the consequences for oneself. Some of the others disagreed. Another

question identified as too obvious was lending someone dinner money which would necessitate doing without - yet many children chose this option. The children themselves may have realised that this particular criticism did not have the validity they believed it to have by the end of the discussion, given the level of disagreement that followed each suggestion!

The third criticism was that some questions were too hard to answer for oneself - the two specifically cited by the group were "Do you smile a lot?" and "Do you talk too much?" The girls particularly said they did not know whether their level of smiling and talking was too much, or whether it was about right. Different wording might facilitate answering such questions, and alternative wording (which will hopefully be advised upon by the children themselves) will be considered for the future (e.g. "Are you told by your classmates or teacher that you smile/talk ...?").

Another criticism raised by one boy was that there was insufficient time to answer the questions. The rest of the group did not seem to find this a problem, and when asked about it, the boy said that he had read through each question three times and when he was less than half way through had observed a friend had finished his questionnaire! This boy also managed to complete his questionnaire in spite of being so far behind his friend. For most children the time was sufficient, although longer would need to be given if a special needs group or a group with learning difficulties were participating.

A fifth criticism which was agreed upon by a few children was that some of the questions were not directly relevant to their own experience. When asked how they coped with this, the children said they answered according to how they thought they would behave, extrapolating from other circumstances.

Another interesting comment which emerged was made by a girl who pointed out that one could lie if one wished to. She knew at least one boy who had done so. When questioned by the others, she said she had seen "Michael's" actual questionnaire as he was handing it in and that he had answered question 14, about answering questions in class, "happy to answer when asked, but would not usually interrupt". The group simultaneously exploded into laughter and agreed that this child persistently interrupted. They also agreed that he could not fail to be aware that this was a problem, since he was so consistently told off for so doing. They therefore believed him to be lying. This provided a perspective on the peer

group's response to another child's behaviour which would have been otherwise unavailable to us (although the teacher questionnaire did provide at least one different perspective from that of the child). It also demonstrates the problem with having the questionnaire results, teacher scores and peer vote as the only information available on the children. One is constantly aware of the potential richness and complexity of observation which is unavailable to us when relying on scores alone. A multi-faceted approach, in which the child is seen functioning in his/her own environment and interaction takes place with that child and the child's peers, is by far the most stimulating and creative way of "assessing" the child's social ability. Under present conditions, this would prove impossible as a routine measurement of assessment, of course. In the meantime, if the questionnaire identified children who were experiencing social difficulty, more detailed observation of that smaller number of children could then follow. At the present time the challenge lies with finding a means of identifying such children out of the vast number in schools, hopefully before potential difficulties have become real ones, while at the same time critically evaluating and changing or refining our own perspective of the children's social world.

6.5 Further Validation with a Small Group of Subjects

As outlined in chapter 4, the practical constraints of classroom time and access to subjects prevented comparison of the new bipolar measure presented here with other measures as I had initially intended. After the main study was complete, however, another piece of research of limited scope was undertaken in order further to test the validity of the new measure. Thirty children from a Scottish primary school (and of the age-range under consideration in this study) were given the children's actual questionnaire, the children's desired questionnaire and the Junior Eysenck Personality Inventory. They were also asked to name their five best friends in the class, and were videotaped both in the playground and in the classroom during a "wet" playtime. Their behaviour was then rated by two adult and two child assessors for general social skill (on a scale of 1 to 10). The teacher was then asked to supply a list of the five most popular and five most unpopular children in the group and to give each of these ten

children a score out of ten for their sociability amongst peers (on a scale of 1 [very unpopular] to 10 [very popular]). This group of ten children were also given, during their lunch breaks, the Wechsler Intelligence Scale for Children. The results of this in-depth analysis across the various measures are summarised in the Tables 1 and 2 below, where M stands for male and F for female; C for child assessor and A for adult assessor; and JEPI for Junior Eysenck Personality Inventory, with E for extroversion, N for neuroticism and L for lie scores. The first figure under "peer rating" is the ranking within the class as a whole (out of 27 children) and the second figure, in brackets, is the ranking amongst the same gender as the subject (out of 17 for the boys and 10 for the girls).

Table 1 The Five Children Designated by the Teacher as "Popular"

Subj.	I.Q.	Teacher	Peer	Actual	Desired	Assessors				JEPI		
		Rating	Rating	Zeros	Zeros	C	C	A	A	E	N	L
1 F	107	10	8 (3)	19	24	8	8	9	8	16	10	1
2 F	100	9	8 (3)	24	24	8	7	8	8	18	7	1
3 M	129	8	18 (11)	17	18	7	7	6	7	19	6	2
4 F	122	8	18 (8)	21	20	5	6	8	8	19	5	1
5 M	128	8	2 (2)	19	19	9	8	7	8	18	5	2

Table 2 The Five Children Designated by the Teacher as "Unpopular"

Subj.	I.Q.	Teacher	Peer	Actual	Desired	Assessors				JEPI		
		Rating	Rating	Zeros	Zeros	C	C	A	A	E	N	L
6 M	101	3	18 (11)	5	3	3	4	6	5	19	19	0
7 M	83	1	24 (15)	7	20	7	8	7	7	9	11	1
8 M	101	7	11 (7)	5	10	6	5	6	4	20	8	0
9 M	72	5	18 (11)	11	11	5	6	3	3	20	14	2
10 M	136	6	25 (16)	21	21	3	4	6	7	18	13	1

In addition, as an objective measure of skill, each subject was rated during the wet playtime for frequency of interaction with peers and length of time spent isolated (out of a 30 minute period):

Table 3 Interaction and Isolation

<u>Subj.</u>	<u>Frequency of Interaction</u>	<u>Length of Time Isolated</u>
1	Constantly in the group	0 minutes
2	Constantly in the group	0 minutes
3	Only left two friends briefly to fetch something	Less than 5 minutes
4	Constantly in the group	0 minutes
5	With a small group all the time, except to visit toilet; other boys from outside the group also interacted with him regularly but briefly	Less than 5 minutes
6	Attempted interaction with 7 different people on 12 occasions, but this was sustained for more than 3 minutes only once. Talked to the teacher when she came in	15 minutes
7	Talked to 3 boys for between 2 and 3 minutes each	20 minutes
8	Played cards with one other boy for a sustained period	10 minutes
9	Talked to 4 boys for between 2 and 5 minutes each	15 minutes
10	Interacted only twice, just to ask for information	Over 28 minutes

We may summarize these results as follows, in terms of both the general pattern and the individual results which do not quite fit this pattern.

The general pattern is that the five popular children with higher teacher scores also have higher I.Q.'s; higher peer ratings; higher zero scores on both the actual and desired questionnaires; and higher ratings from the assessors of overall social skill. They have lower neuroticism scores on the Junior Eysenck Personality Inventory; and they spent much less time alone and interacted more frequently than the unpopular group.

The individual results which do not quite fit this pattern arise with subjects 3, 7 and 10. Subject 3, for example, was given a score of 8 by the teacher. He was not, however, one of the popular children on the peer rating, nor were his zero scores as high as the others in the group. The fact that both his zero scores were low indicates that he was aware why he was not popular but lacked either the knowledge or the desire to change. The video evidence and his demeanour during the I.Q. test suggest that the problem was one of desire. He seemed to prefer the company of adults; and his ambition to be a clothes designer, freely expressed to his peer group, marked him out as different from the other boys in his class.

Subject 7 had the lowest teacher rating and one of the lowest peer ratings in the class, and at first it seems surprising that his actual score of 7 zeros soars to 20 on the desired scale. This was very interesting, because this boy was partially deaf and on the point of being sent to a special school. He had been assessed and found to have a low I.Q. (though one wonders whether the low I.Q. score was reflective of his ability or whether his hearing impairment has skewed the result); but on the basis of these results one would have to argue that his social perception was extremely accurate, as was his knowledge of what is required for social acceptance. Given his desire to behave in that way, one would hope that his next institution will provide him with the mechanism to achieve that desire.

Finally, subject 10 had the most complex pattern of all. His I.Q. was far in excess of what his teacher expected, as was his unpopularity. The teacher had given him a rating of 6, saying that, although he was not popular, neither was he extensively unpopular. He received only one peer vote, however (the second lowest score in the class, next to a young Asian boy who had just recently moved to the school and who scored 0). His actual and desired scores were both 21 and he seemed to think he was mixing with his peers quite well. The video shows the extent of his lack of contact with his peers, however, and he did show a tendency towards

aggression. The social difficulty here, looking at all the results, seemed to be a problem of perception. The boy did not see himself as his peers did, and did not seem aware of the extent of his unpopularity. It would have been interesting to enquire of the children (but perhaps not sensitive to do so) how many peers they thought would include his/her name on their list of best friends to obtain a further measure of the subjects' own accuracy of perception.

There are exceptions to the general pattern, then, which are sufficient, in particular, to raise the question of whether intelligence is or is not a prerequisite of good social functioning. It should also be noted that the evidence from this small sample of children is that neither extroversion nor "truthfulness" are discriminators of popular and unpopular children. The important point, however, is that the general pattern of results does suggest that the new bipolar measure presented in the dissertation is accurately measuring the social ability of children. There is clearly a correspondence between the evaluation of the children on the basis of the peer and teacher ratings, the assessors' observation, and the objective measurement of behaviour in a naturalistic setting, on the one hand, and the evaluation of the same children on the basis of the questionnaires.

7. CONCLUSION

7.1 Introduction

I began this dissertation with a description and critique of the current state of affairs with regard to SST, and a justification of the philosophy and methodology consequently adopted in this study (chapters 1 to 3). I have now completed the description of the development and validation of the bipolar measure which I argued in chapter 3 was necessary if we were to make new discoveries about the social world of the young adolescent (chapters 4 to 6). It remains now to draw some conclusions, and to look to the future. In 7.2, the results from chapters 5 and 6 are briefly reviewed, and some comments made on what has been achieved and what has not been achieved, with particular reference to the discussion of method in chapter 3. In 7.3, the implications of the present study for the conceptual framework of SST are discussed, picking up the discussion in chapter 2. Finally, in 7.4, future research plans are outlined.

7.2 Review of Results

The statistical analyses of chapter 5 showed that significant relationships existed between the teacher general score and each of the questionnaires (actual, desired and teacher); between the peer vote and each of the questionnaires; between the two pupil questionnaires; and, in general, between the teacher questionnaire and each of the child questionnaires (see below). This suggests that the questionnaire has struck a chord of general consensus which exists among the teachers and the children about which behaviours are skilled and unskilled - something which is confirmed by the numerous comments in the free space on the questionnaires. The test-retest results also indicated that the test was reliable, and that it compared favourably with other questionnaires measuring social skills.

The pupil actual and desired questionnaires did not have a significant relationship with the teacher questionnaire on the Pearson Product Moment Correlation. The actual questionnaire was only just outside the

significance level, however, suggesting that the teacher showed a fairly accurate perception of how the child actually behaved, and that the child him/herself was able to assess his/her own behaviour fairly accurately. The desired questionnaire was much further outside the range of significance. This suggests that the teacher, as one might expect, has only limited access to each child's thinking and, in particular, desires. This in turn implies that we as adult assessors need to differentiate much more clearly than has sometimes been done in the past between knowledge of social skills and display or performance of social skills. The lack of correlation between the teacher and desired questionnaires on the Pearson Product Moment Correlation tells us not so much about a weakness in the particular assessment process at the heart of this study, as about the dangers inherent in all forms of adult assessment of children. The gap between the social world of the young adolescent and that of the adult seems, on the evidence which we have examined, to be a significant one. We cannot simply assume that we are able as adults intuitively to know which are "inappropriate" strategies in that world, and to teach new, "appropriate" ones. For if we do assume this, we run the risk of simply reinforcing or intensifying what is in that context quite inappropriate action which may alienate children from their peer group, without providing them with the means of understanding, and living with or overcoming, the alienation.

The descriptive data presented in chapter 6 confirms that the questionnaire is a good indicator of social skill. The children chose the zero option (deemed the most appropriate behaviour) more consistently on the desired questionnaire than on the actual; only 8 questions had less than a 70% response in the zero category on the desired questionnaire, compared with 19 questions on the actual questionnaire; and a consensus existed both in questions where the zero category dominated and in questions where it did not. Only one question on the desired questionnaire showed no strong agreement among the children on which choice of behaviour was desirable, and only four questions had a lower zero score on the desired questionnaire than on the actual.

Boys and girls responded similarly to each other on both questionnaires, both groups desiring to behave more frequently in the zero category than they actually did. The patterns for the various school and nationality groups were also similar to each other. Differences between

the various groups did emerge, however. Girls chose the zero category more than boys on both questionnaires, and seemed more at ease socially - something which was corroborated in the video assessment, where all three judges rated the girls more highly. Secondary modern boys and girls differed most, of the school groups, in their responses on the desired questionnaire, English boys and girls differing more than did Irish children. The Irish children, in general, chose zero more often on the desired questionnaire than did the English. The Scottish sample had of all three nationality groups the highest percentage choosing zero on the actual questionnaire. The grammar school group had over 70% choosing more than 21 zeros on the desired questionnaire, compared with only 25% of the remedial group and 39% of the secondary modern. Because of such differences, my recommendations so far as use of the questionnaire is concerned would be, firstly, that it is used with the norms for each of these groups, rather than norms based on an average of all the groups; and secondly, that the idea of skilfulness should be extended to allow both for group difference and developmental changes.

The general success of the project fully justified many of the decisions taken about the format of the questionnaire at the outset. The pupil questionnaire was universally found to be entirely manageable, and could easily be given in one or two class periods; while the teachers found that they could fill in the teacher questionnaires on a class of about 30 children in a few hours. The use of a bipolar scale, rather than the more familiar "Yes/No" format, provided a wider range of responses than is normally available, resulting in the much more detailed and comprehensive picture of each individual which emerged.

The free space in the questionnaire in which children could elaborate upon on any question, or make a comment, proved invaluable. It was widely used, most often for comments about bullying, and less often, but frequently, for comments about the difficulty of relationships with the opposite sex. By writing freely in it, the children provided an unstructured, and therefore even more revealing, glimpse into their world than was available through the window of the formal questioning, enabling me to focus more specifically on the areas which are important to them. In addition, they also provided constructive criticism and suggestions which will enable me in the future to improve the questionnaire.

The use of the two forms of response ("how I am" and "how I would like to be") provided a reliable means of measuring any discrepancy that existed between how the child perceived himself and how he wanted to be; an indication of his/her knowledge of which behaviour is appropriate; and a means of identifying where (in the complex process of assessing social situations, deciding how to respond, and then responding) the origin of a child's difficulty in social interaction might lie. It further enabled identification of specific areas where children experienced difficulty even when the appropriate behaviour was known and desired (reflected in the 12 questions where a difference of more than 16% existed between the responses to the actual and desired questionnaires). Finally, the use of the two forms of response also allowed me to assess whether the response which I had designated "zero" was in fact the most appropriate in the circumstances. For example, the children regarded the most appropriate response to bullying as "fighting back", which I had designated -2; and it was widely regarded as inappropriate to involve a teacher in an incident even if another child were being beaten up. In some classes it was inappropriate even to talk to a teacher.

The use of a general score awarded by the teacher, in addition to the teacher questionnaire results, showed most effectively whether (s)he was consistent in his/her scoring; whether there might be characteristics omitted by the questionnaire in providing a picture of a socially skilled child; and whether any patterns of scoring were apparent (e.g. a teacher liking quieter children better than noisier ones, and therefore giving higher general scores to that particular group). The general score further showed clearly whether the child's actual view of him/herself was consistent with the teacher's view; and whether a child who was very popular/unpopular with a teacher was also regarded in the same way by his/her peers.

These, then, are the positive aspects of the questionnaire in the format in which it was used in this study. There were, of course, weaknesses as well. In the first place, although a range of responses was provided from which children could choose, some of the children still found the range too restrictive. This was apparent not only from the "free space" responses, but also from the children's responses on the videotape. Secondly, the context of the situation described in the questions was sometimes perceived to be ambiguous. Some children said that their

response would have been different if the circumstances had been so. In some cases the children clarified in the free space the context in which they would make the ticked response from the five options; and some children outlined the context in which they would answer differently. Thirdly, one remains still unaware of the extent to which the questionnaire covers the full range of skilful and unskilful behaviour. From the present findings it is possible to say which responses to the particular social situations presented are universally regarded as skilful or unskilful (for example, calling a teacher to deal with a problem was overwhelmingly regarded as unskilful); and it is possible to identify those responses which are much more ambiguous; but one is still unaware whether, and to what extent, important social situations (from the child's perspective) have been omitted.

Fourthly, it was clearly a weakness of the study that the population was spread so unevenly. The original aim - to take children from different types of school (grammar, secondary modern, comprehensive, private and remedial), different social backgrounds, different academic abilities, different age groups and different parts of the country - was largely not achieved, so that the comparisons which one had hoped could be made proved impossible. Only a dozen children from one remedial group participated, and none from private schools; while there were many grammar school children and several secondary modern pupils. Most children came from England and Northern Ireland, some from Scotland and none from Wales. Only 11-12 year olds participated, so that there was no opportunity to look at possible developmental changes; and no I.Q. control was possible because of the time an adequate I.Q. test would have taken. A quick test, in my view, would not have been worth doing, as one could not have been confident that one was actually measuring the child's overall intellectual ability. Finally, no measure of social class was available, and I would have felt unhappy about asking for the occupation of the parent without their permission.

Fifthly and finally, there is the weakness inherent in the lack of input from the peer group. The failure to tap the wealth of information available on each child from this source - the group which is arguably the most important influence in determining a child's perception of him/herself during the school years - is regrettable. The peer vote gave an idea of how popular or unpopular a child was in comparison with the others in the

class, which was valuable. The results here were corroborated by the external judges in the video assessment. The peer vote provided no indication of why a child was liked or disliked, however. This sort of information is invaluable, especially in cases where the child's problem is that (s)he is perceiving him/herself differently from everyone else.

It is clear that such weaknesses ought to be addressed in the future. The presentation of fairly specific contexts could easily be incorporated into a questionnaire which was being tailored to the needs and prerequisites of a particular class, and it may also be possible to clarify some of the social situations presented in the questionnaire for general usage. The problem here is that, if the questionnaire is being used across culture, class, academic ability and social experience, then to make it too specific might make it more relevant to the real life experience of some children, while distancing the reality of the questions to others. The challenge of ensuring that the questionnaire is composed of situations which are true to the everyday experiences of school children and yet relevant across the social strata remains. One hopes that, with further help and guidance from the children, this challenge might be met - perhaps by using different series of optional questions which would supplement the basic questionnaire, or perhaps by including instructions with the standard questionnaire which would enable the teacher (or whichever professional person is using the questionnaire) to adjust the questions to suit the group being assessed, and subsequently to interpret the data more flexibly.

Another thing which would help in terms of future use of the questionnaire would be a parent measure of the children, perhaps with the parent's name, date of birth and occupation at the top, combined with an opening statement along the lines of, "Thank you for participating - we are grateful for your help. Please try to fill in every question, but if there is any information you do not wish to give, then just leave the space blank". Hopefully this would avoid causing offence, while allowing the person the freedom to choose whether (s)he disclosed such information or not).

Finally, it might be possible in the future, working with a small group of children (perhaps all of whom seem to share the same problem of perceiving themselves incorrectly), to have peers fill in shorter questionnaires on each other, or answer questions about how they perceive each other, using these shorter texts also alongside the other measures.

Obviously this would have to be carried out very sensitively and carefully, ensuring that there was an understanding that everyone in the group was on an equal footing and that it was each person's responsibility to try to help and encourage his/her peers, as indeed it was their responsibility to help and encourage him/her. This seemingly can be achieved in most group therapy situations, though it is not something I would want to attempt without more experience. These suggestions about ways of eliciting the information which would prove invaluable from the peer group are therefore tentative and confined to special circumstances, i.e. use with children who are already experiencing considerable difficulty at school.

Improvements to the questionnaire such as these are certainly worth considering for the future. Even as the questionnaire stands at the present, however, its strengths far outweigh its weaknesses; and it compares very favourably with other measures which are already in existence.

7.3 Implications of the Present Study for the Conceptual Framework of Social Skills Training

Chapter 2 of the dissertation offered a discussion of one important area of SST wherein a reason for its limited success could be found: in its conceptual framework. Three models (those of Harré and Secord; La Gaipa; and Carver and Scheier) were presented as starting points for further thinking in this area; and in this section each of these three models will briefly be examined once again, in order to ascertain the extent to which the results from the present study add to this important debate.

7.3.1 Harré and Secord's Model

Harré and Secord view of reality, it will be recalled, is that it is intersubjective rather than objective, and therefore that the location and display of skills in the social realm which the collective regards as important will be the criteria used by that collective to judge the acceptability or unacceptability of individuals. The individual's

knowledge of which behaviour is appropriate in a social situation is resident in a "cognitive template", and incompetent individuals may lack these publicly shared templates or have idiosyncratic ones.

The questions which must be addressed of the data from this study if this model is to be tested are as follows:

1. Does the data show any evidence of publicly shared templates? That is, is there any evidence of "accounts of episodes"; or, in the language of the questionnaire, is there a particular choice of behaviour for each question in the questionnaire upon which the majority agree? If so, this would suggest that a consensus exists regarding which behaviour is appropriate/inappropriate, and this in turn would imply the existence of a template shared by the majority of the children.
2. Does the data show any evidence of idiosyncratic templates? That is, is there evidence of individuals believing that certain choices of behaviour are appropriate when the majority of the group believe otherwise?
3. Is there any evidence that the possession of an idiosyncratic template is related to unpopularity within the group or with the teacher, or that possession of a shared template is related to popularity within the group or with the teacher?

In attempting to answer the first question, the results for each question on the questionnaire were considered, and where the majority (over 70%) of children agreed on a particular option, this was assumed to be a publicly shared template of an appropriate strategy. Over 70% of the sample, in fact, chose the same response on 21 of the 29 questions on the desired questionnaire. The data for the other eight questions are presented in Appendix 10, and a discussion of them can be found in 6.3.2 above. In six of these eight, over 70% of the children had one of two particular responses, indicating that the remainder of the responses were most definitely not thought to be appropriate by the majority. Only in questions 15 and 17 were respondents divided between three options; and even here, the responses are all to one side of the scale (zero, -1 and -2). In both questions, to be to the plus side of the scale is to display

an idiosyncratic template with regard to the behaviour described. A shared public template does exist on the majority of questions presented in the questionnaire.

The second issue was investigated by looking at the total number of zero scores (on both the actual and desired questionnaires) for each child, and determining the average number. Children who had a very low number of zero scores compared with that average were regarded as possessing idiosyncratic templates. Appendix 8 shows the total number of subjects responding to each category on both the actual and desired questionnaires, and it is therefore possible to see in which categories the majority of the sample fall. Only 12 children (less than 5.5% of the sample) scored fewer than 10 zeros on the actual questionnaire, and only 10 children (less than 4.5% of the sample) scored fewer than 10 zeros on the desired questionnaire. Children with a very low number of zeros on their desired questionnaire, of course - whether this implies that they lack fundamental knowledge of what constitutes socially skilled behaviour, or that they possess the knowledge but have no desire to utilize it -, should be regarded as potentially more "at risk" than those who assess themselves poorly but at least know which behaviour might be socially appropriate.

In order to answer the third question, on whether the possession of an idiosyncratic template necessarily leads to an inability to function successfully with either peers or authority figures, the children with poor overall zero scores on either the actual or desired questionnaires were compared, on both the peer popularity measure and the teacher general score, with the others in the sample. The pattern of results was more complex than expected. Of the 4 subjects scoring fewer than ten zeros on both questionnaires, 2 had both very poor peer votes and low teacher general scores; 1 girl had an average teacher general score and a good peer vote (she had the most surprising set of results in this group); and 1 boy had a very low teacher general score, but a good peer score. Of the remaining 8 subjects who scored fewer than ten zeros on the actual questionnaire, 5 had average to very good teacher scores and high peer votes (though their desired scores were higher, in some cases very much higher, than their actual scores); and the other three had average or good teacher votes but very bad peer scores. These latter three children may be those who possess a template more appropriate to the adult social world rather than that of their peer group. It would have been interesting to

have information from their parents about the children themselves and the family structure to throw some light on these three. Of the remaining 6 children who scored 10 or less on the desired questionnaire, only one scored above average on the peer vote - and his actual and desired zero scores only differed by one point, whereas the discrepancies in the other children's scores were larger than that. The teacher general scores were average or above average for all except subject 153 - a subject with an extremely poor teacher general score and peer vote.

These results would suggest that idiosyncratic templates do exist, but that one should exercise caution before making assumptions about the consequences of the possession of such a template. It seems that some children might be in possession of a template which is appropriate in certain situations (operating in the adult world, for example) but not in others (among one's peers, for example). If this is the case, those children who possess templates appropriate to both social groups (and are very popular with both peers and teacher) and move easily in either social world need to be studied, in order to ascertain how these templates are acquired successfully. We also need to know more about the very small minority of children who seem to possess a template appropriate to neither social group, and are therefore unpopular with both.

7.3.2 La Gaipa's Model

La Gaipa believes that the individual looks for "a good match" between his psychosocial requirements and the availability of support systems, and he is interested in the organizing tendencies of the individual which are responsible for the perception and interpretation of interpersonal events. These organizing principles might include, on a psychological level, cognitive orientations towards other people; on a behavioural level, means-end strategies for obtaining resources; and on a normative level, references to social rules and evaluations - for example, the idea of "justice". A socially incompetent person is described by La Gaipa as possessing an "implicit resource theory" which generates poor predictions about social events. The result is limited understanding and control of his/her world. Tension and cognitive arousal are viewed as important when implicit resource theory is not working properly (i.e. when the theory does

not fit the data) because they increase flexibility to change. An effective system has to limit, control and resolve conflicts. The individual is faced with a complex array of internal and external demands and limitations which all must be held in tension. These include systems requirements (the boundary and maintenance problems of the support systems); "task demands" (meeting psychosocial requirements which are sometimes contradictory); "cultural demands" (normative constraints on personal choice); and "cognitive demands" (understanding, competence and control necessary for competence in interpersonal relationships).

While it was outside the purpose of the present study to look at all the above demands in the necessary depth, the questionnaire did aim to provide answers to the following questions:

1. On the individual psychological level, was there a general tendency for children to perceive themselves too optimistically, too pessimistically, or realistically, both in terms of their own perception of themselves and in relation to others?
2. On the interpersonal behavioural level, were the child's attempts to meet his/her psychosocial requirements successful or unsuccessful?
3. On the cultural normative level, what norms, values or rules (if any) emerged from this group of young adolescents?

The first question was addressed, firstly, by comparing the child's actual scores with his/her desired scores to ascertain if a discrepancy existed, and if so whether the discrepancy was to the detriment of, or favoured, the child; and secondly, by comparing the child's actual questionnaire with the teacher's questionnaire, and also the peer vote, to discover whether the teacher corroborated the child's assessment, and whether there was an indication from the popularity/unpopularity of the child to support the child's view of him/herself in relation to his/her peers.

As the reader may remember from the introduction to chapter 5, for the data analysis a score was given to each child which was the resulting summation of his/her scores on the questionnaire. A score close to zero would indicate a high percentage of zero scores, and a high score would indicate a high percentage of scores other than zero. The Pearson Product Moment correlation for the children's actual scores in relation to their

desired scores was 0.528, showing a significant relationship between the two sets of scores, but not a perfect one. About 60% of the sample scored less than 10 (their summed score) on the desired questionnaire, and of those about half also scored less than 10 on their actual questionnaire, with just over a third scoring between 11 and 20 on the actual questionnaire. A relationship between the two sets of scores does exist, then, with children generally desiring to be closer to zero than they believe themselves to be. This seems a healthy and balanced approach on the part of the children to self-assessment. Most children seem to have a knowledge of social skills which is greater than their behaviour might imply if, for example, one were relying on role-play situations as a means of assessing social skills. They can differentiate between that knowledge of skills and the extent to which they are able to put it into practice. It would be interesting to discover at what age this ability to differentiate between the two emerges, and whether the ability to behave as one desires is enhanced with age.

When comparing the children's actual scores with that of the teacher, the Pearson Product Moment Correlation is not statistically significant (0.162), but the Analysis of Variance shows an F value of 5.896, which is significant at 0.05. Over 60% of the children scored 10 or less on the teacher's questionnaire; but of those, nearly half placed themselves between 11 and 20 on the actual scale; just over 40% did in fact score 10 or less; and fewer than 10% scored 21 or over. Just over 25% scored between 11 and 20 on the teacher scale; and of those nearly 60% also placed themselves in that category, with just over 25% placing themselves in the 10 or less category, and the remainder (about 14%) scoring themselves more harshly (21 or over). Of the children who scored between 21 and 30 on the teacher scale (only 10% of the sample), nearly 85% scored less than 21 on the actual questionnaire. Only 4 children in this group scored more than 21 on the actual scale. Only 9 children scored over 31 on the teacher scale, and all these scored below 31 on their actual questionnaires. The pattern which emerges here is that there is quite a high level of agreement between the children's perception of themselves and the teacher's assessment of their behaviour. This is an important finding in the light of how frequently in research the teacher is used as an assessor of the child. The results seem to indicate that the child's actual results taken alone could be misleading, because children can be both too hard and too

generous when describing their own behaviour. On the whole, however, there was considerable agreement between the teacher's assessment of children's behaviour and the children's own assessment, both when the appraisal was positive and when it was negative.

The peer vote results showed a negative correlation (Pearson Product Moment Correlation = 0.225), as one would anticipate: the closer to zero on the actual score, the higher the peer rating. The F value was 11.687 for this relationship, indicating significance at the 0.01 level. The results show that about a quarter of the sample scored above 0.60 on the peer scale, and that all of these fell within 0-20 on the actual questionnaire. Just over a quarter scored between 0.31 and 0.60 on the peer scale, of whom more than 65% fell within 0-15 on the actual questionnaire. Another 33% fell between 16 and 30, and less than 2% scored over 31. Nearly half of the sample scored 0.30 or less on the peer vote (just under 10% of the total sample falling under 0.10), which is to be expected given that the literature suggests that children most frequently have a small group of close friends rather than many friends. The actual scores of the 10% scoring below 0.10 on the peer scale ranged from 9 to 35, but of the 6 children scoring over 30 on the actual questionnaire, 4 fell below 0.10 on the peer scale. The results here seem to indicate that the most popular children assess their own behaviour accurately, and that it is universally closer to zero than any other group. The next most popular group (above average, but not beyond the 0.60 level) again scores predominantly close to zero (i.e. over two thirds), with only one child scoring a long way from zero. Of those children who score very badly on the actual questionnaire (a small minority of 6), most score below 0.10 on the peer vote. It seems that children do not like peers who assess themselves as being too much to either extreme in their behaviour. Whether this personal assessment is made because the children concerned are trying to be at either extreme, or because they are overly critical of themselves, could only be clarified with any degree of certainty if it was possible to observe the children with their peers and talk to them on a one-to-one basis.

On the individual psychological level then, it seems that most children can assess their behaviour with considerable accuracy, and that more tend to be too harsh in their assessment than too lenient when compared with the teacher's appraisal. There are those, however, who do seem to assess

themselves too generously, given that their good actual scores are not reflected in the degree of popularity which they experience amongst peers, nor the teacher's appraisal of them.

The second question noted above was investigated by looking at the popularity/unpopularity of the child with his/her peer group and at the teacher general score. Where the child was popular on both counts, it was assumed that the child was fulfilling his/her psychosocial requirements successfully and that the child's means-end strategies were functioning well. Where the child was popular with one of the two, it was deduced that the child was fulfilling some of his/her psychosocial requirements, but was skilful only with those means-end strategies appropriate to whichever of the two groups the child was popular with. Where the child scored badly with both groups, it was assumed that the child was failing to meet his/her psychosocial requirements, and that his/her means-end strategies were totally inappropriate.

The results for those 18 children with less than 0.10 on their peer vote, along with their teacher general scores, can be found in Appendix 13, as can the results for the 16 highest peer votes. The peer vote has to be regarded with some caution statistically, of course, because the class sizes varied so much, and a small class will inevitably produce higher peer votes for all the children than will a very large class, where the choice is so much greater. Nevertheless, since we are primarily interested in the comparison of teacher and peer scores at the moment, and all of the children under consideration did have perfect or near perfect ratings, the inclusion of the latter is justified.¹ Of the 16 children with the highest peer votes, all but one was awarded a teacher general score of 5 or above, and half of them were given a score of 9 or 10 by the teacher. From the results it is clear that two categories emerge from the group of children with one or no peer votes: those who are also regarded as unskilled by the teacher, and those who are thought skilled by the teacher.

1. 4 children in the class with 31 pupils were not included in the sample of peers with poor peer scores, since although their scores were below 0.10, they were above 0.09, and all the peer votes for such a large class were lower than the rest of the sample.

Surprisingly, almost all of those popular with the peer group are also regarded as skilful by the teacher. It is clear then that there are four distinct groups: those children who are very popular with both their peer group and their teacher; those who are popular with their peer group but a little less popular with their teacher (though no-one scored less than 4 on the general score); those who are very unpopular with peers but popular with the teacher; and those who are very unpopular with both their peer group and their teacher.

The first group, one assumes, are successfully satisfying their psychosocial needs, and certainly their means-end strategies appropriate to both groups must be functioning well. The second group could almost be included with the first, since only one child was actually below average on the teacher general score (scoring 4). It is interesting that there is no clearly defined group who are popular with their peers and unpopular with the teacher. This makes one wonder if perhaps the means-end strategies or skills involved in being popular with peers are the most difficult for or inaccessible to children, and that if one has mastered those, one is inevitably more skilful generally. It is also possible that those means-end strategies involved in relating to authority figures (or adults generally) are more accessible to children, since their first contact is with the adult world before school. Perhaps if a child successfully masters those strategies in that early context, then (s)he will have a better chance of extrapolating to more complex strategies. Those children in the fourth group who are popular with neither group may have failed to master the preliminary strategies and therefore are already at a disadvantage when the time comes to learn more complex ones.

The third question noted above was considered by looking at the breakdown of responses for each question on the questionnaire, and determining from that where a consensus existed; the extent of that consensus; if there was a male/female variance; and whether those children who deviated from the norm when a very strong consensus existed were consistently less popular. It was then possible to ascertain to some extent which children seemed to be having problems with cognitive demands. For example, those children whose actual and desired responses were consistently different from the peer group may have been experiencing difficulty in understanding and predicting (and therefore controlling) the demands of their peer group. Appendix 5 shows the total number of subjects

responding to each of the five categories (-2, -1, 0, +1 and +2) for each of the 29 questions. The results indicate that a consensus does exist for 21 of the 29 questions on the desired questionnaire (numbers 1, 4, 5, 7, 8, 9, 11, 18, 19, 20, 25, 26 and 30 all producing an agreement of over 80% on the zero option, and numbers 3, 10, 13, 14, 24, 27, 28 and 29 eliciting a response of over 70% for the zero option on each of those questions). The same comments apply here as do for the existence of a shared template in the terminology of Harré and Secord, and these comments need not be repeated here. Suffice it to say that norms or rules do exist in the majority of social situations presented in the questionnaire, and that even in the questions which do not show an overwhelming majority for one particular option, in each case there is a consensus of general direction of response (usually divided between two clear options). It is certainly clear which responses are not appropriate for this age group, and this in itself is vitally important in helping the minority of children opting for these responses to think about the consequences of choosing such an option.

7.3.3 Carver and Scheier's Model

There are three components of Carver and Scheier's feedback loop theory which are particularly relevant to the present study. The first is the hierarchal organization of control. The second is the expectancy of outcome, which can be either positive or negative. Where there is a positive expectancy a person might persevere until successful completion is attained, but if this expectancy is unrealistic then the individual might continue with the inappropriate behaviour, perhaps unaware that (s)he may be having the opposite effect to the one desired. Where there is a negative expectancy, the person may end their attempt at producing the outcome (s)he desires quite early and withdraw. The idea of a self-fulfilling prophecy here is quite important, as the belief that failure will occur will more readily lead to early withdrawal from the attempt, and this "failure" will be seen as a confirmation of the original belief. This is very important in our study, where teachers may label children at an early stage. The third component is the existence of public and private selves. A person who is aware of both his/her public and private persona may "fail" socially because (s)he also believes that (s)he is lacking in a

particular skill or skills, expects failure and fulfills that expectation. A person who is unaware of any skill deficit (the deficit might be the inability to recognize appropriate/inappropriate behaviour), and is also unaware that (s)he is failing socially, might have an abnormally low level of focus on the public self - (s)he might be unaware of or uncaring about the effect of his/her behaviour on others, the benefits and consequences of social contact having to be pointed out to such an individual; or an abnormally high level of focus on the public self - (s)he might be using his/her behaviour as a form of manipulation (e.g. disruptive classroom behaviour receives the teacher's attention, while bullying controls peers), the public self being used to further personal ends.

Carver and Scheier's description of these three aspects of the model led to the formulation of the following questions for the purposes of the present study:

1. Is there any evidence that children are failing to monitor themselves in social situations, or monitoring inaccurately?
2. Is there any evidence that some children expect a positive outcome and some expect a negative outcome in social situations?
3. Is there any evidence of a low or high focus on the public self in our sample?

To answer the first question, it is possible to obtain an indication of whether children are failing to monitor, or are not monitoring correctly, from a comparison of their actual and desired scores with their peer vote and teacher rating. If some children have good actual questionnaire results but poor teacher and peer scores, then this would imply that although the children possess a knowledge of social skills, they are either failing to monitor their behaviour or monitoring it inaccurately. If their desired scores were good and actual scores poor, and their peer and teacher scores were also poor, this would imply that their ability to monitor their behaviour was functioning well, but that the problem lay in their ability to translate their knowledge of how to behave into action. The results for those children scoring 0 or 1 on their peer vote and those scoring 3 or below on the teacher general score can be found in Appendix 3. From these results it is evident that 4 of the 18 children who had a peer vote of less than 0.10 had a good actual score (20 or more), and that 4 of the 15

children awarded 3 or below by the teacher on the general score also had actual scores of 20 or more. The desired questionnaire scores for these 8 children were also high (only 2 of the 8 had a desired score 2 points lower than the actual), so one can conclude that their knowledge of social skills is good, but that there may be a problem in their ability to assess and monitor their own behaviour. Of the children with good desired scores, there were 8 out of 18 in the poor peer vote group who scored more than 20, and 8 out of 15 in the poor teacher general score group who scored more than 20. All had lower actual scores, and this would imply that their ability to monitor and assess their actual behaviour is accurate and that they do possess a knowledge of social skills, but that for some reason they are unable to translate that knowledge into action. It is also worth noting that of the children with desired scores below 20 in the poor teacher general score group, 7 in all, only one had a good peer vote. The remainder had both poor teacher and peer scores. Those scoring over 20, on the other hand, all had poor teacher scores, but 4 had average to good peer votes.

The second question, concerning expectancy of outcome, is addressed here by looking at whether there are children who score consistently at one extreme or the other on the scale, especially if they do so on both the actual and the desired questionnaire. It has to be said that this issue is the one least easily addressed by the results in this study. It would have been better to include a couple of questions asking about the children's expectations specifically, but at present it will have to suffice to draw inferences from the extreme responses. Where children score consistently to one extreme or the other in both questionnaires, it is possible that they have abandoned hope of change and no longer even desire to be different. The zero option usually included some form of positive action or feeling, whereas the two extremes did not. For a child therefore to opt for an extreme in preference to the zero option, in particular on the desired questionnaire, might be indicative of not trying to change, and of accepting the normal behaviour pattern and its consequences. If these children who desire to remain at one extreme or the other are also unpopular with the teacher or, more importantly their peer group (because they are more likely to receive feedback from this source), then one can tentatively suggest that they expect failure and have no impetus to change.

Looking at the results in Appendix 14 of subjects scoring at either extreme on both the actual and desired questionnaires, it is apparent that 5 children score at one extreme or the other on both questionnaires, 1 scoring at one extreme on the actual and the other extreme on the desired). Of these 6, all have low peer votes (subject 161 is closest to an average score, but the rest are well below), although the teacher general scores are average to good in all but one case (150). 5 of the 6 are to the -2 side of the scale on the actual questionnaire and 4 of those desire to remain there. Only one is to the +2 side, and he too desires to remain there. Of the 9 subjects desiring to be to the +2 side of the scale, all but one has a poor peer vote, and all but one had few +2 scores on their actual questionnaire (the teacher general scores are mixed). Of the 14 subjects desiring to be at the -2 side of the scale, 7 had poor peer votes, 2 were average and 5 were good. As already cautioned, it would be unwise to think it was possible to draw any conclusions with confidence about the expectancy of outcome based on looking at these results, and one is even more tentative in the absence of any overwhelmingly obvious pattern. Had there been a distinct group of children who scored to one extreme on both scales and were also clearly unpopular, one could have drawn some inferences; but such a group does not exist. One therefore has to conclude that the present study has little to say on the subject.

The issue of whether there is any evidence for the existence of a high or low focus on the public self (question 3 above) was addressed in the following way. To ascertain if there were children in the sample with a low level of focus on the public self, the children with a high number of extreme negative scores (-2's) were considered. A high level of focus on the public self is indicated by a high number of extreme positive scores (+2's). The figures proved very interesting. On the actual questionnaire, 7 children had scores of over 6 in the -2 category and 3 had scores of over 6 in the +2 category. On the desired questionnaire, however, 14 children desired to score over 6 in the -2 category and 9 desired to score over 6 in the +2 category. In both categories, a low level of focus was more usual than a high level of focus. Six subjects scored at one extreme or the other on both actual and desired questionnaires. Of these, 4 rated themselves and desired to be to the -2 side of the scale (having a low level of focus on the public self), one rated himself and desired to be at

the +2 side of the scale (having a high level of focus on the public self), and one rated himself as being to the -2 side, but desired to be at the other extreme.

It is interesting to look at the composition of the groups who regarded themselves as being and those who desired to be at these two extremes. Of the 7 who rated themselves as being at the -2 end of the scale, 2 were boys from secondary modern schools, 2 were boys from grammar schools, 2 were girls from secondary modern schools and one was a girl from the remedial group. Of those rating themselves as being at the +2 extreme, 2 were boys from secondary modern schools and the third a girl from a secondary modern school. Of those desiring to be at the -2 extreme of the scale, 7 were boys from grammar schools, 1 was a boy from a secondary modern and 2 were girls from a secondary modern, 2 were girls from grammar schools and 1 boy and 1 girl were from the remedial group. Of those desiring to be at the +2 extreme, 4 were boys from grammar schools, 4 were boys from secondary modern schools and 1 was a girl from a secondary modern school. One suspects that it is less socially appropriate for girls to be at the +2 extreme than boys, and also that girls are less prone to extreme behaviour than boys (22 boys scored at one extreme or the other compared with 10 girls). Also it is worthy of note that of those scoring at either extreme 15 were from secondary modern schools, 14 from grammar schools and 3 from the remedial group. This is a little surprising, given that the sample had to be so heavily weighted with grammar school subjects. It may imply that the social skills necessary in a particular type of school vary.

To summarize, it is possible that failure to behave skilfully in a social context can occur at various levels of functioning. For example, children may not know the "rules" of the social group in which they are operating, or they may have their own idiosyncratic set of rules. They may know the rules, but fail to adhere to them, either because they choose not to, or try to and are unable to succeed. They may experience partial success because of knowing and keeping some of the social rules appropriate to the group, but fail in other, perhaps more complex, areas (e.g. coping with bullying). They may know the rules but persistently fail because they believe they are going to fail. Given the number of possible sources of failure, it is not surprising that SST has only been moderately successful. The source and context of a child's social difficulty could necessitate vastly different approaches in training.

7.4 Future Research

This study began life as an attempt to answer the question "what is the social world of the young adolescent like?" It has raised and ends with still further questions. Are necessary social skills different depending on the social context? For example, are the skills necessary to function in a secondary modern different from those necessary in a grammar school? Which skills or skills deficits cause some children to function within their peer group and the adult world successfully, some to fail in both, and others to succeed in one but not the other? Do girls find it easier to succeed in both worlds; and if so, what social rules in the male peer group make it more difficult for boys to function in this way? Finally, are there national differences in what constitutes skilful behaviour, and in how children are encouraged to view themselves? These questions have not been answered here, but would form the basis for future research in this area.

In terms of the future of the present questionnaire specifically, I would wish it always to be used in conjunction with the other measures described in this dissertation (i.e. the teacher general score, the teacher questionnaire and the peer vote), and only as a first general screening instrument. Children who seemed to be experiencing some sort of personal difficulty could then be focussed upon and a more sensitive and detailed assessment given. One would hope, ideally, that a head teacher would have access to several different instruments, both general and specific, from among which he could choose according to the particular interests of the child concerned and the nature of the (suspected) problem.

Where must SST in general go in the future in view of the results of the present study? In my opinion, we need first of all to discover more about what children regard as skilled and unskilled behaviour. This would involve, among other things, the formulation an age-related dimension as part of the process, in order to ascertain which skills are most important at which ages. One would hope to elicit this information in both an informal and a more structured way. By using both informal and more structured methods, it might be possible, in addition to identifying component skills, to begin to uncover the cognitive processes at work in identifying situational contexts; in being aware of options and the

consequences of those options; in choosing an option; and in monitoring the success or failure of that choice, with the resultant reinforcement or alteration of behaviour, or withdrawal.

It would be particularly interesting to discover (perhaps using the questionnaire as a starting point) how peers view each other at different stages, and whether a general consensus exists at each level about the likeability or unlikeability of certain characteristics or children (and, if it does exist, whether that consensus changes with age or remains stable). There are ethical problems with this, in that the researcher risks initiating the identification of disliked children or of worsening their plight. It would probably be possible to avoid this if an informal setting such as a Youth Club were used, where children came from different schools and talked about classmates rather than peers in the Youth Club. The researcher could then ask for the aid of the teachers of those children who had been identified as particularly liked and disliked, and the class could be asked to cooperate in the study of some innocuous, neutral subject. This would protect the disliked children from teasing or bullying, while admittedly involving deceiving the children. It does not seem possible to study such a subject in a way which solves all the ethical problems inherent in such a venture.

Another approach to uncovering the rationale behind like or dislike of peers would be to find out more from adults about their memories of school life, as this might help illuminate just how formative those years are. The adults I have spoken to so far, in order to test the ground to see how clearly people remember their school years and whether it might prove a fruitful area for more formal investigation, seem to regard the last two to three years of primary school and the first three or four years at secondary school as being the most formative, for a variety of reasons. These were the years when they either bullied or were bullied (physically and /or verbally), or were teased about certain characteristics, or failed/succeeded academically and failed/succeeded with the opposite sex. It was particularly interesting that everyone who spoke about that period in their life could remember with great clarity details of the names and peculiarities of both peers and teachers. They could also remember, again with surprising detail, incidents that had been of particular note, and the feelings experienced at that time. All those adults who volunteered this information, without prompting, described ways in which those early

experiences had affected their present personalities and position in society. Retrospective accounts from adults about adolescence could prove a valuable source of information, though obviously one has to acknowledge that memory is selective, and that there may be no means of corroborating any of the information given. A longitudinal study of children through to their adult years would possibly be the best way to see what relationship there exists, if any, between people's experiences of interacting socially at school and their adult social selves. One could incorporate into the design of such a study assessment both of a social skills training programme restricted purely to the teaching of specific skills, and of a social skills training scheme with a cognitive emphasis.

One specific aspect of the questionnaire which needs a lot more investigation concerns the subject of bullying in schools. The questionnaire included only two questions on bullying; and it was apparent from the responses in the "free" section at the end of the questionnaire that I had completely misjudged the importance of this in the life of the first or second year child. There was a wide range of response, both from the bullies themselves and from the bullied, the latter being much more in the majority.

Any future research designed, along the lines of these recommendations, to discover more about the social world of the adolescent needs, in my view, to have a clearly stated definition of which skills, skills deficits or cognitive functioning are being targeted. It further needs to contain detailed descriptions of method. For example, if role play is adopted, are subjects allowed to prepare themselves mentally by imagining the context and changing it to suit their real life experiences? Thirdly, it needs to include subject responses about the degree to which the method adopted in the study succeeded in enabling them to give a real life response to the social description described. Such a broader framework might help to give this vast area of research a structure by means of which we could more readily monitor progress, identify method and design weaknesses and strengths, and, most importantly, allow subjects the freedom to give unrestricted information.

APPENDIX 1

The pupil and teacher questionnaires.

A1.1 The Pupil Questionnaires

The actual and desired pupil questionnaires contained exactly the same general requests for information (name, age, class, date, teacher's name and gender), and exactly the same questions (see below). Their difference lay in the instructions on the first page. The instructions on the actual questionnaire were as follows:

"Please read these questions carefully, and imagine yourself to be in school when these things happen to you. Answer the questions as truthfully as you can by putting a tick in the box under the answer which is most true for you. There are no 'right' and 'wrong' answers".

The instructions on the desired questionnaire were as follows:

"Please read these questions carefully. Once again, imagine yourself to be in school when these things happen to you. This time, though, answer the questions saying how you wish you could be. For example, in question 1, last time you may have ticked "A" because you find it difficult to look at people. But you might wish you could look at them easily, so this time you might tick "C". Say how you wish you could be".

The thirty questions in the questionnaires then followed, as detailed below. All but question 22 had 5 alternative answers, each with a box beneath in which a tick could be placed. Question 22 had only two boxes, marked "Yes" and "No".

1. When you are having a conversation with someone your own age, do you
 - a) not look at the other person at all
 - b) find it hard to look at the other person, but try to
 - c) look at the other person about the amount that shows you are interested in what they are saying (even if you are not really interested)
 - d) look at the other person a bit too much - occasionally people tell you to stop staring
 - e) look at the other person all the time in case you lose their attention - people often tell you to stop staring
2. Some people use their hands a lot when they are talking. When you are talking, do you
 - a) never use your hands at all
 - b) use your hands less than your classmates - only if you have to to explain something
 - c) use your hands about the same amount as your classmates do
 - d) use your hands more than most of your classmates do
 - e) use your hands all the time that you are talking
3. We touch people a lot, for example to get their attention or to reassure them. Do you
 - a) never touch anyone, and hate anyone touching you - so much that you would pull away from them
 - b) hardly ever touch anyone, and dislike anyone touching you, but would not actually pull away
 - c) touch other people when it's natural (for example, to get their attention), and not mind if someone touches you, so long as it's natural and not for too long
 - d) touch other people more often than your classmates do (when you are talking, for example), and like it when people touch you
 - e) touch other people all the time (when you are talking, for example), and like it very much when people touch you
4. Do you smile
 - a) never or rarely
 - b) sometimes, but you find it difficult

- c) quite a lot, but never at something bad (for example, someone getting beaten up, or crying)
 - d) quite a lot, even when other people would not smile (for example, someone getting beaten up, or crying)
 - e) most of the time, sometimes just to yourself, and sometimes when something really bad has happened (for example, someone getting beaten up, or crying)
5. Do you usually talk
- a) much too softly - people are always saying they cannot hear
 - b) too softly - people sometimes ask you to speak up
 - c) about average - just right
 - d) too loudly - people sometimes ask you to speak more quietly
 - e) much too loudly - people often ask you to talk more quietly
6. Do you try to start a conversation with a teacher
- a) never
 - b) sometimes, but only if you have to
 - c) sometimes, when you feel like it
 - d) quite a lot - sometimes even when you know that (s)he is very busy
 - e) all the time - you would rather talk to a teacher than to classmates
7. Do you try to start a conversation with your classmates
- a) never - you don't like talking to any of them
 - b) sometimes, but mostly you would rather not talk to them
 - c) anytime - you can chat to almost all your classmates easily
 - d) quite a lot - sometimes they get fed up with how much you talk
 - e) all the time - they often get fed up with how much you talk
8. Do you find giving compliments to a friend (for example, saying that you like something new which they have bought)
- a) very difficult - you feel much too shy to say anything
 - b) quite difficult - you do it, but you feel a bit shy
 - c) very easy - you like them to know what you think
 - d) quite difficult - you do it, but then make a joke about it
 - e) very difficult - you criticize or make fun of the person even though you feel like saying something nice

9. Do you respond to compliments by
- a) feeling very embarrassed - so much that you wish the person had said nothing
 - b) feeling very embarrassed - but deep down quite pleased
 - c) feeling very pleased and thanking the person
 - d) not thanking the person because you know you deserve the compliment
 - e) not thanking the person and thinking you should get compliments a lot more than you do - people don't appreciate you enough
10. Do you talk
- a) only about other people or things, never about yourself
 - b) only sometimes about yourself, usually if someone asks a direct question
 - c) easily about yourself if someone asks, but you like to show interest in other people too
 - d) mostly about yourself - you don't talk much about other people or things
 - e) always about yourself
11. Do you listen to what someone else is saying
- a) always - you would rather listen and not talk yourself, and you dislike talking yourself
 - b) mostly - you find talking a bit difficult
 - c) always when someone else is talking, but you can also talk easily yourself
 - d) sometimes, but you would rather talk yourself
 - e) hardly ever - you always do most of the talking
12. Do you find saying sorry to a person your own age
- a) very easy - you often say sorry even when something is not your fault
 - b) quite easy - you sometimes say sorry even when something is not your fault
 - c) easy enough if you are in the wrong, but you don't say sorry if something is not your fault
 - d) difficult, even when you are in the wrong

- e) very difficult - you hardly ever say sorry, or admit when you are in the wrong
13. If someone asks you to do something which is very unreasonable, for example, to pay for their lunch when you need the money to pay for your own lunch, do you
- a) always give in to what the other person asks
 - b) often give in to what the other person asks
 - c) refuse firmly to do what the other person asks, but not in an unpleasant or rude way - just by giving the reason why
 - d) refuse in quite an unpleasant way
 - e) refuse and behave in a very unpleasant way towards the other person
14. During class, are you
- a) completely quiet, never answering questions even when you are asked directly
 - b) quite quiet - you would rather not answer questions, but would do so if you were asked directly
 - c) happy to answer questions when asked, but you would not usually interrupt
 - d) a bit noisy, interrupting quite a lot and making comments
 - e) very noisy, always interrupting and making comments
15. Do you
- a) try to please everybody most of the time
 - b) try quite hard to please most people
 - c) try to please the people you get on with, but not everyone
 - d) make little effort to please anyone
 - e) make no effort to please anyone
16. When you do badly at something, for example in an exam or a game, do you
- a) feel very disappointed and depressed for a long, long time
 - b) feel very disappointed and depressed for some time
 - c) feel disappointed for a while, but decide to do better next time
 - d) feel a bit disappointed, but just accept it
 - e) just accept it and feel nothing

17. When you do badly at something, do you think it is due to
- a) yourself totally
 - b) mostly yourself, but some other reasons as well
 - c) partly yourself and partly some other reasons - a lot depends on the situation
 - d) mostly other reasons than yourself
 - e) other reasons completely - not yourself at all
18. Do you mix with people of the same sex as you in the class
- a) not at all well - you would prefer to be by yourself
 - b) not very well - sometimes you do, but you would rather not mix with them
 - c) easily - you get on well with most of them
 - d) not very well - you try a bit too hard to get them to like you
 - e) not at all well - you try much too hard to get them to like you
19. Do you mix with people of the opposite sex to you in the class
- a) not at all well - you would prefer to be by yourself
 - b) not very well - sometimes you do, but you would rather not mix with them
 - c) easily - you get on well with most of them
 - d) not very well - you try a bit too hard to get them to like you
 - e) not at all well - you try much too hard to get them to like you
20. Are you
- a) always bullied by other people
 - b) sometimes bullied by other people
 - c) never bullied, and never a bully of other people
 - d) sometimes a bully of other people
 - e) always bullying other people
21. If you are bullied or teased by other people, do you
- a) just accept it, and let them bully and tease you
 - b) try to say it's unfair
 - c) try to get the bullies to stop, by joking or becoming really good at something they will admire
 - d) become angry and shout at them

- e) become angry and fight back
22. Does whichever of the above you have chosen make the bullies stop bullying you?
- a) Yes
 - b) No
23. If you were bullied, or saw someone being bullied, would you
- a) do nothing
 - b) try to defend yourself or the other person, and if that didn't work, give up
 - c) try to deal with the bullies yourself, and if that didn't work, call a teacher
 - d) usually call a teacher - you would not normally deal with the situation yourself
 - e) always call a teacher - you would never deal with the situation yourself
24. If someone new joined your class, would you try to talk to them
- a) never
 - b) probably not, even if a chance to do so came up
 - c) yes, if a chance to do so came up, but you would not be too pushy
 - d) definitely, you would go over to the person as soon as you got the chance, and would expect the person to stick with you
 - e) always - you would be the first person to go over, and you would expect the person to stick with you
25. Do you talk to your teachers
- a) never
 - b) not often - you find it very difficult to talk to them
 - c) quite easily, at least to the ones you get on well with
 - d) quite a lot - you would prefer to talk to them than to your classmates
 - e) as much as you can - you find you can talk much more easily to them than you can to your classmates

26. Do you ask questions in class
- a) never - even if you don't know what you are supposed to be doing
 - b) usually not, even if you don't know what you are supposed to be doing
 - c) only when you need to, or when something is of special interest to you
 - d) often - sometimes a teacher will say you ask too many questions
 - e) all the time - many of your teachers tell you to stop asking questions and get on with your work
27. If you are praised for something you have done by a teacher, do you
- a) get very embarrassed and upset at the teacher for saying anything
 - b) get a bit embarrassed and wish the teacher had said nothing
 - c) feel pleased, but not let it show too much in case your classmates get jealous or tease you
 - d) feel really pleased, and go on about it to your friends a bit
 - e) feel really pleased, and go on about it so much that your friends tell you to shut up
28. If you are told off for something which you have done, or are punished for it, do you
- a) never say you are sorry, or show how you feel at all
 - b) sometimes say you are sorry, but not really want to
 - c) accept your punishment, say you are sorry, and show other people that you are
 - d) sometimes say you are sorry, but show you're a bit angry
 - e) never say you are sorry, and show how angry you feel
29. If you are told off for something which you have not done, do you
- a) accept the telling off, and say nothing to defend yourself
 - b) accept the telling off, and complain to your friends, but not to the person who told you off
 - c) tell the person who is telling you off that you did not do anything, and explain what really happened
 - d) feel angry or upset, but only give an explanation when the teacher asks you several times why you are angry/upset

e) show you are really angry or upset, and refuse to give an explanation no matter how often the teacher asks you why you are so angry/upset

30. When a teacher criticizes your work, but is fair in his or her criticism, do you
- a) just accept the criticism, but not try to improve your work at all
 - b) accept the criticism and reluctantly try to put it right in this case, but continue to make the same sort of mistake in future work
 - c) accept the criticism, and use it to improve your work generally
 - d) refuse to accept the criticism, and try to justify your mistakes
 - e) refuse to accept the criticism, and show the teacher how angry you feel

Both questionnaires concluded with the following rubric:

"Thank you for answering the questions. If there was any answer which you gave which you would like to explain a bit more, you can use this space to do it, and the back of this page if you need more room (remember to put the number of the question down").

A1.2 The Teacher Questionnaire

The teacher questionnaire began with requests for general information (names of teacher and pupil, date), and with the following instruction:

"Please read the following questions carefully, and then place a cross in red ink under the alternative which you think reflects the character of the child most accurately".

The thirty questions in the questionnaire then followed as detailed below. As a result of events described in chapter 4 (4.2.3, 4.2.4), the teacher instruction on the questionnaire itself was subsequently superseded by another in the general instructions to teachers (see 4.3.3), to allow for faster processing.

1. During a conversation with someone of the same age, does the child
 - 2) avoid eye contact completely
 - 1) look only very occasionally at the other person
 - 0) look frequently at the other person
 - +1) look at the other person so much that the latter seems uncomfortable
 - +2) stare at the other person all the time
2. While speaking, does the child
 - 2) never use any accompanying gestures
 - 1) use gestures only very infrequently
 - 0) use gestures naturally to illustrate, where necessary
 - +1) use gestures noticeably more frequently than his or her peers
 - +2) use gestures constantly
3. Are the gestures
 - 2) less frequent than peers, and not in accord with what is being said
 - 1) less frequent than peers, but in accord with what is being said
 - 0) about average in frequency, and in accord with what is being said
 - +1) more frequent than peers, but in accord with what is being said
 - +2) more frequent than peers, and not in accord with what is being said
4. Does the child
 - 2) always avoid physical contact
 - 1) usually avoid physical contact
 - 0) neither avoid nor excessively engage in physical contact
 - +1) engage in physical contact more than peers
 - +2) constantly engage in physical contact
5. Does the child smile
 - 2) never or rarely
 - 1) only infrequently
 - 0) quite a lot, but never when it would be an inappropriate response
 - +1) quite a lot, sometimes even when inappropriate
 - +2) most of the time, even when obviously inappropriate
6. Does the child usually talk

- 2) much too softly - almost impossible to hear
 - 1) too softly - one has to concentrate in order to hear
 - 0) at just the right level
 - +1) too loudly - not comfortable to listen to
 - +2) much too loudly - very uncomfortable to listen to
7. Does the child initiate conversation with you
- 2) never
 - 1) infrequently
 - 0) when the opportunity exists and the time is appropriate
 - +1) too often
 - +2) constantly
8. Does the child initiate conversation with his/her peers
- 2) never
 - 1) infrequently
 - 0) easily - chats quite happily to most of the other children
 - +1) too often - more than they would find desirable
 - +2) constantly - much more than they would find desirable
9. Does the child talk
- 2) only about other people or things - never him/herself: will deflect questions about him/herself
 - 1) little about him/herself: will answer questions about him/herself but does not volunteer information
 - 0) about other people and things, and about him/herself: shows interest in other people, but not afraid to talk personally
 - +1) too much about him/herself: little interest in other people
 - +2) only about him/herself: no interest in other people
10. Does the child listen to what someone else is saying
- 2) always - rarely talks
 - 1) mostly - finds talking somewhat difficult
 - 0) when someone is talking, but also talks easily him/herself
 - +1) not often enough - prefers to talk
 - +2) rarely - does most of the talking

11. Does the child find apologizing
- 2) much too easy - always apologizes even for things which are not his/her fault: much too acquiescent
 - 1) somewhat too easy - sometimes apologizes for things not his/her fault
 - 0) easy enough if (s)he is in the wrong, but not needlessly
 - +1) difficult, even when in the wrong
 - +2) very difficult - never apologizes or admits being in the wrong
12. Does the child respond to unreasonable requests by
- 2) always complying with them
 - 1) usually complying with them
 - 0) being assertive but not unpleasant when refusing them
 - +1) being assertive and unpleasant when refusing them
 - +2) being over-assertive and rude when refusing them
13. During class, is the child
- 2) totally passive, never volunteering information even when asked
 - 1) very quiet and reluctant to volunteer information, but will do so when asked
 - 0) active, in that (s)he is happy to volunteer information but rarely interrupts
 - +1) very active, frequently volunteering unasked-for information and interrupting
 - +2) always interrupting and volunteering unasked-for information
14. Does the child
- 2) make no effort to please
 - 1) make little effort to please
 - 0) try to please, but not excessively
 - +1) try too hard to please
 - +2) try over-anxiously to please
15. Does the child respond to failure
- 2) with total acceptance, and little or no show of emotion
 - 1) with little disappointment and little show of emotion
 - 0) with disappointment, but not excessive to the situation

- +1) by becoming quite upset or angry, somewhat excessive to the situation
- +2) by becoming very distressed or angry, totally excessive to the situation

16. Would the child attribute failure to

- 2) him/herself totally, even if other factors were also responsible
- 1) him/herself mostly, even if other factors were also responsible
- 0) whatever the causes actually were in the situation - him/herself or other circumstances
- +1) external circumstances mostly, even if (s)he were responsible
- +2) external circumstances totally, even if (s)he were indubitably responsible

17. When relating to members of his/her own sex, does the child

- 2) never or rarely interact voluntarily
- 1) infrequently interact voluntarily
- 0) interact easily and without being "pushy"
- +1) frequently try too hard to command attention
- +2) always try too hard to command attention

18. When relating to members of the opposite sex, does the child

- 2) never or rarely interact voluntarily
- 1) infrequently interact voluntarily
- 0) interact easily and without being "pushy"
- +1) frequently try too hard to command attention
- +2) always try too hard to command attention

19. Is the child

- 2) always bullied
- 1) frequently bullied
- 0) never bullied or bullying
- +1) frequently bullying others
- +2) always bullying others

20. When bullied or teased by peers, does the child
- 2) always withdraw into him/herself and not respond at all
 - 1) frequently withdraw and show little emotion
 - 0) try to respond in such a way as to deflect the bullying
 - +1) frequently respond by becoming very upset or aggressive
 - +2) always respond by becoming very upset or aggressive
21. If bullied (or if witnessing bullying), would the child call on an authority figure
- 2) never under any circumstances, even if, e.g. someone were being badly beaten up
 - 1) infrequently, even if, e.g. someone were being badly beaten up
 - 0) only if there were no alternative, even if, e.g. someone were being badly beaten up
 - +1) frequently, even in situations which would be better dealt with by him/herself
 - +2) always - would never try to deal with a situation by him/herself
22. If a new member joined the class, would the child try to initiate conversation
- 2) not under any circumstances
 - 1) unlikely to do so, even if an obvious opportunity arose
 - 0) very likely to do so, but in a welcoming, not a pushy way
 - +1) definitely, but would tend to be too pushy
 - +2) always, but would be much too pushy and demanding
23. Does the child communicate with his/her teachers
- 2) not at all - never tries to communicate
 - 1) not well - finds it difficult to communicate
 - 0) very well with almost all
 - +1) not well - tries too hard to get teachers' individual attention
 - +2) not at all - constantly tries to focus their attention on him/her
24. Does the child ask questions in class
- 2) never, even if (s)he doesn't know what to do
 - 1) infrequently, even if (s)he doesn't know what to do
 - 0) when necessary, or when something is of particular interest

- +1) often - sometimes questions which are unnecessary or irrelevant
- +2) all the time - often questions which are unnecessary or irrelevant

25. When told off or disciplined justly, does the child

- 2) show no remorse or emotion of any kind
- 1) show little remorse or emotion of any kind
- 0) accept the discipline and show remorse in accordance with the situation
- +1) become quite upset and/or defensive and/or aggressive, somewhat excessive to the situation
- +2) become very upset and/or very defensive and/or very aggressive, totally disproportionate to the situation

26. Does the child find giving compliments to peers

- 2) very difficult - (s)he is much too shy to say anything
- 1) quite difficult - (s)he is a bit shy
- 0) very easy - it comes quite naturally to him/her
- +1) quite difficult - tends to accompany compliments with other comments, e.g. jokes
- +2) very difficult - reacts to the situation by joking or criticizing

27. Does the child respond to compliments from peers

- 2) with extreme embarrassment
- 1) with embarrassment, but pleasure
- 0) with pleasure and gratitude
- +1) with no gratitude, while tending to give the impression that (s)he deserves the compliment
- +2) with no gratitude, clearly because (s)he thinks that the compliment is deserved, and indeed that (s)he is not appreciated enough

28. If you praise the child for something, does the child

- 2) get very embarrassed
- 1) become a bit embarrassed
- 0) seem moderately pleased
- +1) seem pleased, and express this to his/her peers
- +2) seem very pleased, and express this to peers in such a way and to such an extent as to cause friction

29. If disciplined unjustly, would the child

- 2) accept the punishment and say nothing to anyone in his/her defence
- 1) accept the punishment and complain to peers or others, but not to the teacher concerned
- 0) explain his/her side of the story to the teacher concerned
- +1) become somewhat angry/upset/abusive without presenting a reasoned explanation
- +2) become very angry/upset/abusive, without giving an explanation even when asked

30. When his/her work is criticized by a teacher, does the child

- 2) accept the criticism without displaying any motivation to correct the mistakes or attempt to do better
- 1) accept the criticism and perhaps try to correct his/her work in this instance, but continue to make similar mistakes in the future
- 0) accept the criticism and use it to improve his/her performance
- +1) refuse to accept the criticism and attempt to justify his/her mistakes
- +2) refuse to accept the criticism, become angry or upset, and attempt to justify his/her mistakes, even in the light of reasoned argument

The questionnaire concluded with the following rubric:

"Thank you for your patience and help. If there is anything you would like to clarify in, or add to, any of your answers, or any aspect of the child's behaviour which hasn't been covered and you would like to comment on it, please use the space below to do so".

APPENDIX 2

The individual responses for each of 243 subjects on the actual questionnaire and for each of 221 subjects on the desired questionnaire to each of the 29 questions on those questionnaires which were scored on the bipolar scale.

The first column gives the subject number, the remainder of each line in these computer-formatted lists comprising a series of two-digit numbers (e.g. 00, -1) which give the response to each question except question 22 (which had a "yes/no" response).

A2.1 The Actual Questionnaire

```
001 00-100+10000+100-10000000000+10000000000+1-1000000-1000000
002 00+100+1+1000000000000-200+10000000000-1+1-1+10000000000+1
003 00-100+1+1000000+100+10000+10000-1000000+2000000+1+1000000
004 00-100+1+2-10000+10000+1+1-1-100-10000+1+20000-100+1+1+100
005 00-1000000-10000+1-200+100+100+1000000+1+2-200000000-10000
006 00-100+1-1-10000+10000+1+1-1-1-100+100-1-100000000-200+2+2
007 00+100+2+1000000+100+100+100-200-10000-10000000000+1-10000
008 00-100+100-10000000000-1+10000+1-1000000+1-1+10000-1000000
009 000000+2+10000000000+10000-10000-1000000+200000000+1000000
010 00-1000000-10000-1-1-1-100000000000000-1+20000000000+100+1
011 00+100+2-2-20000-100-1-2-100-200-2000000+2-1000000-1000000
012 00+20000+10000000000-20000+200-1-1000000+200+1000000000000
013 -2+100+1+100000000-10000-1+100+1000000-1+2-10000+100-1-100
014 -10000+10000000000-100-200+100+100000000+20000000000-100-2
015 00+100+10000+1-2-10000-200+100-200+100-1+2-100-100+1-1+2+1
016 0000000000-100000000000000000000-2000000+2-100000000000000
017 -1-10000-100000000000000000000000000000000-1+2000000000000000
018 00-100+100-1000000-100-1+1+100+1000000+1+20000-10000+1+1+2
019 00-100+100-100+1+1-1+100000000-1-10000-1-100+2-10000-10000
020 00-1-10000-10000+1-100-10000-1+1000000-1+20000-10000000000
021 000000+200-100+200+100-1+2-1+1+1-100-1+1+100+1-2-1+1+100-1
022 00+1000000-100-100-100000000-100-100000000-100000000000-100
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171 -1-200-100-2000000-2-2+1+2-20000-2-2-2-1+1-1+200-1-1-1-1+1
172 00-1000000+10000-1-1+1+100+100+1-1+1-1-100000000-2-1+10000
173 00-1-100+1-10000-100000000+200+1000000+1+200000000+1+10000
174 00-1-10000-10000-1000000000000+1000000+1+200000000+1+10000
175 00-1-10000-10000-100000000+2+1+2+10000+1+200000000+1+10000
176 00-200+1000000000000000-2-100-2-10000-1-100-200+100+1000000
177 0000-1+1-20000-1000000-1000000+1-1000000+100000000+100 * *
178 00-1000000-1000000000000000-100+20000-100+1-10000-100-1+100
179 0000+100000000000-100000000+1-1000000000000+10000000000+100
180 00-1000000-100000000000-10000-100000000000+200000000-100+100
181 00000000000-100000000000000-100-200000000000+10000000000000-100
182 00-1-1+100-100-2-100-1+100-1-2-100-1-1-1+1-100-100-1-1+100
183 00000000000-100000000000-10000-100-200-100+100000000000+10000
184 000000000000000000-100-1000000
185 00-1000000-100000000000+1-1-1-2+1-100000000+100000000000000
186 000000000000000000000000000000-100-2+100000000000-1+10000-1000000
187 000000+200-1000000-1000000000-1+100000000000000000000-1-1000000
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191 00-1-100+1-10000+1-1000000-10000-100-1+1-2+1000000000000000
192 00-100000000000+100-1000000000000000000-1-1-20000000000000000
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194 00000000000-1000000-1000000+1-100000000000+2000000000-1-10000
195 00-10000+100+100-1-1+1-100+1-1-20000-10000+100000000000+100
196 00000000000-100000000000000000-1-100-100-100+2-100000000000000
197 -1-2-1-100-200+1+1-2-1+200+2+1-1+1000000+2-2-1-100-1-1+2+1
198 00000000000-100000000000000-1-1000000000000+1000000000-1000000
199 00-1-1-100+2-1-2-1-1-2+1-1-1-2-2-1-2-1-1-2-100-100-2-1-200
200 00000000-1-1+1-1-100-1+100-1-100000000-1+1-100-1-1-1+1+1-1
201 00000000000-100000000000000000000000000-100+1-2+2-100000000000000
202 0000-10000-100+10000-1-10000-200-1000000-200000000000-10000
203 000000000-10000+1-1-1-10000+1-100000000000-2-10000-1-100-1-1
204 +2-1-2-100+2-2-200-2-2-10000-100-2-2-1-2-1+200+100-100-200
205 00-100-100-10000-10000-100+1-100000000-100000000000-1000000
206 00-10000+2-1000000000000000000000000000000+100000000000-1000000
207 00-100000000000000-100000000000000000000-100+2-1000000000-10000

A2.2 The Desired Questionnaire

[illegible]

110 00-1000000-20000000000-10000-2+2-2000000000000000000-100
111 00-1000000-10000000000-20000-1+2-2000000-1+100000000000000
112 0000000000+10000000000000000-20000000000000000000000000000000
113 +1-1+10000-10000-1-20000-200-2+1-100000000-1000000-100-100
114 00-1000000000000000000000000000-100-10000000000+2000000000000
115 00-1000000000000000000000000000-2+2000000000000+2000000000000
116 00-2000000+100000000000000000-2+2+1000000+2+20000+100000000
117 0000+2000000000000-100000000-100+2000000+2-1000000+2-20000
118 0000000000000000000000000000000-100-2000000000000000000000000
119 00-1000000000000000-1+1-1+10000+1-200000000+100+1+100000000
120 00000000000000000000000000000000-2000000+2-1000000000000000
121 00-200+20000000000-1-2-20000-2000000000000000000000000000000
122 00-10000000000000000000000000000-100000000000000+1000000000000
123 0000000000000000000000000-2-100-200-2000000+20000000000000000
124 0000000000+1000000000000000000000+1000000+2000000000000+200
125 0000000000-10000000000-10000-100-200000000-1000000000000000
126 0000000000+2000000000000000+10000-2000000+20000+20000000000
127 0000+10000000000000-10000-1-10000+1000000+10000000000000000
128 0000000000-10000000000000000-10000000000000000000000000000000
129 00-1000000000000000-10000-10000000000-1000000000000000000000
130 00-10000000000000000000-2-1000000-100000000-1+1000000000000
131 0000000000000000+1-100-200+1-1+2-1000000+2000000000000000+1
132 0000000000-1000000+1000000-100+10000000000-1+10000+1-10000
133 0000-10000000000000000-1-1-1-1+1-1000000-2-1000000000000+1
134 000000+10000000000000000+2-1+20000000000+2-10000000000+100
135 0000000000000000000000000000+100+100000000+2-100000000+2+1+2
136 000000+1000000000000000-1-100-1-1-200000000000000000000-200
137 0000000000000000000-10000-1000000-20000-1-1-100000000000000
138 +100+1-1+1-1+1+10000-1+1+1+1-2+1+1+100000000+100+1-1000000
139 0000000000000000+1-100000000000000+1000000+200+100-1+1000000
140 00-2000000-100000000-2+10000-200000000-1+2-2000000000000000
141 0000-100000000+1-1000000+100+1+20000+100+1-1000000-1-1+100
142 0000000000000000000000000000-1000000000000000-1-100000000000000
143 00
144 00-2000000-1000000000000+1+10000000000-1+20000000000-1+1+1
145 -1-2-20000-2000000-10000+1+2+1+1-20000-1+200000000-1-20000
146 0000000000000000000000000000+1000000000000+1+2000000000000000

185 +2-1000000000000000000-1-100-2+2-100000000+100000000000000
186 00-20000+10000000000+1-1-1+100+2+10000-100-1000000-1000000
187 000000+200-100000000000000000-2+100000000+100000000-1000000
188 0000-10000-100-100-1-100-1-100+200000000+1-10000-1-10000-1
189 00000000-2-2000000-1-10000-1-200-1000000+1-100-2-100+1+200
190 00-2-100-200000000-10000000000+20000000000000000+100+2+2+2
191 +1-1-10000-100-1+1-1+10000-10000+100-1+100+1000000+1+100-1
192 0000-2000000000000-200000000-10000-1+10000000000000000000
193 00-10000-1-1000000000000000000000000000-100+1000000000000000
194 00-1000000-1000000-100-10000-10000000000+20000000000-10000
195 000000+10000000000000000-10000-2+1-100000000+100000000000000
196 0000000000-10000-10000-100-1-1+1-100-100+2-100000000000000
197 00-2-2+100-200-100-1-1+1+100-1+100-1-1+2-1-1-10000-1+2+1
198 00-1+100+100+1+100-1000000-1000000000000+100+1000000+10000
199 00-200-20000-2-20000-100-1-100-1-2-2+1-1+2000000000000000
200 00000000000000000000000000000000-2+2-100000000000000000+10000
201 00-1000000000000000000000000000000000-1+2-100000000000000
202 000000000000000000000000000000000-20000000000-2000000000000000
203 000000000000000000000000000000000-1000000-1+100000000-2-10000-10000-1-1
204 +1-1-1-10000-2000000-1-1-100-100-200-2-2-10000+1000000-2-2
205 00-1000000-200000000000000-100-2+2000000000000000000000000000
206 00-10000+2-10000-1-100+20000000000000-1+1+10000-10000000000
207 00-100000000000000000000000000000000-1+100000000+2-100000000+10000
208 00-1-100+20000-1-100000000000000-1-200-1-1+100+1000000-1-100
209 0000000000000000000000000000000000-1000000+2000000000000000
210 00-1-200-100+1-1-1+100-1-1-1-200-1+1-1-1-2-1-1-1-100-10000
211 +2-1000000000000000-100+1-100-100-10000000000000000-1000000
212 00-100000000000000-2-2-2+1-1000000000000-2+1+20000000000-1-1
213 0000-1+10000-100000000-2-1000000+1000000-1-10000-100-20000
214 00-2-1-20000000000-200-20000-200-200-2-1-1+2000000+1-100-2
215 00-2-10000-1-100-200000000000000-1000000+100000000-1000000
216 0000000000+100+1000000-1-100-1+1-1-1-100000000+1-2+1-10000
217 00-2000000-10000-1-100-200-1-200000000-10000+1-10000+20000
218 00-2-10000-2-1-1-100-2-200-100-2-1-2-2-100-100-10000-2-1-2
219 00000000000000000000+10000+1+100+2+1000000+2-1-20000-2+100-1
220 000000-20000000000+1-2-10000-100-100000000+1+1+100-1000000
221 00000000000000000000000000000000-200-1000000+1+100000000000000

APPENDIX 3

The raw scores across all the measures for each of the 243 subjects taking part in the study

The table below gives the subject number and sex of each child; the teacher number (18 participated); the type of school; the questionnaire results for the actual, desired and teacher questionnaires (the scores for each subject referring to the total number of -2, -1, 0, +1 and +2 responses made by the subject throughout that particular questionnaire); the teacher general score; and the peer votes obtained, followed by the total possible number of peer votes. The scores for subjects 221-243 are included, though only the actual questionnaire data is available on these children.

Key to the Data

- Column 1 subject number
2 sex: female=1; male=2
3 teacher number
4 type of school: grammar=1; secondary modern=2; remedial=3
5 -2, -1, 0, +1, +2 total scores for each of those sections on the child's actual questionnaire
6 -2, -1, 0, +1, +2 total scores for each of those sections on the child desired questionnaire
7 -2, -1, 0, +1, +2 total scores for each of those sections on the teacher questionnaire
8 teacher general score out of ten
9 number of peer votes obtained
10 total number of potential peer votes

1 2 3 4 5 5 5 5 6 6 6 6 7 7 7 7 7 8 9 10

001 2 01 1 00 04 20 04 0 00 01 26 00 01 00 00 29 00 00 09 08 20
002 2 01 1 01 02 18 07 0 00 04 21 00 03 00 01 25 03 00 07 06 20
003 2 01 1 00 02 18 07 1 01 02 13 06 06 00 00 17 12 00 05 02 20
004 2 01 1 00 06 12 08 2 00 05 15 07 01 00 11 18 00 00 05 03 20
005 2 01 1 02 03 17 05 1 03 03 14 01 07 00 01 12 16 00 04 03 20
006 2 01 1 01 08 12 05 2 08 06 07 01 06 00 11 18 00 00 05 03 20
007 2 01 1 01 03 17 06 1 02 00 21 04 01 00 00 29 00 00 10 04 20
008 2 01 1 00 06 17 05 0 01 03 20 03 01 00 00 29 00 00 09 06 20
009 2 01 1 00 02 21 03 2 01 04 22 00 01 00 00 03 19 07 03 02 20
010 2 01 1 00 07 18 02 1 00 04 24 00 00 00 00 29 00 00 06 04 20
011 2 01 1 05 05 15 01 2 02 00 19 05 02 00 00 29 00 00 06 14 20
012 2 01 1 01 02 19 03 3 00 02 21 01 04 00 01 22 06 00 06 03 20
013 2 01 1 01 06 14 06 1 02 02 12 05 07 00 02 20 07 00 05 11 20
014 2 01 1 02 03 19 03 1 00 02 24 01 01 00 01 28 00 00 06 04 20
015 2 01 1 03 04 11 08 2 05 06 13 01 03 00 02 13 14 00 05 01 20
016 2 01 1 01 02 24 00 1 00 02 25 00 01 00 00 29 00 00 08 01 20
017 2 01 1 00 04 23 00 1 00 01 25 00 02 00 00 29 00 00 08 06 20
018 2 01 1 00 05 14 07 2 04 03 19 01 01 00 07 22 00 00 06 03 20
019 2 01 1 00 09 14 04 1 00 04 20 03 01 00 01 28 00 00 07 04 20
020 2 01 1 00 08 17 02 1 02 03 21 01 01 00 13 16 00 00 05 04 20
021 2 01 1 01 06 10 08 3 02 01 23 01 01 00 01 28 00 00 06 04 20
022 1 02 1 00 07 21 01 0 01 04 24 00 00 00 09 21 00 00 10 04 09
023 1 02 1 00 07 19 03 0 01 03 25 00 00 00 07 09 14 00 07 04 09
024 1 02 1 01 09 17 02 0 01 03 20 03 02 01 19 10 00 00 04 03 09
025 1 02 1 00 04 19 06 0 01 02 26 00 00 00 01 13 16 00 08 04 09
026 2 02 1 01 04 22 02 0 04 01 19 02 03 00 07 22 01 00 07 09 09
027 2 02 1 04 08 16 01 0 08 07 12 01 01 00 07 20 03 00 06 05 09
028 2 02 1 04 12 11 01 1 06 08 13 00 02 00 09 18 03 00 05 05 09
029 2 02 1 00 06 20 02 1 01 04 21 01 02 00 08 08 14 00 05 08 09
030 2 02 1 04 11 14 00 0 03 04 21 01 00 03 03 03 16 05 03 03 09
031 2 02 1 02 08 15 03 1 07 06 12 00 04 00 01 28 01 00 10 05 09
032 1 03 1 01 04 22 00 2 02 02 23 01 01 00 00 30 00 00 09 04 08
033 1 03 1 01 04 18 05 1 01 00 28 00 00 00 00 30 00 00 09 04 08
034 1 03 1 02 03 23 01 0 02 01 24 02 00 00 06 24 00 00 05 01 08
035 1 03 1 00 00 27 02 0 00 01 27 01 00 00 00 22 08 00 07 08 08

036 1 03 1 02 02 25 00 0 02 02 23 00 02 00 04 26 00 00 05 05 08
037 2 03 1 03 07 12 04 3 00 02 23 02 02 00 01 28 01 00 09 03 08
038 2 03 1 01 02 19 06 1 04 09 14 02 00 00 01 29 00 00 06 06 08
039 2 03 1 04 09 13 03 0 01 02 12 12 02 00 12 17 01 00 04 07 08
040 2 03 1 00 07 16 04 2 04 06 19 00 00 00 01 29 00 00 08 07 08
041 1 04 1 00 02 22 05 0 00 01 27 01 00 00 03 22 05 00 08 02 09
042 1 04 1 00 07 21 01 0 01 01 27 00 00 00 00 30 00 00 10 06 09
043 1 04 1 01 08 13 07 0 00 03 26 00 00 00 01 28 01 00 08 09 09
044 1 04 1 01 04 22 02 0 01 04 24 00 00 00 03 13 14 00 05 04 09
045 1 04 1 00 07 21 01 0 03 06 20 00 00 00 00 28 02 00 09 08 09
046 2 04 1 01 08 17 03 0 01 00 23 03 02 00 00 29 01 00 09 02 09
047 2 04 1 01 03 20 04 1 00 00 29 00 00 00 01 26 03 00 09 08 09
048 2 04 1 01 02 16 07 3 05 04 18 01 01 01 02 13 12 02 04 07 09
049 2 04 1 01 08 18 01 1 02 02 23 00 02 00 04 25 01 00 07 01 09
050 2 04 1 01 11 10 05 2 02 00 24 02 01 00 02 25 03 00 06 03 09
051 1 05 1 00 05 22 02 0 00 00 29 00 00 07 14 06 03 00 04 04 09
052 1 05 1 01 01 23 03 1 00 00 28 00 01 00 01 27 02 00 10 08 09
053 1 05 1 00 11 18 00 0 01 03 24 01 00 00 02 28 00 00 08 02 09
054 1 05 1 00 10 17 02 0 03 08 16 02 00 06 13 11 00 00 04 02 09
055 1 05 1 01 03 23 02 0 02 02 23 01 01 00 03 27 00 00 10 04 09
056 2 05 1 00 04 22 01 2 00 05 22 02 00 00 00 21 09 00 09 05 09
057 2 05 1 00 02 18 08 1 01 01 25 00 02 01 03 14 08 04 03 06 09
058 2 05 1 02 05 12 10 0 02 02 23 01 01 00 01 24 05 00 05 06 09
059 2 05 1 01 05 18 05 0 00 04 23 01 01 00 01 19 10 00 07 06 09
060 2 05 1 01 09 11 06 2 09 05 13 01 01 00 00 27 03 00 09 07 09
061 1 06 1 02 07 15 05 0 02 01 26 00 00 00 00 28 00 00 10 07 08
062 1 06 1 00 11 16 01 1 00 01 28 00 00 00 12 16 00 00 08 05 08
063 1 06 1 00 16 11 02 0 02 01 25 00 01 00 14 14 00 00 05 05 08
064 1 06 1 00 06 21 02 0 00 00 29 00 00 00 00 21 07 00 09 05 08
065 2 06 1 03 03 18 05 0 00 07 20 02 00 00 00 28 00 00 10 06 08
066 2 06 1 01 11 15 02 0 01 01 23 03 01 00 10 18 00 00 07 05 08
067 2 06 1 04 05 18 01 1 02 02 22 02 01 00 08 20 00 00 06 04 08
068 2 06 1 02 07 13 02 2 03 02 15 04 05 01 01 18 08 00 04 03 08
069 2 06 1 00 04 23 02 0 00 00 28 01 00 00 14 14 00 00 05 05 08
070 1 07 1 00 04 23 02 0 02 02 23 02 00 00 00 28 02 00 10 05 08
071 1 07 1 02 08 14 05 0 03 00 25 01 00 01 02 27 00 00 07 04 08
072 1 07 1 00 09 20 00 0 00 01 27 01 00 00 02 27 01 00 08 06 08

073 1 07 1 03 02 22 01 1 02 00 26 00 01 00 00 29 01 00 08 04 08
074 1 07 1 00 11 17 01 0 02 04 20 02 01 01 02 27 00 00 08 03 08
075 2 07 1 02 10 15 02 0 03 04 17 04 01 01 10 19 00 00 05 02 08
076 2 07 1 00 07 21 01 0 00 05 23 01 00 00 01 29 00 00 09 06 08
077 2 07 1 00 09 18 02 0 00 02 23 03 01 00 01 28 00 00 08 05 08
078 2 07 1 00 09 11 09 0 03 02 23 01 00 00 02 25 03 00 08 05 08
079 1 08 1 02 10 17 00 0 01 03 24 01 00 03 14 11 01 01 04 04 09
080 1 08 1 00 01 24 03 1 00 00 25 00 00 00 14 15 00 01 05 07 09
081 1 08 1 00 06 22 01 0 00 02 26 00 01 00 06 13 09 02 05 05 09
082 1 08 1 00 09 17 02 1 00 02 26 01 00 04 09 15 01 01 07 03 09
083 1 08 1 00 11 17 01 0 02 04 22 01 00 03 07 17 01 02 06 02 09
084 2 08 1 00 03 24 01 1 00 00 29 00 00 00 00 25 03 02 10 09 09
085 2 08 1 01 07 15 06 0 01 04 24 00 00 00 02 15 09 04 06 04 09
086 2 08 1 03 06 17 02 1 00 00 28 00 01 03 11 12 02 02 04 06 09
087 2 08 1 00 05 21 03 0 00 00 29 00 00 11 07 05 05 02 02 05 09
088 2 08 1 00 05 23 01 0 00 00 29 00 00 03 11 14 01 01 03 05 09
089 1 09 1 01 07 15 05 1 01 01 19 07 01 00 07 18 00 00 07 02 09
090 1 09 1 01 08 18 02 0 02 00 26 01 00 01 06 18 00 00 06 04 09
091 1 09 1 01 06 11 07 4 02 02 25 00 00 00 02 21 02 00 08 02 09
092 2 09 1 00 07 20 01 1 00 00 29 00 00 00 03 22 00 00 07 06 09
093 2 09 1 00 10 12 06 1 01 00 22 04 02 00 05 20 00 00 07 05 09
094 2 09 1 00 14 12 03 0 02 02 20 05 00 00 02 15 08 00 05 04 09
095 2 09 1 01 07 17 03 1 03 01 24 01 00 00 01 22 02 00 07 04 09
096 2 09 1 01 02 23 02 1 00 00 29 00 00 00 03 22 00 00 08 07 09
097 2 09 1 01 02 21 04 1 03 03 17 02 04 00 00 22 03 00 06 08 09
098 2 09 1 00 03 26 00 0 00 00 29 00 00 00 02 23 00 00 07 04 09
099 1 10 1 00 03 26 00 0 00 03 26 00 00 00 04 25 01 00 10 07 09
100 1 10 1 00 12 16 01 0 01 04 24 00 00 00 18 05 07 00 06 01 09
101 1 10 1 00 01 26 02 0 00 02 25 02 00 00 04 23 03 00 10 07 09
102 1 10 1 03 04 22 00 0 01 03 25 00 00 00 14 11 05 00 08 03 09
103 1 10 1 00 05 21 03 0 02 00 25 01 01 00 03 23 04 00 09 04 09
104 2 10 1 00 05 16 04 4 01 02 21 02 03 00 08 22 00 00 08 05 09
105 2 10 1 02 08 17 02 0 05 00 22 02 00 00 04 24 02 00 08 03 09
106 2 10 1 00 03 25 01 0 00 00 28 00 01 07 17 01 05 00 05 01 09
107 2 10 1 00 01 26 01 1 00 01 28 00 00 00 02 26 02 00 10 07 09
108 2 10 1 01 00 20 07 1 01 04 20 04 00 00 06 20 03 01 08 07 09
109 1 11 1 02 06 20 00 1 02 01 21 04 01 00 11 19 00 00 07 04 09

110 1 11 1 01 14 13 01 0 03 03 22 00 01 04 12 14 00 00 05 07 09
111 1 11 1 00 09 14 06 0 02 04 21 01 01 00 00 20 10 00 07 06 09
112 1 11 1 01 01 27 00 0 01 00 27 01 00 00 01 27 02 00 08 07 09
113 2 11 1 05 05 17 02 0 03 07 16 03 00 00 11 19 00 00 06 02 09
114 2 11 1 00 05 23 01 0 00 03 25 00 01 00 04 07 18 01 05 07 09
115 2 11 1 00 05 21 03 0 01 01 25 00 02 00 03 14 13 00 06 04 09
116 2 11 1 03 07 19 00 0 02 00 21 03 03 00 02 18 10 00 06 01 09
117 2 11 1 00 03 14 10 2 01 03 21 00 04 00 05 05 14 06 04 03 09
118 2 11 1 00 03 25 01 0 01 01 27 00 00 03 04 23 00 00 05 08 09
119 1 12 1 02 07 18 02 0 01 03 19 06 00 00 05 24 01 00 07 02 09
120 1 12 1 01 05 20 03 0 01 01 26 00 01 00 01 28 01 00 10 08 09
121 1 12 1 01 06 15 05 2 04 01 23 00 01 01 13 15 01 00 04 00 09
122 1 12 1 00 01 17 11 0 00 02 26 01 00 00 00 30 00 00 09 06 09
123 2 12 1 00 11 18 00 0 03 01 24 00 01 00 01 28 01 00 08 02 09
124 2 12 1 00 04 22 02 1 00 00 25 02 02 00 16 14 00 00 04 02 09
125 2 12 1 01 02 17 08 1 01 04 24 00 00 00 00 30 00 00 10 09 09
126 2 12 1 02 01 21 00 5 01 00 24 01 03 00 00 30 00 00 08 04 09
127 2 12 1 02 05 20 02 0 00 03 23 03 00 00 02 27 01 00 09 09 09
128 2 12 1 00 00 24 05 0 00 02 27 00 00 00 00 29 01 00 10 08 09
129 1 13 1 00 08 18 03 0 00 04 25 00 00 00 03 14 08 02 06 04 09
130 1 13 1 01 04 18 06 0 01 04 23 01 00 00 06 21 00 00 06 03 09
131 1 13 1 00 02 23 03 1 01 03 20 03 02 01 03 22 01 00 07 04 09
132 2 13 1 00 08 18 02 1 00 04 21 04 00 03 15 09 00 00 03 00 09
133 2 13 1 02 10 16 01 0 01 07 19 02 00 01 12 14 00 00 05 03 09
134 2 13 1 04 04 15 03 3 00 02 22 02 03 00 06 21 00 00 07 04 09
135 2 13 1 01 04 17 03 4 00 01 22 03 03 01 06 14 05 01 05 07 09
136 2 13 1 00 05 24 00 0 02 04 22 01 00 01 08 18 00 00 05 06 09
137 2 13 1 02 04 22 01 0 01 05 23 00 00 00 02 22 03 00 08 03 09
138 2 13 1 02 06 20 01 0 01 04 11 13 00 00 06 21 00 00 07 02 09
139 1 14 2 00 07 10 07 5 00 02 22 04 01 00 00 21 06 00 06 08 20
140 1 14 2 00 09 17 02 1 04 02 21 01 01 00 00 23 04 00 07 00 20
141 1 14 2 01 07 16 04 1 00 05 17 06 01 00 06 20 01 00 04 02 20
142 1 14 2 01 04 18 05 1 00 03 26 00 00 01 00 12 09 05 06 02 20
143 1 14 2 00 04 21 03 1 00 00 29 00 00 00 11 15 01 00 04 00 20
144 1 14 2 01 07 20 00 1 01 03 20 04 01 00 04 23 00 00 07 05 20
145 1 14 2 01 04 18 05 1 05 04 15 03 02 00 01 09 11 06 08 06 20
146 1 14 2 00 05 21 03 0 00 00 26 02 01 00 00 26 01 00 10 05 20

147 1 14 2 00 06 18 05 0 03 06 16 02 02 00 00 07 14 06 06 05 20
148 1 14 2 00 07 20 01 1 01 08 18 01 01 00 08 18 01 00 03 01 20
149 2 14 2 06 05 12 03 3 06 03 12 04 04 00 00 11 16 00 05 03 20
150 2 14 2 08 05 07 04 5 00 00 09 07 13 05 09 12 01 00 03 02 20
151 2 14 2 01 04 09 09 6 01 08 14 04 02 00 01 11 14 01 04 05 20
152 2 14 2 01 05 14 06 3 02 04 18 03 02 01 04 22 01 00 06 05 20
153 2 14 2 05 06 13 04 1 01 02 10 01 15 04 06 12 05 00 02 02 20
154 2 14 2 01 05 23 00 0 00 03 26 00 00 00 03 23 01 00 06 05 20
155 2 14 2 04 07 12 04 2 00 02 26 00 01 00 00 27 00 00 09 06 20
156 2 14 2 02 06 17 04 0 02 01 26 00 00 00 03 24 00 00 06 06 20
157 2 14 2 03 04 12 03 7 00 00 29 00 00 00 00 08 05 14 04 04 20
158 2 14 2 00 05 24 00 0 00 00 29 00 00 00 00 27 00 00 09 06 20
159 2 14 2 03 05 15 03 3 00 00 29 00 00 00 00 27 00 00 09 02 20
160 1 15 2 01 06 22 00 0 05 02 22 00 00 01 04 20 03 00 07 06 17
161 1 15 2 09 11 03 04 2 07 11 04 04 03 00 07 21 00 00 05 05 17
162 1 15 2 00 03 17 05 4 01 07 17 03 01 02 08 15 03 00 05 03 17
163 1 15 2 01 06 17 02 3 01 05 18 02 03 00 03 11 11 03 04 01 17
164 1 15 2 00 03 17 05 4 02 02 19 04 02 01 07 16 04 00 05 04 17
165 1 15 2 02 06 16 03 2 01 00 22 06 00 00 07 21 00 00 05 05 17
166 1 15 2 00 06 22 01 0 00 00 28 01 00 00 03 20 05 00 06 03 17
167 1 15 2 01 04 16 04 4 03 02 21 02 00 01 04 23 00 00 06 03 17
168 1 15 2 00 04 13 07 1 00 02 18 08 01 00 00 22 06 00 08 03 17
169 1 15 2 01 07 20 01 0 06 02 18 01 02 01 05 22 00 00 05 03 17
170 1 15 2 01 02 12 01 9 00 02 11 08 08 00 01 15 08 04 09 01 17
171 1 15 2 08 08 08 03 2 05 08 13 03 00 00 04 23 01 00 06 06 17
172 1 15 2 01 07 14 07 0 03 08 11 04 02 01 02 24 01 00 05 06 17
173 2 15 2 00 04 18 05 2 04 05 10 05 05 00 01 13 13 01 08 02 17
174 2 15 2 00 04 20 04 1 04 06 08 03 07 00 01 19 08 00 08 03 17
175 2 15 2 00 04 17 05 3 04 07 09 03 06 00 02 21 05 00 08 04 17
176 2 15 2 04 04 18 03 0 01 05 17 02 04 00 03 18 07 00 09 00 17
177 2 15 2 01 04 18 04 0 02 03 17 05 02 00 07 20 01 00 07 01 17
178 1 16 1 00 07 19 02 1 00 03 25 01 00 03 20 05 02 00 03 04 31
179 1 16 1 00 02 23 04 0 01 01 23 03 01 01 06 19 04 00 06 03 31
180 1 16 1 00 05 22 01 1 06 05 15 02 01 00 04 26 00 00 07 07 31
181 1 16 1 01 03 24 01 0 00 05 22 02 00 00 08 22 00 00 06 05 31
182 1 16 1 02 14 09 04 0 02 03 22 01 01 00 18 10 02 00 04 00 31
183 1 16 1 01 04 22 02 0 02 00 24 02 01 00 00 29 01 00 08 06 31

184 1 16 1 00 02 27 00 0 11 04 11 03 00 00 03 25 02 00 06 04 31
185 1 16 1 01 05 20 03 0 01 04 21 01 02 00 08 22 00 00 05 04 31
186 1 16 1 01 03 23 02 0 01 05 18 04 01 00 03 27 00 00 07 06 31
187 1 16 1 00 05 22 01 1 01 02 23 02 01 00 03 25 02 00 07 07 31
188 1 16 1 00 12 14 03 0 00 11 16 01 01 00 02 28 00 00 07 04 31
189 1 16 1 02 04 20 02 1 04 06 16 02 01 00 03 22 03 00 07 03 31
190 1 16 1 01 04 20 03 1 04 02 18 01 04 00 07 22 01 00 05 07 31
191 2 16 1 01 07 17 04 0 01 08 12 08 00 00 07 17 06 00 05 06 31
192 2 16 1 01 04 23 01 0 02 02 24 01 00 00 03 08 19 00 05 02 31
193 2 16 1 00 04 20 05 0 00 04 24 01 00 00 00 30 00 00 10 03 31
194 2 16 1 00 05 22 01 1 00 06 22 00 01 00 06 20 04 00 06 03 31
195 2 16 1 01 06 16 06 0 01 02 23 03 00 00 00 28 02 00 09 09 31
196 2 16 1 00 06 22 00 1 00 08 19 01 01 00 07 00 03 00 06 06 31
197 2 16 1 04 09 07 05 4 03 10 08 06 02 02 11 04 11 02 02 06 31
198 2 16 1 00 04 24 01 0 00 03 19 07 00 00 00 24 06 00 08 05 31
199 2 16 1 08 14 05 01 1 06 05 16 01 01 00 01 27 02 00 07 01 31
200 2 16 1 00 13 11 05 0 01 01 25 01 01 02 18 10 00 00 03 00 31
201 2 16 1 01 03 23 01 1 00 03 25 00 01 00 02 22 06 00 06 05 31
202 2 16 1 02 06 20 01 0 02 00 27 00 00 00 00 26 04 00 08 07 31
203 2 16 1 01 10 16 02 0 01 06 21 01 00 00 03 25 02 00 08 07 31
204 2 16 1 09 07 09 01 3 06 08 13 02 00 00 01 25 04 00 05 01 31
205 2 16 1 00 08 20 01 0 02 02 24 00 01 01 04 12 13 00 05 02 31
206 2 16 1 00 03 24 01 1 00 06 19 02 02 00 05 19 06 00 06 09 31
207 2 16 1 00 05 23 00 1 00 03 23 02 01 00 18 12 00 00 05 05 31
208 2 16 1 01 11 12 05 0 01 09 16 02 01 00 08 13 09 00 03 05 31
209 2 16 1 00 04 25 00 0 00 01 27 00 01 00 01 28 01 00 07 07 31
210 1 17 3 09 07 08 03 2 03 15 08 03 00 00 22 06 02 00 04 00 11
211 1 17 3 01 04 17 05 2 00 06 21 01 01 01 03 18 08 00 06 07 11
212 1 17 3 01 09 16 03 0 03 05 18 02 01 01 06 15 08 00 05 05 11
213 1 17 3 00 07 20 02 0 02 06 19 02 00 00 11 11 08 00 06 06 11
214 1 17 3 03 11 14 00 1 07 04 15 01 02 01 15 02 11 01 04 03 11
215 1 17 3 03 05 21 00 0 02 05 21 01 00 00 09 17 04 00 07 07 11
216 2 17 3 02 09 16 02 0 01 07 16 05 00 09 20 01 00 00 03 05 11
217 2 17 3 01 06 21 01 0 03 06 18 01 01 00 02 07 18 03 08 07 11
218 2 17 3 02 07 11 05 4 09 10 10 00 00 00 03 02 24 01 05 05 11
219 2 17 3 03 02 15 05 4 02 02 18 05 02 00 01 01 25 03 02 01 11
220 2 17 3 02 06 12 07 2 02 04 19 04 00 01 22 03 04 00 06 04 11

221 2 17 3 02 09 18 00 0 01 09 25 02 00 00 09 20 01 00 06 06 11
222 1 18 4 01 05 11 07 5
223 1 18 4 00 05 23 01 0
224 1 18 4 01 01 26 01 0
225 1 18 4 00 01 26 00 0
226 1 18 4 00 02 27 00 0
227 1 18 4 02 06 18 02 1
228 1 18 4 00 06 20 02 1
229 1 18 4 00 05 15 01 0
230 1 18 4 02 02 24 01 0
231 2 18 4 01 02 19 06 1
232 2 18 4 00 01 27 01 0
233 2 18 4 02 07 20 00 0
234 2 18 4 00 04 21 03 1
235 2 18 4 15 08 04 02 0
236 2 18 4 02 05 15 06 1
237 2 18 4 02 01 20 03 3
238 2 18 4 02 02 22 02 1
239 2 18 4 00 03 21 03 2
240 2 18 4 06 03 10 03 7
241 2 18 4 04 10 11 02 2
242 2 18 4 00 02 25 02 0
243 2 18 4 06 02 11 07 3

APPENDIX 6

The total number of -2's, -1's, 0's, +1's and +2's scored for each of the 29 questions assessed on the bipolar scale on the desired questionnaire by each of the following groups participating in the study, along with the actual scores for the Scottish comprehensive group for comparison.

Chatham Grammar School, boys	(English grammar school)
Ballymena Academy, boys	(Irish grammar school)
Friends School Lisburn, boys	(Irish grammar school)
Upbury Manor School, boys	(English secondary modern)
Robert Napier School, boys	(English remedial unit)
Ballymena Academy, girls	
Friends School Lisburn, girls	
Upbury Manor School, girls	
Robert Napier School, girls	
Johnstone High School, boys	(Scottish comprehensive school)
Johnstone High School, girls	

A6.1 Chatham Grammar, Boys

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	0	20	0	0
	2	3	11	5	1	0
	3	0	3	17	0	0
	4	0	0	18	1	1
	5	0	0	17	3	0
	6	3	5	9	2	1
	7	0	0	18	2	0
	8	0	0	19	1	0
	9	0	0	18	0	2
	10	1	2	16	2	0
	11	0	1	15	4	0
	12	0	7	13	0	0
	13	0	2	14	1	3

14	1	0	15	3	1
15	5	4	11	0	0
16	0	1	11	4	4
17	3	6	7	1	3
18	1	0	19	0	0
19	0	0	20	0	0
20	0	3	15	1	1
21	1	0	3	1	15
23	0	1	16	0	3
24	0	0	16	2	2
25	2	2	13	2	1
26	2	0	15	3	0
27	1	0	15	2	2
28	3	1	13	2	1
29	0	1	13	3	3
30	2	1	16	0	1

A6.2 Ballymena Academy, Boys

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	2	1	57	4	1
	2	12	11	39	3	0
	3	1	6	47	8	3
	4	3	1	52	4	5
	5	0	1	62	2	0
	6	3	15	39	5	3
	7	0	2	59	3	1
	8	0	2	61	1	1
	9	1	6	57	1	0
	10	4	12	47	2	0
	11	4	1	58	2	0
	12	14	11	39	1	0
	13	3	14	44	2	2
	14	2	8	52	3	0
	15	23	19	22	0	1

16	1	1	45	13	5
17	18	12	26	6	3
18	0	0	63	1	1
19	0	1	64	0	0
20	0	2	62	1	0
21	5	3	32	5	20
23	0	14	39	5	7
24	0	0	44	12	9
25	2	2	55	4	1
26	0	2	59	4	0
27	0	8	51	5	1
28	3	3	55	3	1
29	6	5	48	4	2
30	0	4	55	5	1

A6.3 Friends Lisburn, Boys

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	0	17	2	0
	2	2	10	7	0	0
	3	2	3	13	1	0
	4	1	1	15	2	0
	5	0	1	15	1	2
	6	2	5	12	0	0
	7	2	0	16	1	0
	8	1	3	14	1	0
	9	0	3	15	1	0
	10	1	5	13	0	0
	11	0	4	14	1	0
	12	0	4	13	1	1
	13	0	3	15	1	0
	14	0	4	14	1	0
	15	4	6	9	0	0
	16	0	3	10	4	2
	17	3	4	10	2	0

18	1	1	17	0	0
19	1	6	10	2	0
20	1	4	12	2	0
21	2	1	5	4	7
23	0	5	12	2	0
24	0	1	16	2	0
25	0	2	16	1	0
26	0	1	18	0	0
27	0	0	18	1	0
28	0	3	12	4	0
29	1	2	15	0	1
30	1	2	15	1	0

A6.4 Upbury Manor, Boys

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	3	12	0	1
	2	2	4	9	0	1
	3	3	1	11	0	1
	4	0	1	8	2	5
	5	1	0	14	0	1
	6	2	1	10	1	2
	7	3	1	8	2	2
	8	0	1	12	3	0
	9	0	5	8	0	3
	10	0	3	11	1	1
	11	0	0	15	0	1
	12	0	4	8	2	2
	13	0	0	12	1	3
	14	1	0	12	0	3
	15	4	0	10	0	2
	16	1	2	7	2	4
	17	2	4	8	0	2
	18	0	0	12	2	2
	19	0	4	10	1	1

20	1	4	9	2	0
21	1	0	7	3	5
23	0	4	8	1	3
24	2	1	9	2	2
25	0	2	10	1	3
26	0	0	14	1	1
27	1	0	10	3	2
28	2	2	8	0	4
29	1	0	10	3	2
30	0	1	9	4	2

A6.5 Robert Napier, Boys

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	0	6	0	0
	2	2	0	4	0	0
	3	0	1	5	0	0
	4	1	0	5	0	0
	5	0	0	6	0	0
	6	1	1	3	1	0
	7	0	1	5	0	0
	8	0	1	4	1	0
	9	0	2	4	0	0
	10	0	1	3	2	0
	11	2	0	4	0	0
	12	2	2	2	0	0
	13	0	1	4	1	0
	14	0	2	3	1	0
	15	2	2	2	0	0
	16	1	0	3	1	1
	17	0	4	1	1	0
	18	1	1	4	0	0
	19	1	1	4	0	0
	20	0	2	4	0	0
	21	0	0	4	1	1

23	0	2	2	2	0
24	1	0	3	2	0
25	0	2	2	2	0
26	1	0	5	0	0
27	1	1	3	1	0
28	1	1	2	1	1
29	0	1	5	0	0
30	1	1	4	0	0

A6.6 Ballymena Academy, Girls

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	1	51	0	0
	2	4	20	27	1	0
	3	0	3	47	2	0
	4	0	1	49	0	2
	5	0	2	50	0	0
	6	1	5	45	1	0
	7	0	0	51	1	0
	8	0	1	51	0	0
	9	0	1	50	1	0
	10	3	9	40	0	0
	11	2	0	47	3	0
	12	10	12	30	0	0
	13	0	5	45	2	0
	14	0	0	51	1	0
	15	21	15	15	1	0
	16	0	0	38	8	6
	17	17	11	22	0	2
	18	0	0	52	0	0
	19	0	1	51	0	0
	20	0	2	50	0	0
	21	3	5	32	2	10
	23	0	7	35	10	0
	24	0	1	43	6	2

25	0	1	49	2	0
26	0	0	47	5	0
27	0	3	47	2	0
28	0	0	51	1	0
29	2	2	48	0	0
30	0	0	49	3	0

A6.7 Friends Lisburn, Girls

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	0	12	0	1
	2	6	1	6	0	0
	3	0	4	8	0	1
	4	0	0	11	0	2
	5	2	0	10	1	0
	6	1	6	4	2	0
	7	0	0	13	0	0
	8	0	3	10	0	0
	9	1	1	11	0	0
	10	0	5	8	0	0
	11	1	3	8	1	0
	12	1	2	9	0	1
	13	0	3	9	1	0
	14	2	2	7	2	0
	15	7	2	4	0	0
	16	1	0	4	3	5
	17	1	3	8	1	0
	18	0	0	13	0	0
	19	0	0	13	0	0
	20	0	1	12	0	0
	21	2	0	5	5	1
	23	1	5	4	3	0
	24	0	0	11	2	0
	25	1	2	10	0	0
	26	0	2	10	1	0

27	1	4	8	0	0
28	1	1	8	2	1
29	0	0	11	0	2
30	1	1	10	0	1

A6.8 Upbury Manor, Girls

	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question					
1	1	3	19	0	0
2	7	4	9	2	1
3	3	2	16	1	1
4	0	0	18	4	1
5	0	0	21	1	1
6	3	5	12	2	1
7	0	2	19	2	0
8	1	1	16	4	1
9	0	5	18	0	0
10	2	4	17	0	0
11	2	0	19	1	1
12	3	3	11	6	0
13	0	4	11	7	1
14	1	3	14	3	2
15	3	3	13	4	0
16	3	0	14	4	2
17	3	3	16	1	0
18	0	2	21	0	0
19	0	8	14	1	0
20	1	7	8	7	0
21	2	2	4	5	10
23	4	4	13	1	1
24	0	0	19	2	2
25	0	2	19	0	2
26	1	5	15	1	1
27	1	4	12	4	2
28	3	6	13	0	1

29	1	0	17	4	1
30	3	2	16	2	0

A6.9 Robert Napier, Girls

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	0	5	0	1
	2	2	3	1	0	0
	3	1	3	2	0	0
	4	1	0	4	1	0
	5	0	1	5	0	0
	6	0	1	5	0	0
	7	0	2	3	1	0
	8	0	1	5	0	0
	9	2	1	3	0	0
	10	2	1	2	1	0
	11	1	0	5	0	0
	12	2	1	2	2	0
	13	0	4	2	0	0
	14	0	1	5	0	0
	15	2	1	3	0	0
	16	0	0	6	0	0
	17	1	3	1	1	0
	18	0	0	5	1	0
	19	1	1	4	0	0
	20	1	2	3	0	0
	21	1	2	1	2	0
	23	0	2	2	0	2
	24	0	1	5	0	0
	25	0	1	5	0	0
	26	0	2	4	0	0
	27	0	2	3	1	0
	28	1	2	3	0	0
	29	0	1	5	0	0
	30	1	1	4	0	0

A6.10 Johnstone High School, Boys (Actual Scores)

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	1	0	12	0	0
	2	3	5	5	0	0
	3	3	2	8	0	0
	4	1	0	7	3	2
	5	1	0	7	5	0
	6	1	5	6	1	0
	7	2	1	9	1	0
	8	1	1	9	2	0
	9	0	4	8	1	0
	10	2	3	7	0	1
	11	2	3	7	1	0
	12	3	1	8	1	0
	13	1	1	7	2	2
	14	1	1	9	2	0
	15	3	3	6	1	0
	16	3	1	6	2	1
	17	3	1	7	1	1
	18	2	0	11	0	0
	19	0	3	9	1	0
	20	0	2	9	2	0
	21	1	0	4	3	5
	23	2	3	4	1	3
	24	0	2	6	3	2
	25	0	2	9	1	1
	26	0	1	8	4	0
	27	1	0	11	0	0
	28	1	1	11	0	0
	29	1	0	8	2	2
	30	1	4	8	0	0

A6.11 Johnstone High School, Girls (Actual Scores)

		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
Question	1	0	2	7	0	0
	2	0	4	5	0	0
	3	0	3	6	0	0
	4	0	0	9	0	0
	5	0	0	8	0	1
	6	1	2	6	0	0
	7	0	0	9	0	0
	8	0	0	8	1	0
	9	0	2	7	0	0
	10	0	0	9	0	0
	11	0	0	9	0	0
	12	1	1	7	0	0
	13	0	0	9	0	0
	14	0	4	5	0	0
	15	3	3	3	0	0
	16	0	0	8	1	0
	17	0	6	3	0	0
	18	0	0	8	0	1
	19	0	1	7	1	0
	20	0	0	9	0	0
	21	1	0	3	3	2
	23	0	1	3	1	3 *
	24	0	0	7	1	0
	25	0	1	7	0	0
	26	0	0	7	0	1
	27	0	1	6	1	0
	28	0	2	4	2	0
	29	0	1	6	1	0
	30	0	1	5	2	0

* A total of 8, rather than 9, girls responded to question 23

APPENDIX 7

The number of subjects (94 girls and 126 boys) responding to the -2, -1, 0, +1 and +2 categories in each question on the desired questionnaire which was scored on the bipolar scale, expressed both as raw scores and as a percentage.

A7.1 Girls' Results

	<u>Raw scores</u>						<u>Percentages</u>				
1	1	4	87	0	2	1.5	4.0	92.5	0.0	2.0	
2	19	28	43	3	1	20.0	30.0	45.5	3.0	1.5	
3	4	12	73	3	2	4.0	13.0	78.0	3.0	2.0	
4	1	1	82	5	5	1.5	1.5	87.0	5.0	5.0	
5	2	3	86	2	1	2.0	3.0	91.5	2.0	1.5	
6	5	17	66	5	1	5.0	18.0	70.0	5.0	1.5	
7	0	4	86	4	0	0.0	4.0	91.5	4.0	0.0	
8	1	6	82	4	1	1.5	6.5	87.0	4.0	1.5	
9	3	8	82	1	0	3.0	8.5	87.0	1.5	0.0	
10	7	19	67	1	0	7.5	20.0	71.0	1.5	0.0	
11	6	3	79	5	1	6.5	3.0	84.0	5.0	1.5	
12	16	18	51	8	1	17.0	19.0	54.0	8.5	1.5	
13	0	16	67	10	1	0.0	17.0	71.0	10.5	1.5	
14	3	6	77	6	2	3.0	6.5	82.0	6.5	2.0	
15	33	21	35	5	0	35.0	22.5	37.0	5.0	0.0	
16	4	0	62	15	13	4.0	0.0	66.0	16.0	14.0	
17	22	20	47	3	2	23.5	21.5	50.0	3.0	2.0	
18	0	4	89	1	0	0.0	4.0	95.0	1.5	0.0	
19	1	10	82	1	0	1.5	10.5	87.0	1.5	0.0	
20	2	12	73	7	0	2.0	13.0	77.5	7.5	0.0	
21	8	9	42	14	2	18.5	9.5	44.5	15.0	22.5	
23	5	18	54	14	3	5.0	19.0	57.5	15.0	3.0	
24	0	2	78	10	4	0.0	2.0	83.0	10.5	4.0	
25	1	6	83	2	2	1.5	6.5	88.0	2.0	2.0	
26	1	9	76	7	1	1.5	9.5	81.0	7.5	1.5	

27	2	13	70	7	2	2.0	14.0	74.5	7.5	2.0
28	5	9	75	3	2	5.0	9.5	80.0	3.0	2.0
29	3	3	81	4	3	3.0	3.0	86.0	4.0	3.0
30	5	4	79	5	1	5.0	4.0	84.0	5.0	1.5

A7.2 Boys' Results

<u>Raw scores</u>						<u>Percentages</u>				
1	2	4	112	6	2	1.50	3.0	89.0	4.5	1.50
2	21	36	64	4	1	16.50	28.5	51.0	3.0	0.75
3	6	14	93	9	4	4.50	11.0	74.0	7.0	3.00
4	5	3	98	9	11	4.00	2.5	78.0	7.0	9.00
5	1	2	114	4	3	0.75	1.5	92.0	3.0	2.50
6	13	25	73	9	6	10.00	20.0	58.0	7.0	4.50
7	5	4	106	8	3	4.00	3.0	84.0	6.0	2.50
8	1	7	110	7	1	0.75	5.5	87.0	5.5	0.75
9	1	16	102	2	5	0.75	12.5	81.0	1.5	4.00
10	6	23	90	6	1	4.50	18.0	71.5	4.5	0.75
11	6	6	106	7	1	4.50	4.5	84.0	7.0	0.75
12	16	28	75	4	3	12.50	22.0	60.0	3.0	2.50
13	3	20	89	6	8	2.50	16.0	71.0	4.5	6.00
14	4	15	95	8	4	3.00	12.0	75.0	6.0	3.00
15	38	31	54	0	3	30.00	24.5	43.0	0.0	2.50
16	3	7	76	24	16	2.50	5.5	60.5	19.0	12.50
17	26	30	52	10	8	20.50	24.0	41.0	8.0	6.00
18	3	2	115	3	3	2.50	1.5	91.0	2.5	2.50
19	2	12	108	3	1	1.50	9.5	85.0	2.5	0.75
20	2	15	102	6	1	1.50	12.0	81.0	4.5	0.75
21	9	4	51	14	48	7.00	3.0	40.5	11.0	38.00
23	0	26	77	10	13	0.00	20.5	61.0	8.0	10.00
24	3	2	88	20	13	2.50	1.5	70.0	16.0	10.00
25	4	10	96	10	5	3.00	8.0	77.0	8.0	4.00
26	3	3	111	8	1	2.50	2.5	88.0	6.0	0.75
27	3	9	97	12	4	2.50	7.0	77.0	9.5	4.00
28	9	10	90	10	7	7.00	8.0	71.5	8.0	5.50

29	8	9	91	10	8	6.00	7.0	72.0	8.0	6.00
30	4	9	99	10	4	3.00	7.0	78.5	8.0	3.00

A total of 124, rather than 126, boys responded to question 5.

A total of 125, rather than 126, boys responded to question 24.

APPENDIX 8

A tabulated breakdown of the number of children scoring zero on the actual questionnaire and the desired questionnaire.

The number of children falling in six categories of zero scores expressed as a raw score and as a percentage of the total sample.

Histograms: the number of children falling in six categories of zero scores, expressed as a percentage of the total sample

A8.1 A Tabulated Breakdown of the Number of Children Scoring Zeros on the Actual and Desired Questionnaires, Expressed as a Raw Score and as a Percentage of the Total Sample

No. of zeros	No. of children scoring that number of zeros on the actual questionnaire		No. of children scoring that number of zeros on the desired questionnaire	
		%		%
1	0	0.00	0	0.00
2	0	0.00	0	0.00
3	1	0.45	0	0.00
4	0	0.00	1	0.45
5	1	0.45	0	0.00
6	0	0.00	0	0.00
7	2	0.90	1	0.45
8	2	0.90	3	1.35
9	3	1.35	2	0.90
10	3	1.35	3	1.35
11	8	3.60	4	1.80
12	12	5.40	6	2.70
13	6	2.70	6	2.70
14	11	4.95	3	1.35
15	11	4.95	5	2.25

16	14	6.30	8	3.60
17	26	11.70	6	2.70
18	24	10.80	11	4.95
19	7	3.15	13	5.85
20	21	9.45	10	4.50
21	15	6.75	18	8.10
22	18	8.10	16	7.20
23	16	7.20	22	9.90
24	9	4.05	18	8.10
25	4	1.80	19	8.55
26	4	1.80	16	7.20
27	3	1.35	9	4.05
28	0	0.00	8	3.60
29	0	0.00	13	5.85

A8.2 The Number of Children Falling in Six Categories of Zero Scores,
Expressed as a Raw Score and as a Percentage of the Total Sample

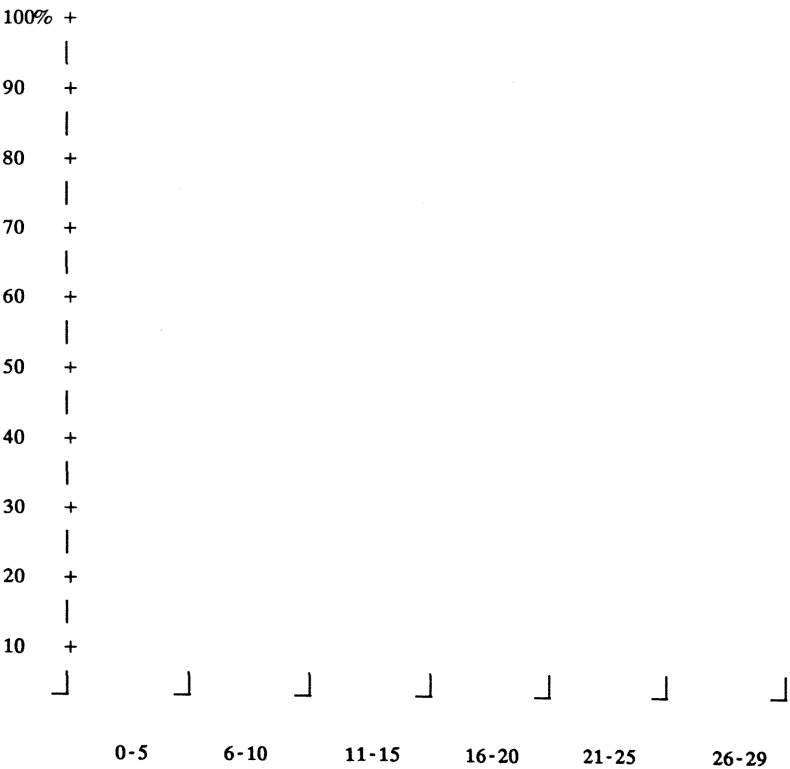
No. of zeros	Actual questionnaire		Desired questionnaire	
	Raw score	%	Raw score	%
0-5	2	0.9	1	0.45
6-10	10	4.5	9	4
11-15	48	21	24	11
16-20	92	41.5	48	21
21-25	62	28	93	42
26-29	7	3	46	20

With the inclusion of the Scottish sample actual scores:

0-5	3	1
6-10	11	4.5
11-15	54	22
16-20	97	40
21-25	68	28
26-29	11	4.5

A8.3 Histograms: The Number of Children Falling in Six Categories of Zero Scores, Expressed as a Percentage of the Total Sample

Actual Questionnaire

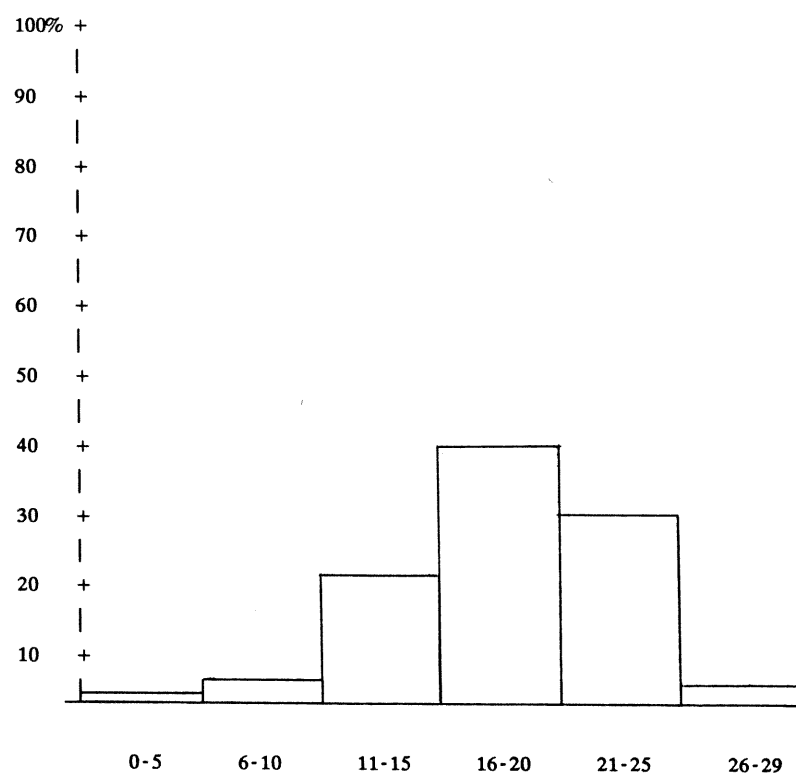


With the inclusion of the Scottish sample actual scores:

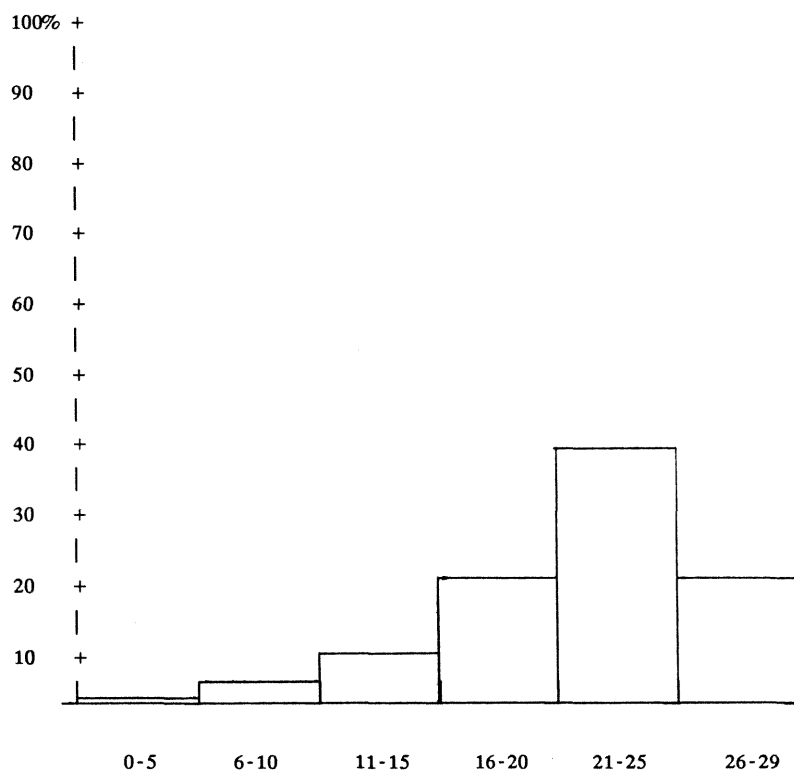
0-5	3	1
6-10	11	4.5
11-15	54	22
16-20	97	40
21-25	68	28
26-29	11	4.5

A8.3 Histograms: The Number of Children Falling in Six Categories of Zero Scores, Expressed as a Percentage of the Total Sample

Actual Questionnaire



Desired Questionnaire



APPENDIX 9

The total number of zero scores (in six categories) for the actual and desired questionnaires according to type of school, nationality and sex.

The following abbreviations apply:

Comprehensive	Comp.
Grammar	Gr.
Secondary modern	Sec.
Remedial	Rem.
English	Eng.
Irish	Ir.
Scottish	Scot.

A9.1 The total number of zero scores in each of six categories (0-5, 6-10, 11-15, 16-20, 21-25 and 25-29) on the actual (A) and desired (D) questionnaires for each group taking part in the study.

		<u>0-5</u>		<u>6-10</u>		<u>11-15</u>		<u>16-20</u>		<u>21-25</u>		<u>26-29</u>	
		<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>
Eng. Gr.													
boys		0	0	1	1	7	5	10	4	3	10	0	1
Ir. Gr.													
boys		1	0	3	1	18	10	34	15	26	43	2	15
girls		0	0	1	0	11	2	24	11	24	32	5	20
Eng. Sec.													
boys		0	0	2	5	6	2	6	3	1	0	0	6
girls		1	1	2	0	3	4	13	9	4	5	0	4

Eng. Rem.

boys	0	0	0	1	3	0	2	4	1	1	0	0
girls	0	0	1	1	1	1	3	2	1	2	0	0

Scot.

Comp.

boys	1		1		3		3		4		1	
girls	0		0		2		2		2		3	

A9.2 The percentage of zero scores in each of six categories (0-5, 6-10, 11-15, 16-20, 21-25 and 25-29) on the actual and desired questionnaires for each group taking part in the study

<u>0-5</u>		<u>6-10</u>		<u>11-15</u>		<u>16-20</u>		<u>21-25</u>		<u>26-29</u>	
A	D	A	D	A	D	A	D	A	D	A	D

Eng. Gr.

boys	0	0	5	5	33	24	48	19	14	48	0	5
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Ir. Gr.

boys	1	0	4	1	21	12	41	18	31	51	2	18
girls	0	0	2	0	17	3	37	17	37	49	8	31

Eng. Sec.

boys	0	0	13	31	40	12	40	19	7	0	0	38
girls	4	4	9	0	13	17	57	39	17	22	0	17

Eng. Rem.

boys	0	0	0	17	50	0	33	67	17	17	0	0
girls	0	0	17	17	17	17	50	33	17	33	0	0

Scot.

Comp.

boys	8		8		23		23		31		8	
girls	0		0		23		23		23		33	

A9.3 A summary of the total number of zeros scored in each of six categories on the actual questionnaire according to school

	<u>Comp.</u>	<u>Gr.</u>	<u>Sec. Mod.</u>	<u>Rem.</u>
0-5	1	1	1	0
6-10	1	5	4	1
11-15	5	36	9	4
16-20	5	68	19	5
21-25	6	54	6	2
26-29	<u>4</u>	<u>7</u>	<u>0</u>	<u>0</u>
Total	22	171	39	12

A9.4 A summary of the total number of zeros scored in each of six categories on the actual questionnaire according to nationality

	<u>Eng.</u>	<u>Ir.</u>	<u>Scot.</u>
0-5	1	1	1
6-10	6	4	1
11-15	20	29	5
16-20	34	58	5
21-25	11	51	6
26-29	<u>0</u>	<u>7</u>	<u>4</u>
Total	72	150	22

A9.5 A summary of the total number of zeros scored in each of six categories on the actual questionnaire according to sex

	<u>Boys</u>	<u>Girls</u>
0-5	2	1
6-10	7	4
11-15	37	17
16-20	55	42
21-25	36	32
26-29	<u>3</u>	<u>8</u>
Total	140	104

A9.6 A summary of the total number of zeros scored in each of six categories on the desired questionnaire according to school

	<u>Gr.</u>	<u>Sec. Mod.</u>	<u>Rem.</u>
0-5	0	1	0
6-10	2	5	2
11-15	17	6	1
16-20	28	12	6
21-25	85	4	3
26-29	<u>36</u>	<u>10</u>	<u>0</u>
Total	168	38	12

A9.7 A summary of the total number of zeros scored in each of six categories on the desired questionnaire according to nationality

	<u>Eng.</u>	<u>Ir.</u>
0-5	1	0
6-10	8	1
11-15	12	12
16-20	22	26
21-25	18	75
26-29	<u>11</u>	<u>35</u>
Total	72	149

A9.8 A summary of the total number of zeros scored in each of six categories on the desired questionnaire according to sex

	<u>Boys</u>	<u>Girls</u>
0-5	0	1
6-10	8	1
11-15	17	7
16-20	26	22
21-25	54	39
26-29	<u>22</u>	<u>24</u>
Total	127	94

APPENDIX 10

An analysis of the eight questions on the desired questionnaire where the number of children opting for the zero category was less than 70%; that is, a breakdown of the percentage of children who chose each of the five possible options on the desired questionnaire, along with the corresponding scores on the actual questionnaire for comparison.

<u>Qu.</u>	<u>-2</u>		<u>-1</u>		<u>0</u>		<u>+1</u>		<u>+2</u>	
	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>
2	10.0	18.0	44.5	29.0	35	48.0	9.0	3.0	1.2	1.00
6	7.0	8.0	45.0	19.0	41	63.0	4.5	6.5	1.6	3.00
12	12.3	14.5	17.0	21.0	51	57.0	16.5	5.5	2.4	2.00
15	16.5	32.0	29.0	23.5	50	40.5	4.5	2.5	0.4	1.50
16	3.7	3.0	10.0	3.0	60	63.0	23.0	18.0	4.1	13.00
17	17.7	22.0	37.5	22.5	41	45.0	3.2	6.0	0.8	4.50
21	9.0	7.7	8.6	6.0	25	42.0	26.0	13.0	31.0	31.50
23	5.3	2.5	36.0	20.0	43	29.5	12.0	11.0	3.7	7.25

APPENDIX 11

An analysis of the nine questions where the difference between the actual (A) and desired (D) questionnaires in the number of children opting for the zero category was over 16%, in order of the magnitude of the difference.

<u>Qu.</u>	<u>%</u>	<u>-2</u>		<u>-1</u>		<u>0</u>		<u>+1</u>		<u>+2</u>	
		<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>	<u>A</u>	<u>D</u>
20	30.0	3.2	2.00	33.0	12.0	50	80.0	13.0	6.00	0.8	0.50
5	25.5	2.8	1.50	10.3	2.5	66	91.5	18.0	2.75	2.8	2.00
9	25.5	1.6	2.00	34.5	11.0	58	83.5	5.7	1.50	0.0	2.50
14	23.0	1.2	3.00	20.0	9.5	55	78.0	19.0	6.50	4.9	2.75
6	22.0	7.4	8.00	45.0	19.0	41	63.0	4.5	6.50	1.6	3.00
28	22.0	1.2	6.50	23.5	8.5	53	75.0	17.0	6.00	3.7	4.00
19	17.5	2.4	1.50	24.0	10.0	69	86.5	4.1	2.00	0.0	0.50
21	17.0	9.0	7.75	8.6	6.0	25	42.0	26.0	13.00	31.0	31.50
23	16.5	5.3	2.50	36.0	20.0	43	59.5	12.0	11.00	3.7	7.25

APPENDIX 12

An analysis of the 18 subjects scoring 10 or below in the zero category on either the actual or desired questionnaires, giving sex (B = boy, G = girl), school type (Gr. = grammar; S.M. = secondary modern; Rem.= remedial), nationality (Eng. = English, Ir. = Irish), the zero total on all three questionnaires (maximum = 29), the general score and the peer vote.

<u>Subj.</u>	<u>Sex</u>	<u>Sch.</u>	<u>Nation.</u>	<u>Act.</u> <u>quest.</u>	<u>Des.</u> <u>quest.</u>	<u>Teacher</u> <u>quest.</u>	<u>General</u> <u>score</u>	<u>Peer</u> <u>vote</u>
21	B	Gr.	Eng.	10	23	28	6/10	4/20
50	B	Gr.	Ir.	10	24	25	6/10	3/9
139	G	S.M.	Eng.	10	22	21	6/10	8/20
150	B	S.M.	Eng.	7	9	12	3/10	2/20
151	B	S.M.	Eng.	9	14	11	4/10	5/20
161	G	S.M.	Eng.	3	4	21	5/10	2/17
171	G	S.M.	Eng.	8	13	23	6/10	6/17
182	G	Gr.	Ir.	9	22	10	4/10	0/31
197	B	Gr.	Ir.	7	8	4	2/10	6/31
199	B	Gr.	Ir.	5	16	27	7/10	1/31
204	B	Gr.	Ir.	9	13	25	5/10	1/31
210	G	Rem.	Eng.	8	8	6	4/10	0/11
6	B	Gr.	Eng.	12	7	18	5/10	3/20
153	B	S.M.	Eng.	13	10	12	2/10	2/20
173	B	S.M.	Eng.	18	10	13	8/10	2/17
174	B	S.M.	Eng.	20	8	19	8/10	3/17
175	B	S.M.	Eng.	17	9	21	8/10	4/17
218	B	Rem.	Eng.	11	10	2	5/10	5/11

APPENDIX 13

The 18 lowest peer vote and the 16 highest peer vote ratings in the sample, along with the corresponding teacher general scores.

A13.1 The 18 Lowest Peer Vote Ratings

<u>Subject</u>	<u>Peer rating</u>	<u>Teacher general score</u>
15	0.05	5
16	0.05	8
121	0.00	4
132	0.00	3
140	0.00	7
143	0.00	4
148	0.05	3
163	0.05	4
170	0.05	9
176	0.00	9
177	0.05	7
182	0.00	4
192	0.06	5
199	0.03	7
200	0.00	3
204	0.03	5
210	0.00	4
219	0.09	2

A13.2 The 16 Highest Peer Vote Ratings

<u>Subject no.</u>	<u>Peer rating</u>	<u>Teacher general score</u>
26	1.000	7
29	0.880	5
35	1.000	7
39	0.875	4
40	0.875	8
43	1.000	8
45	0.880	9
47	0.880	9
52	0.880	10
61	0.875	10
97	0.880	6
118	0.880	5
120	0.880	10
125	1.000	10
127	1.000	9
128	0.880	10

APPENDIX 14

An analysis of the 10 subjects scoring more than five -2 or +2 responses on the actual questionnaire and the 22 subjects scoring more than five -2 or +2 responses on the desired questionnaire.

Key

B = boy

G = girl

Sec.M. = secondary modern

Gr. = grammar

Rem. = remedial

Comp. = comprehensive

Eng. = English

Ir. = Irish

Sc. = Scottish

A14.1 The Actual Questionnaire

<u>Subject</u>	<u>Sex</u>	<u>School</u>	<u>Nationality</u>	<u>-2</u>	<u>+2</u>
149	B	Sec.M.	Eng.	6	
150	B	Sec.M.	Eng.	8	
151	B	Sec.M.	Eng.		6
157	B	Sec.M.	Eng.		7
161	G	Sec.M.	Eng.	9	
170	G	Sec.M.	Eng.		9
171	G	Sec.M.	Eng.	8	
199	B	Gr.	Ir.	8	
204	B	Gr.	Ir.	9	
210	G	Rem.	Eng.	9	

A14.2 The Desired Questionnaire

3	B	Gr.	Eng.		6
5	B	Gr.	Eng.		7
6	B	Gr.	Eng.	8	6
13	B	Gr.	Eng.		7
27	B	Gr.	Ir.	8	
28	B	Gr.	Ir.	6	
31	B	Gr.	Ir.	7	
60	B	Gr.	Ir.	9	
149	B	Sec.M.	Eng.	6	
150	B	Sec.M.	Eng.		13
153	B	Sec.M.	Eng.		15
161	G	Sec.M.	Eng.	7	
169	G	Sec.M.	Eng.	6	
170	G	Sec.M.	Eng.		8
174	B	Sec.M.	Eng.		7
175	B	Sec.M.	Eng.		6
180	G	Gr.	Ir.	6	
184	G	Gr.	Ir.	11	
199	B	Gr.	Ir.	6	
204	B	Gr.	Ir.	6	
214	G	Rem.	Eng.	7	
218	B	Rem.	Eng.	9	

APPENDIX 15

The percentages of children choosing -2, -1, 0, +1 and +2 on each question on the desired questionnaire, according to sex, type of school and nationality.

A15.1 Overall Scores

<u>Qu.</u>	<u>Boys</u>					<u>Girls</u>				
	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
1	01	03	89	05	01	01	04	93	00	02
2	16	28	51	03	01	20	30	46	03	01
3	05	11	74	07	03	04	13	78	03	02
4	04	02	78	07	09	01	01	87	05	05
5	01	01	92	03	02	02	03	92	02	01
6	10	20	58	07	05	05	18	70	05	02
7	04	03	84	06	03	00	04	92	04	00
8	01	05	87	05	01	01	06	87	04	01
9	01	12	81	01	04	03	08	87	01	00
10	04	18	72	04	01	07	20	71	01	00
11	04	04	84	05	01	06	03	84	05	01
12	12	22	60	03	02	17	19	54	08	01
13	02	16	71	04	06	00	17	71	10	01
14	03	12	75	06	03	03	06	82	06	02
15	30	24	43	00	02	35	23	37	05	00
16	02	05	61	19	12	04	00	66	16	14
17	21	24	41	08	06	23	21	50	03	02
18	02	01	91	02	02	00	04	95	01	00
19	02	10	85	02	01	01	10	87	01	00
20	01	12	81	04	01	02	13	78	07	00
21	07	03	41	11	38	08	09	45	15	22
23	00	21	61	08	10	05	19	56	15	03
24	02	01	70	16	10	00	02	83	11	04
25	03	08	77	08	04	01	06	88	02	02
26	02	02	88	06	01	01	09	81	07	01

27	02 07 77 09 04	02 14 75 07 02
28	07 08 72 08 05	05 10 80 03 02
29	06 07 72 08 06	03 03 86 04 03
30	03 07 79 08 03	05 04 84 05 02

A15.2 Grammar School Children

<u>Qu.</u>	<u>Boys</u>					<u>Girls</u>					<u>Combined</u>				
	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
1	02	01	90	06	01	00	01	97	00	01	01	01	93	04	01
2	16	31	49	04	00	15	32	51	02	00	16	31	50	03	00
3	03	12	74	07	03	00	11	85	03	01	02	11	78	06	02
4	04	02	82	07	06	00	02	92	00	06	02	02	86	04	06
5	00	02	90	04	02	03	03	92	02	00	01	02	91	03	01
6	10	22	58	07	04	03	17	75	05	00	07	20	65	06	02
7	02	02	89	06	01	00	00	98	01	00	01	01	93	04	01
8	01	05	90	03	01	00	06	94	00	00	01	05	92	02	01
9	01	09	86	02	02	01	03	94	01	00	01	07	89	02	01
10	06	18	73	03	00	05	21	74	00	00	05	20	73	02	00
11	04	06	84	07	00	05	05	85	06	00	04	05	84	07	00
12	13	21	63	02	01	17	21	60	00	01	15	21	62	01	01
13	03	18	70	04	05	00	12	83	05	00	02	16	75	04	03
14	03	12	77	07	01	03	03	89	05	00	03	09	82	06	01
15	31	28	40	00	01	43	26	29	01	00	35	27	36	01	01
16	01	05	64	20	10	01	00	65	17	17	01	03	64	19	13
17	23	21	40	09	06	28	21	46	01	03	25	21	43	06	05
18	02	01	95	01	01	00	03	97	00	00	01	02	96	01	01
19	01	07	90	02	00	00	01	98	00	00	01	05	94	01	00
20	01	09	85	04	01	00	05	95	00	00	01	07	89	03	01
21	08	04	38	10	40	08	08	57	11	17	08	05	46	10	31
23	00	19	64	07	10	01	18	60	20	00	01	19	63	12	06
24	00	01	73	15	11	00	02	83	12	03	00	01	77	14	08
25	04	06	80	07	02	01	05	91	03	00	03	05	85	05	01
26	02	03	88	07	00	00	03	88	09	00	01	03	88	08	00
27	01	08	80	08	03	01	11	85	03	00	01	09	82	06	02

28	06	07	77	09	02	01	01	91	05	01	04	05	82	07	02
29	07	08	73	07	06	03	03	91	00	03	05	06	80	04	05
30	03	07	83	06	02	01	01	91	05	01	02	05	86	05	02

A15.3 Secondary Modern Children

<u>Qu.</u>	<u>Boys</u>					<u>Girls</u>					<u>Combined</u>				
	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
1	00	19	75	00	06	04	13	83	00	00	02	15	80	00	02
2	12	25	56	00	06	30	17	39	09	04	23	21	46	05	05
3	19	06	69	00	06	13	09	70	04	04	15	08	69	03	05
4	00	06	50	12	31	00	00	78	17	04	00	03	67	15	15
5	06	00	88	00	06	00	00	91	04	04	02	00	90	02	05
6	12	06	63	06	12	13	22	52	09	04	13	15	56	08	08
7	19	06	50	12	12	00	09	83	09	00	08	08	69	10	05
8	00	06	75	19	00	04	04	70	17	04	02	00	72	18	02
9	00	31	50	00	19	00	22	78	00	00	00	26	67	00	08
10	00	19	69	06	06	09	17	74	00	00	05	18	72	02	02
11	00	00	94	00	06	09	00	83	04	04	05	00	87	03	05
12	00	25	50	12	12	13	13	48	26	00	08	18	49	20	05
13	00	00	75	06	19	00	17	48	30	04	00	10	59	21	10
14	06	00	75	00	19	04	13	61	13	09	05	08	67	08	13
15	25	00	63	00	12	13	13	57	17	00	18	08	59	10	05
16	06	12	44	12	25	13	00	61	17	09	10	05	54	15	15
17	12	25	50	00	12	13	13	70	04	00	13	18	62	03	05
18	00	00	75	12	12	00	09	91	00	00	00	05	85	05	05
19	00	25	63	06	06	00	35	61	04	00	00	31	62	05	03
20	06	25	56	12	00	04	30	35	30	00	05	28	44	23	00
21	06	00	44	19	31	09	09	17	22	44	08	05	28	21	39
23	00	25	50	06	19	17	17	57	04	04	10	21	54	05	10
24	12	06	56	12	12	00	00	83	09	09	05	03	72	10	10
25	00	12	63	06	19	00	09	83	00	09	00	10	74	03	13
26	00	00	88	06	06	04	22	65	04	04	03	13	74	05	05
27	06	00	63	19	12	04	17	52	17	09	05	10	56	18	10
28	12	12	50	00	25	13	26	57	00	04	13	20	54	00	13

29	06	00	63	19	12	04	00	74	17	04	05	00	69	18	08
30	00	06	56	25	12	13	09	70	09	00	08	08	64	15	05

A15.4 Remedial Children

<u>Qu.</u>	<u>Boys</u>					<u>Girls</u>					<u>Combined</u>				
	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
1	00	00	100	00	00	00	00	84	00	17	00	00	92	00	08
2	33	00	67	00	00	33	50	17	00	00	33	25	42	00	00
3	00	17	84	00	00	17	50	33	00	00	08	33	58	00	00
4	17	00	84	00	00	17	00	67	17	00	17	00	75	08	00
5	00	00	100	00	00	00	17	84	00	00	00	08	92	00	00
6	17	17	50	17	00	00	17	84	00	00	08	17	67	08	00
7	00	17	84	00	00	00	33	50	17	00	00	25	67	08	00
8	00	17	67	17	00	00	17	84	00	00	00	17	75	08	00
9	00	33	67	00	00	33	17	50	00	00	17	25	58	00	00
10	00	17	50	33	00	33	17	33	17	00	17	17	42	25	00
11	33	00	67	00	00	17	00	84	00	00	25	00	75	00	00
12	33	33	33	00	00	33	17	17	33	00	33	25	25	17	00
13	00	17	67	17	00	00	67	33	00	00	00	42	50	08	00
14	00	33	50	17	00	00	17	84	00	00	00	25	67	08	00
15	33	33	33	00	00	33	17	50	00	00	33	25	42	00	00
16	17	00	50	17	17	00	00	100	00	00	08	00	75	08	08
17	00	67	17	17	00	17	50	17	17	00	08	58	17	17	00
18	17	17	67	00	00	00	00	84	17	00	08	08	75	08	00
19	17	17	67	00	00	17	17	67	00	00	17	17	67	00	00
20	00	33	67	00	00	17	33	50	00	00	08	33	58	00	00
21	00	00	67	17	17	17	33	17	33	00	08	17	42	25	08
23	00	33	33	33	00	00	33	33	00	33	00	33	33	17	17
24	17	00	50	33	00	00	17	84	00	00	08	08	67	17	00
25	00	33	33	33	00	00	17	84	00	00	00	25	58	17	00
26	17	00	84	00	00	00	33	67	00	00	08	17	75	00	00
27	17	17	50	17	00	00	33	50	17	00	08	25	50	17	00
28	17	17	33	17	17	17	33	50	00	00	17	25	42	08	08
29	00	17	84	00	00	00	17	84	00	00	00	17	83	00	00

30 17 17 67 00 00 17 17 67 00 00 17 17 67 00 00

A15.5 Irish Children

<u>Qu.</u>	<u>Boys</u>						<u>Girls</u>						<u>Combined</u>					
	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>		<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	
1	02	01	88	07	01		00	01	97	00	01		01	01	92	04	01	
2	17	25	55	03	00		15	32	51	02	00		16	28	53	03	00	
3	03	11	70	11	05		00	11	85	03	01		02	11	76	07	03	
4	05	02	80	07	06		00	02	92	00	06		03	02	85	04	06	
5	00	02	94	01	02		03	03	92	02	00		01	03	93	01	01	
6	06	24	61	06	03		03	17	75	05	00		04	21	67	05	02	
7	02	02	89	05	01		00	00	98	01	00		01	01	93	04	01	
8	01	06	89	02	01		00	06	94	00	00		01	06	91	01	01	
9	01	11	86	02	00		01	03	94	01	00		01	07	89	02	00	
10	06	20	71	02	00		05	21	74	00	00		05	21	73	01	00	
11	05	06	86	03	00		05	05	85	06	00		04	05	85	04	00	
12	17	18	62	02	01		17	21	60	00	01		17	20	61	01	01	
13	04	20	70	04	02		00	12	83	05	00		02	17	76	04	01	
14	02	14	79	05	00		03	03	89	05	00		03	09	83	04	00	
15	32	30	37	00	01		43	26	29	02	00		37	28	34	01	01	
16	01	05	65	20	08		01	00	65	17	17		01	03	65	19	12	
17	25	19	43	09	03		28	21	46	01	03		26	20	44	06	04	
18	01	01	95	01	01		00	03	97	00	00		01	02	96	01	01	
19	01	08	88	02	00		00	01	98	00	00		01	05	93	01	00	
20	01	07	88	04	00		00	05	95	00	00		01	06	91	02	00	
21	08	05	44	11	32		08	08	57	11	17		08	06	50	11	25	
23	00	23	61	08	08		02	18	60	20	00		01	21	60	13	04	
24	00	01	71	17	11		00	02	83	12	03		00	01	77	15	07	
25	02	05	86	06	01		01	05	91	03	00		02	05	88	05	01	
26	00	03	92	05	00		00	03	88	09	00		00	03	90	07	00	
27	00	10	82	07	01		01	11	85	03	00		01	10	83	05	01	
28	04	07	80	08	01		01	01	91	05	01		03	04	85	07	01	
29	08	08	75	05	04		03	03	91	00	03		06	06	82	03	03	
30	01	07	83	07	01		01	01	91	05	01		01	04	87	06	01	

A15.6 English Children

<u>Qu.</u>	<u>Boys</u>					<u>Girls</u>					<u>Combined</u>				
	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>	<u>-2</u>	<u>-1</u>	<u>0</u>	<u>+1</u>	<u>+2</u>
1	00	07	90	00	02	03	10	83	00	03	01	08	87	00	03
2	17	36	43	02	02	31	24	34	07	03	23	31	39	04	03
3	07	12	79	00	02	14	17	62	03	03	10	14	72	01	03
4	02	02	74	07	14	03	00	76	17	03	03	01	75	11	10
5	02	00	88	07	02	00	03	90	03	03	01	01	89	06	03
6	19	12	52	10	07	10	21	59	07	03	15	15	55	08	06
7	07	05	74	10	05	00	14	76	10	00	04	08	75	10	03
8	00	05	83	12	00	03	07	72	14	03	01	06	79	13	01
9	00	17	71	00	12	07	21	72	00	00	03	18	72	00	07
10	02	14	71	10	02	14	17	65	03	00	07	15	69	07	01
11	05	02	81	10	02	10	00	83	03	03	07	01	82	07	03
12	05	31	55	05	05	17	14	41	27	00	10	24	49	14	03
13	00	07	71	07	14	00	27	45	24	03	00	15	61	14	10
14	05	07	69	10	10	03	14	65	10	07	04	10	68	10	08
15	26	14	55	00	05	17	14	55	14	00	23	14	55	06	03
16	05	07	50	17	21	10	00	69	14	07	07	04	58	15	15
17	12	33	38	05	12	14	21	59	07	00	13	28	46	06	07
18	05	02	83	05	05	00	07	90	03	00	03	04	86	04	03
19	02	12	81	02	02	03	31	62	03	00	03	20	73	03	01
20	02	21	67	07	02	07	31	38	24	00	04	25	55	14	01
21	05	00	33	12	50	10	14	17	24	34	07	06	27	17	44
23	00	17	62	07	14	14	21	52	03	10	06	18	58	06	13
24	07	02	67	14	10	00	03	83	07	07	04	03	73	11	08
25	05	14	60	12	10	00	10	83	00	07	03	13	69	07	08
26	07	00	81	10	02	03	24	65	03	03	06	10	75	07	03
27	07	02	67	14	10	03	21	52	17	07	06	10	61	15	08
28	14	10	55	07	14	14	27	55	00	03	14	17	55	04	10
29	02	05	67	14	12	03	03	76	14	03	03	04	70	14	08
30	07	07	69	10	07	14	10	69	07	00	10	08	69	08	04

APPENDIX 16

The combined percentages (boys and girls) scoring -2, -1, 0, +1 and +2 on the desired questionnaire, along with those of Scottish comprehensive children on the actual questionnaire for comparison, presented by school and nationality.

A16.1 The Combined Percentages according to School

<u>Qu.</u>	<u>Grammar</u>	<u>Sec. Mod.</u>	<u>Remedial</u>	<u>Comprehensive</u>
1	01 01 93 04 01	02 15 80 00 02	00 00 92 00 08	05 09 86 00 00
2	16 31 50 03 00	23 21 46 05 05	33 25 42 00 00	14 41 45 00 00
3	02 11 78 06 02	15 08 69 03 05	08 33 58 00 00	14 23 64 00 00
4	02 02 86 04 06	00 03 67 15 15	17 00 75 08 00	05 00 73 14 09
5	01 02 91 03 01	02 00 90 02 05	00 08 92 00 00	05 00 68 23 05
6	07 20 65 06 02	13 15 56 08 08	08 17 67 08 00	09 32 55 05 00
7	01 01 93 04 01	08 08 69 10 05	00 25 67 08 00	09 05 82 05 00
8	01 05 92 02 01	02 05 72 18 02	00 17 75 08 00	05 05 77 14 00
9	01 07 89 02 01	00 26 67 00 08	17 25 58 00 00	00 27 68 05 00
10	05 20 73 02 00	05 18 72 02 02	17 17 42 25 00	09 14 73 00 05
11	04 05 84 07 00	05 00 87 03 05	25 00 75 00 00	09 14 73 05 00
12	15 21 62 01 01	08 18 49 20 05	33 25 25 17 00	18 09 68 05 00
13	02 16 75 04 03	00 10 59 21 10	00 42 50 08 00	05 05 73 09 09
14	03 09 82 06 01	05 08 67 08 13	00 25 67 08 00	05 23 64 09 00
15	35 27 36 01 01	18 08 59 10 05	33 25 42 00 00	27 27 41 05 00
16	01 03 64 19 13	10 05 54 15 15	08 00 75 08 08	14 05 64 14 05
17	25 21 43 06 05	13 18 62 03 05	08 58 17 17 00	14 32 45 05 05
18	01 02 96 01 01	00 05 85 05 05	08 08 75 08 00	09 00 86 00 05
19	01 05 94 01 00	00 31 62 05 03	17 17 67 00 00	00 18 73 09 00
20	01 07 89 03 01	05 28 44 23 00	08 33 58 00 00	00 09 82 09 00
21	08 05 46 10 31	08 05 28 21 39	08 17 42 25 08	09 00 32 27 32
23	01 19 63 12 06	10 21 54 05 10	00 33 33 17 17	10 19 33 10 29
24	00 01 77 14 08	05 03 72 10 10	08 08 67 17 00	00 10 62 19 10
25	03 05 85 05 01	00 10 74 03 13	00 25 58 17 00	00 14 76 05 05
26	01 03 88 08 00	03 13 74 05 05	08 17 75 00 00	00 05 71 19 05
27	01 09 82 06 02	05 10 56 18 10	08 25 50 17 00	05 05 81 05 05

28	04 05 82 07 02	13 20 54 00 13	17 25 42 08 08	05 14 71 10 00
29	05 06 80 04 05	05 00 69 18 08	00 17 83 00 00	05 05 67 14 10
30	02 05 86 05 02	08 08 64 15 05	17 17 67 00 00	05 24 62 10 00

A16.2 The Combined Percentages according to Nationality

<u>Qu.</u>	<u>Irish</u>	<u>English</u>	<u>Scottish</u>
1	01 01 92 04 01	01 08 87 00 03	05 09 86 00 00
2	16 28 53 03 00	23 31 39 04 03	14 41 45 00 00
3	02 11 76 07 03	10 14 72 01 03	14 23 64 00 00
4	03 02 85 04 06	03 01 75 11 10	05 00 73 14 09
5	01 03 93 01 01	01 01 89 06 03	05 00 68 23 05
6	04 21 67 05 02	15 15 55 08 06	09 32 55 05 00
7	01 01 93 04 01	04 08 75 10 03	09 05 82 05 00
8	01 06 91 01 01	01 06 79 13 01	05 05 77 14 00
9	01 07 89 02 00	03 18 72 00 07	00 27 68 05 00
10	05 21 73 01 00	07 15 69 07 01	09 14 73 00 05
11	04 05 85 04 00	07 01 82 07 03	09 14 73 05 00
12	17 20 61 01 01	10 24 49 14 03	18 09 68 05 00
13	02 17 76 04 01	00 15 61 14 10	05 05 73 09 09
14	03 09 83 04 00	04 10 68 10 08	05 23 64 09 00
15	37 28 34 01 01	23 14 55 06 03	27 27 41 05 00
16	01 03 65 19 12	07 04 58 15 15	14 05 64 14 05
17	26 20 44 06 04	13 28 46 06 07	14 32 45 05 05
18	01 02 96 01 01	03 04 86 04 03	09 00 86 00 05
19	01 05 93 01 00	03 20 73 03 01	00 18 73 09 00
20	01 06 91 02 00	04 25 55 14 01	00 09 82 09 00
21	08 06 50 11 25	07 06 27 17 44	09 00 32 27 32
23	01 21 60 13 04	06 18 58 06 13	10 19 33 10 29
24	00 01 77 15 07	04 03 73 11 08	00 10 62 19 10
25	02 05 88 05 01	03 13 69 07 08	00 14 76 05 05
26	00 03 90 07 00	06 10 75 07 03	00 05 71 19 05
27	01 10 83 05 01	06 10 61 15 08	05 05 81 05 05
28	03 04 85 07 01	14 17 55 04 10	05 14 71 10 00
29	06 06 82 03 03	03 04 70 14 08	05 05 67 14 10
30	01 04 87 06 01	10 08 69 08 04	05 24 62 10 00

APPENDIX 17

The instructions given to the three judges who were assessing the video, and a copy of a script which they were asked to complete about the children being observed; the judges' written comments and scores for those subjects under observation; and a summary of the scores awarded by the judges, along with the child's peer vote and teacher general score.

A17.1 The Judges' Instructions, and a Copy of the Script

Video Assessment

Name of scorer: Age:

Instructions:

1. First watch the video with the sound off: you may watch it as many times as you like in this form. 8 children appear in it, seated in a semi-circle as follows:

 4. Granne 5. Sean
 3. Ciara 6. Christopher
 2. Suzanne 7. Gavin
 1. Trudi 8. William
2. On Chart 1, give each child a score out of 10 for how much you like them, e.g. a score of 0 would mean that you dislike him/her very much, 10 that you like him/her very much. Also write down what you liked about the person and what you did not like: write 'NOTHING' if there was nothing in particular which you liked or disliked. Finally, choose the person whom you think would be (i) the most popular and (ii) the least popular in the class. If there is more than one in each group, write down all the names.

3. With the sound turned up, again watch the video as many times as you like and give each child a score out of 10, on Chart 2, for how much you like them. Also write down what you liked about the person and what you did not like: write 'NOTHING' if there was nothing in particular which you liked or disliked. Finally, choose the person whom you think would be (i) the most popular and (ii) the least popular in the class. If there is more than one in each group, write down all the names.

Chart 1: Video scores without sound

Name	Score out of 10	What did you like?	What did you not like?
1. Trudi			
2. Suzanne			
3. Ciara			
4. Granne			
5. Sean			
6. Christopher			
7. Gavin			
8. William			

Most popular person in the class:

Least popular person in the class:

Chart 2: Video scores with sound

Name	Score out of 10	What did you like?	What did you not like?
1. Trudi			
2. Suzanne			
3. Ciara			
4. Granne			
5. Sean			

6. Christopher
7. Gavin
8. William

Most popular person in the class:

Least popular person in the class:

A17.2 The Judges' Comments and Scores

Judge 1 A first year girl

A. With sound

<u>Name</u>	<u>Subj.</u>	<u>Score</u>	<u>Likes</u>	<u>Dislikes</u>
	<u>No.</u>			
Trudi	179	6	nothing	
Suzanne	183	8	laughed a lot	
Ciara	187	8	laughed a lot	
Granne	190	7	was interesting	
Sean	199	6	nothing	
Chris	198	5	nothing	thought a lot of himself
Gavin	208	6	nothing	
William	197	5	nothing	

B. Without sound

Trudi	179	4	nothing	seemed very serious
Suzanne	183	6	laughed a lot	
Ciara	187	8	seemed friendly	
Granne	190	7	laughed a lot	
Sean	199	4	nothing	
Chris	198	5	nothing	
Gavin	208	5	nothing	

William 197 4 nothing

Most popular person: Ciara

Least popular person: Sean

Judge 2 A first year boy

A. With sound

<u>Name</u>	<u>Subj.</u>	<u>Score</u>	<u>Likes</u>	<u>Dislikes</u>
	<u>No.</u>			
Trudi	179	4	looked and seemed shy	
Suzanne	183	5	looked happy	said nothing
Ciara	187	6	she laughed and talked most of the time	
Granne	190	7	when she was talking everyone looked at her	
Sean	199	6	he was talking and looked at whoever was talking	
Chris	198	2		when he talked no-one looked at him and he is a
bit of a poseur				
Gavin	208	5	he was happy and talked a lot	
William	197	2		he was unhappy and said nothing.

B. Without sound

Trudi	179	2		she just sat there solemnly and said nothing
Suzanne	183	5	she looked happy	she said nothing

Ciara	187	6	she laughed and talked most of the time	
Granne	190	7	when she was talking everyone looked at her	
Sean	199	6	he was happy and looked at the people who were talking	
Chris	198	2		when he talked no- one looked at him and he was a bit of a poseur
Gavin	208	5	he was happy and talked a lot	
William	197	2		he looked unhappy and said nothing

Most popular person: Granne

Least popular person: William

Judge 3 A first year boy

A. With sound

<u>Name</u>	<u>Subj.</u>	<u>Score</u>	<u>Likes</u>	<u>Dislikes</u>
	<u>No.</u>			
Trudi	179	8	tidy	nothing
Suzanne	183	8	tidy	nothing
Ciara	187	8	tidy	nothing
Granne	190	7	nothing	not as tidy as other girls
Sean	199	5	nothing	slouches in chair
Chris	198	2	nothing	generally annoying
Gavin	208	5	nothing	nothing
William	197	7	nice personality	nothing

B. Without sound

Trudi	179	8	intelligent, tidy	nothing
Suzanne	183	8	intelligent, tidy	nothing
Ciara	187	8	intelligent, tidy	nothing
Granne	190	7	nothing	bites fingernails, less tidy than other girls
Sean	199	4	nothing	slouches in chair
Chris	198	2	nothing	generally annoying
Gavin	208	5	nothing	nothing
William	197	6	nice personality	nothing

Most popular person: Trudi, Suzanne, Ciara

Least popular: Christopher

A17.3 A Summary of the Judges' Scores in the "With Sound" Condition, along
with the Child's Peer Vote and Teacher General Score

<u>Subject</u>					<u>Teacher</u>
<u>No.</u>	<u>Judge 1</u>	<u>Judge 2</u>	<u>Judge 3</u>	<u>Peer vote</u>	<u>score</u>
179	6	4	8	3	6
183	8	5	8	6	8
187	8	6	8	7	7
190	7	7	7	7	5
199	6	6	5	1	7
198	5	2	2	5	8
208	6	5	5	5	3
197	5	2	7	6	2

APPENDIX 18

The results of the test-retest data (Irish Grammar, 6 boys and 25 girls):
the raw scores for each subject on each questionnaire; a breakdown of
scores showing the number of questions which elicited different answers
and the number of subjects who had that number of different responses; and
the overall score (signs collapsed) for each subject after the first
questionnaire (X column) and after the second questionnaire (Y column).

A18.1 The Raw Scores

The subject's first questionnaire results are followed on the next
line by his/her second questionnaire results.

Boys

```
1 00 00 00 00 00 00 00 00 -1 -1 -1 00 00 00 00 -2 00 -1 00 00 00 00 00 00 00
00 00 00 -1 00
1* 00 00 00 00 00 00 00 00 -1 -1 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00
2 00 -1 00 00 00 00 00 00 -1 -1 -1 00 +2 00 +1 00 +1 +1 -1 00 -1 +2 -1 00 00
00 00 +1 +1 00
2 00 00 00 00 00 00 00 00 -1 00 -1 00 +1 00 +1 00 +1 00 00 00 -1 +2 -1 00 00
00 -1 +1 +1 00
3 00 +1 00 +1 +1 -1 +2 +1 00 00 +1 00 +1 +2 00 00 00 00 00 +1 +2 00 00 00
00 +1 -1 00 +1
3 00 00 00 +1 +1 00 -1 +1 +2 +1 00 +1 00 +2 00 -1 00 -1 -1 +1 +2 00 00 00
+1 +1 +1 00 -1
4 00 00 00 00 00 00 00 00 +1 00 -1 +1 00 -1 00 -2 00 -1 00 00 00 +2 -1 00 00
-1 -1 00 -1 00
4 00 00 00 00 00 -1 00 +1 00 -1 00 00 -1 00 00 00 00 00 00 +2 -1 00 00
-1 -1 00 -1 00
5 00 +1 00 00 -1 -1 00 +1 00 00 00 -1 00 -1 -1 +1 -2 00 00 -1 00 -1 +1 00
00 00 -1 -1 00
5 00 00 00 +1 00 -1 00 00 -1 00 00 00 +1 -1 -1 +1 -2 00 00 -1 +2 -1 +1 00
00 -1 -1 -1 00
```

6 00 -1 00 00 00 -1 00 +1 -1 00 00 00 00 00 -2 00 -1 00 00 -1 +2 -1 +1 00
00 00 -1 00 00
6 00 00 00 00 00 -1 00 +1 -1 00 00 00 00 00 -2 00 00 00 00 -1 +2 -1 +1 00
-1 00 00 00 00

*This subject answered only 28 questions on the second questionnaire

Girls

7 00 -1 00 00 00 00 00 00 00 00 -1 00 -1 00 00 00 00 00 -1 -1 00 00
00 -1 00 -1 00
7 00 00 00 00 00 -1 00 00 00 00 00 -1 00 -1 00 00 00 00 00 00 00 00
00 -1 00 00 00
8 00 00 00 00 -1 00 00 00 00 00 00 -1 00 00 -1 00 00 00 00 00 00 00
00 00 00 00
8 00 00 00 00 +1 00 00 00 00 00 00 -1 00 00 -1 00 00 00 00 00 +1 00 00
00 00 00 00
9 00 00 00 00 00 -1 00 00 00 -1 00 -1 00 00 -1 00 -1 00 00 00 00 00 00
00 00 00 00
9 00 00 00 00 00 -1 00 00 00 00 00 00 00 -1 00 -1 00 00 00 00 00 00
00 00 00 00
10 00 -1 00 00 -2 -1 00 00 00 00 -1 -1 00 00 -1 +1 00 00 00 00 -2 00 00
00 +1 00 00 00
10 00 00 00 00 -1 -1 00 00 00 00 -1 00 00 -1 00 00 00 00 00 -2 00 00
00 00 00 00
11 00 00 00 +2 -1 -1 00 00 -1 00 00 +1 00 -1 -1 00 00 00 00 00 00 -1
00 00 00 00
11 00 00 00 00 -1 -1 00 00 00 00 00 00 -1 00 00 00 00 00 00 00 -1
00 00 00 00
12 00 -1 00 00 00 -1 00 00 -1 00 00 +1 00 -1 00 00 -1 00 -1 +1 00 00 00 -1
00 00 -1 00 00
12 00 00 00 00 00 -1 00 -1 -1 00 00 00 00 -1 00 00 00 -1 00 00 00 -1
00 00 -1 00 00
13 00 00 00 00 -1 -1 00 00 00 00 00 00 00 00 +1 -1 00 00 00 -1 -1 00 00
00 00 00 00
13 00 00 00 00 -1 -1 00 00 -1 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00

14 00 +1 -1 00 00 -1 00 00 00 00 00 00 00 00 -2 00 00 +1 -1 -1 00 00 00 -1
00 00 00 00 00
14 00 00 -1 00 00 -1 00 00 00 00 00 00 00 -1 -1 00 00 00 -1 -1 00 00 00 00
00 00 00 00 00
15 00 +1 -1 00 -1 -2 -1 -1 00 -1 -1 -1 00 -1 -1 00 -1 -1 00 00 -2 00 00
-1 -1 00 00 00
15 00 +1 00 00 -1 -2 00 00 -1 -1 00 -1 00 00 -1 00 -1 00 -1 00 00 -2 00 -1
-1 -1 00 -1 00
16 00 00 00 -1 00 -1 00 00 00 -1 -1 00 00 00 -2 00 00 00 00 -1 +1 -1 00 00
00 00 00 00 00
16 00 -1 00 00 00 -1 00 00 00 00 00 -1 00 00 -1 +1 00 00 00 00 +1 00 00 00
00 00 00 -2 00
17 00 00 00 +1 00 00 00 00 00 00 00 -2 00 00 -1 00 -1 00 00 00 00 -1 00 00
00 00 -1 -1 00
17 00 00 00 -1 00 00 00 00 00 00 00 00 00 -1 -1 00 00 00 00 00 -1 00 00
00 00 00 -1 00
18 00 00 00 00 -1 00 00 00 00 00 -1 00 00 -1 00 +1 00 00 00 00 +2 -1 00 00
00 00 00 00 +1
18 00 00 00 00 -1 00 00 00 00 00 00 00 00 00 00 00 00 00 +1 -1 00 00
00 00 00 00 00
19 00 +1 00 00 +1 00 00 00 00 -1 00 -1 00 00 00 00 -2 00 00 +1 +2 -1 00 00
00 00 00 00 00
19 00 +1 00 00 00 00 00 00 00 00 -1 +1 00 00 00 -1 00 00 00 +1 00 00 00
+1 00 00 00 00
20 00 00 00 00 00 00 00 -1 00 +1 +1 00 00 00 00 00 00 +1 -1 00 -1 00 00
-1 00 00 00 00
20 00 00 00 00 00 00 00 -1 00 00 +1 00 00 00 00 -1 00 00 -1 00 -1 00 00
00 00 00 +1 00
21 +1 -1 -1 00 00 00 00 00 -1 -1 -1 00 -1 -1 +1 -2 00 00 00 00 -1 00 00
-2 00 -1 00 00
21 -1 +1 00 +1 00 00 00 00 00 -1 00 00 -2 -1 +1 -2 00 00 00 00 00 00 00
-2 00 -1 -1 00
22 00 +1 00 00 -1 -1 00 00 00 00 -1 00 -1 -1 00 00 00 -1 00 00 +1 00 -1
-1 00 00 00 00
22 00 00 00 00 00 -1 00 00 00 00 00 00 -1 00 00 00 00 -1 00 00 +1 00 -1
-1 00 00 00 00

23 00 00 -1 00 -1 -1 00 00 -1 -1 00 +1 00 -1 -1 00 -2 00 -1 00 -1 00 00 -1
 00 00 00 00 00
 23 00 00 00 00 00 -1 00 00 -1 00 00 00 00 00 -1 00 -1 00 00 -1 00 00 00 00
 00 00 00 00 00
 24 00 00 00 00 00 -1 00 00 00 00 00 -1 00 -1 -1 00 -2 00 -2 00 00 00 00 -1
 -1 00 00 00 00
 24 00 00 00 00 00 -1 00 00 00 00 00 00 00 -1 -2 00 00 00 -1 00 00 00 00 -1
 -1 00 00 00 00
 25 00 00 00 +1 00 00 00 00 00 00 00 00 00 00 +1 00 00 00 00 00 +1 00 00
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 25 00 00 00 +1 00 -1 00 00 00 00 00 00 00 -1 00 +1 00 00 00 00 00 00 -1
 00 00 00 -1 00
 26 00 00 00 00 +1 -1 00 00 -1 00 +1 00 00 -1 -1 00 00 00 -1 00 +1 -1 00 00
 -1 00 00 00 00
 26 00 00 00 00 00 -1 00 00 00 00 00 00 00 -1 00 00 00 00 -1 00 +1 -1 00 00
 00 00 00 00 00
 27 00 00 00 00 -1 00 00 -1 -1 00 00 -1 00 00 00 +1 00 00 -1 -1 -2 -1 00 00
 00 00 00 00 00
 27 00 00 00 00 -1 00 00 -1 00 00 00 -1 00 00 00 00 00 00 -1 -1 -1 -1 00 00
 00 00 00 00 00
 28 00 +1 00 00 00 -2 00 -1 -1 00 00 -1 00 00 -1 00 00 00 00 00 +1 00 00 00
 -1 00 00 00 00
 28 00 +1 00 00 00 -1 00 -1 -1 00 00 00 00 00 00 00 00 +1 00 +1 00 00 00
 00 -1 00 00 00
 29 00 -1 00 +2 00 -2 00 00 00 00 00 00 00 -1 00 00 -1 00 00 00 +1 -2 -1 -1
 00 -1 +1 00 00
 29 00 00 00 +1 00 -1 00 00 00 00 00 00 00 -1 -1 00 -1 00 00 00 00 00 -1
 00 00 +1 00 00
 30 00 -1 00 00 00 -1 00 00 -1 00 00 00 +1 -1 00 -2 -1 00 -1 00 +1 00 00 -1
 -1 00 +1 +1 00
 30 00 00 00 00 00 00 00 00 -1 00 00 00 00 00 00 -1 00 00 00 00 +2 +1 00 00
 00 00 00 00 00
 31 00 -1 00 +1 00 00 00 -1 -1 -1 00 +1 00 -1 -1 00 00 00 00 00 00 -1 00 -1
 -1 -1 -1 00 -1
 31 00 00 00 +1 00 -1 00 -1 -1 -1 00 +1 00 -1 -1 00 00 00 00 00 00 -1 00 -1
 -1 00 -1 00 -1

18.2 Breakdown of Scores

<u>Number of questions with different answers</u>	<u>Number of subjects with that number of different responses</u>
2	2
3	2
4	7
5	7
6	3
7	2
8	1
9	4
10	1
13	1
14	1

21 out of 31 subjects (nearly 70%) scored 6 or fewer errors, and that includes minor errors of degree (+1 instead of +2, for example).

A18.3 The Overall Scores

<u>Subject</u>	<u>First session scores (x)</u>	<u>Second session scores (y)</u>
1	7	2
2	16	12
3	17	20
4	13	10
5	15	17
6	13	11
7	7	4
8	3	4
9	5	3
10	11	6
11	9	4
12	10	7

13	6	3
14	9	6
15	19	16
16	9	8
17	8	5
18	8	3
19	10	6
20	7	6
21	15	14
22	10	6
23	13	5
24	10	7
25	4	6
26	10	5
27	10	7
28	9	7
29	14	7
30	14	5
30	14	13

The standard deviation for the x values = 3.8730

The standard deviation for the Y values = 4.4721

A t-test on the difference between the means of the two groups showed $t_{obs} = 9.5577$. Given a 0.01 significance level for a directional test, and $N-1 = 30df$, then if $t_{obs} < 2.457$ the null hypothesis is not rejected; and if $t_{obs} > 2.457$, the null hypothesis is rejected. Since $t_{obs} = 9.5577$, the null hypothesis is rejected, and one concludes that because the observed value is more than the critical value of t , the mean value of the differences between scores is outside the range of sampling error, and a significant relationship exists between the two sets of scores.

A Pearson Product Moment Correlation was also carried out to enable a comparison of reliability for this test to be made in relation to the other tests of social skills which are available (see chapter 2). This found $r = 0.7896$. Given a 0.01 significance level for a directional test, and $N-2 = 29df$, then if $r_{obs} > 0.4093$ the null hypothesis is not rejected; and if $r_{obs} > 0.4093$, then the null hypothesis is rejected. Since $r_{obs} = 0.7896$,

the null hypothesis, that the correlation between the two sets of scores = 0, is rejected, and it is concluded that there is a relationship between the two sets of scores.

APPENDIX 19

Statistics for the analyses with signs inserted

Table 1 Breakdown of child actual scores in relation to teacher general scores with + and - signs inserted (c61 and c20)

105 children scored between 7 and 10 on the teacher general score	47.51%
Of these, 103 (98.09%) fell inside the -12 to +12 range on the actual questionnaire	
2 (1.90%) fell outside the -12 to +12 range on the actual questionnaire	
116 children scored 6 or below on the teacher general score	52.48%
Of these, 98 (84.48%) fell inside the -12 to +12 range on the actual questionnaire	
18 (15.51%) fell outside the -12 to +12 range on the actual questionnaire	
18 children scored 10 on the teacher general score	8.14%
Of these, 17 (94.44%) fell inside the -6 to +6 range on the actual questionnaire	
1 (5.55%) fell outside the -6 to +6 range on the actual questionnaire	
4 children scored 2 on the teacher general score	1.80%
Of these, all (100.00%) fell inside the -12 to +12 range on the actual questionnaire	
1 child scored outside the -24 to +24 range on the actual questionnaire. That child scored 7 on the teacher general score	

Pearson Product Moment Correlation c20 and c61 = 0.118

A very low correlation. Children evidencing the highest teacher general scores fell (with the exception of one) between -12 and +12 on the actual scale as anticipated. Children who obtained the lower general scores fell mainly between -12 and +12, but 18 children fell outside that range.

Table 2 Regression equation: child actual scores and teacher general scores with + and - signs inserted (c61 and c20)

The regression equation is $c20 = 6.59 + 0.0361 c61$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	6.5906	0.1502	43.88
c61	0.03613	0.02063	1.75

S = 1.987

R-squared = 1.4%

R-squared = 0.9%, adjusted for degrees of freedom

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	12.117	12.117	3.067	0.05
Residual	219	864.941	3.950		
Total	220	877.059			

<u>Row</u>	<u>c61</u>	<u>c20</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
30	-19.0	3.00	5.904	0.350	-2.904	-1.48 X
87	-2.0	2.00	6.518	0.136	-4.518	-2.28R
151	15.0	4.00	7.132	0.401	-3.132	-1.61 X
153	-10.0	2.00	6.229	0.192	-4.229	-2.14R
161	-21.0	5.00	5.832	0.388	-0.832	-0.43 X
170	15.0	9.00	7.132	0.401	1.868	0.96 X
197	-4.0	2.00	6.446	0.134	-4.446	-2.24R
199	-27.0	7.00	5.615	0.506	1.385	0.72 X
204	-18.0	5.00	5.940	0.331	-0.940	-0.48 X
210	-18.0	4.00	5.940	0.331	-1.940	-0.99 X
219	5.0	2.00	6.771	0.218	-4.771	-2.42R

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 3 Breakdown of child desired scores in relation to teacher general scores with + and - signs inserted (c62 and c20)

105 children scored 7 or above on the teacher general score	47.51%
Of those, 90 (85.71%) scored between -8 and +8 on the child desired questionnaire	
15 (14.28%) scored outside -8 to +8, ranging from -20 to +22	
116 children scored 6 or below on the teacher general score	52.48%
Of those, 99 (85.34%) scored between -8 and +8 on the child desired questionnaire	
17 (14.65%) scored outside -8 to +8, ranging from -28 to +32	
18 children scored 10 on the teacher general score	8.14%
Of those, 17 (94.44%) scored between -8 and +8 on the desired questionnaire	
1 (5.55%) scored outside -8 to +8, i.e. -12	

4 children scored 2 on the teacher general score 1.80%
 Of those, 3 (75.00%) scored between -8 and +8 on the desired
 questionnaire

1 (25.00%) scored outside -8 to +8, i.e. +28

3 children scored outside -24 to +24 on the desired 1.35%
 questionnaire

Of those, all 3 scored 5 or below on the teacher general score

Pearson Product Moment Correlation c20 and c62 = -0.029

A very low correlation. Most scores fell between -8 and +8. Only 6
 children fell over +8, while 26 fell over -8. Of those falling over -8, 12
 children scored 5 or below on the general score, the remainder scoring over
 5.

Table 4 Regression equation: child desired scores and teacher general
 scores with + and - signs inserted (c62 and c20)

The regression equation is $c20 = 6.45 - 0.0083 c62$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	6.4522	0.1414	45.64
c62	-0.00833	0.01965	-0.42

S = 2.000

R-squared = 0.1%

R-squared = 0.0% , adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	0.719	0.719	0.1796	n.s.
Residual	219	876.340	4.002		
Total	220	877.059			

<u>Row</u>	<u>c62</u>	<u>c20</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
3	14.0	5.00	6.336	0.346	-1.336	-0.68 X
27	-20.0	6.00	6.619	0.375	-0.619	-0.31 X
60	-20.0	9.00	6.619	0.375	2.381	0.21 X
87	0.0	2.00	6.452	0.141	-4.452	-2.23R
150	33.0	3.00	6.177	0.705	-3.177	-1.70 X
153	27.0	2.00	6.227	0.589	-4.227	-2.21RX
170	22.0	9.00	6.269	0.494	2.731	1.41 X
184	-23.0	6.00	6.644	0.430	-0.644	-0.33 X
197	-6.0	2.00	6.502	0.154	-4.502	-2.26R
204	-18.0	5.00	6.602	0.338	-1.602	-0.81 X
210	-18.0	4.00	6.602	0.338	-2.602	-1.32 X
218	-28.0	5.00	6.685	0.524	-1.685	-0.87 X
219	3.0	2.00	6.427	0.169	-4.427	-2.22R

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 5 Breakdown of teacher questionnaire scores in relation to teacher general scores with + and - signs inserted (c63 and c20)

105 children scored 7 or above on the teacher general score 47.51%

Of these, 97 (92.38%) fell between -10 and +10 on the teacher questionnaire

8 (7.61%) fell outside -10 to +10 on the teacher questionnaire, ranging from -12 to +22

116 children scored 6 or below on the teacher general score 52.48%

Of these, 65 (56.03%) fell between -10 and +10 on the teacher questionnaire

51 (43.96%) fell outside -10 to +10 on the teacher questionnaire, ranging from -38 to +34

35 children scored 4 or below on the teacher general score, ranging from -39 to +34 15.83%

Of these, 7 (20.00%) fell between -10 and +10 on the teacher questionnaire

28 (80.00%) fell outside -10 to +10 on the teacher questionnaire

Pearson Product Moment Correlation c20 and c63 = 0.178

A low correlation. Of those children falling outside -10 and +10, only 14 scored above 5 on the general scale, compared with 53 who scored 5 or below. In addition, there were a greater number of lower general scores on the teacher questionnaire scale which fell over -10 than fell over +10.

Table 6 Regression equation: teacher questionnaire scores and teacher general scores with + and - signs inserted (c63 and c20)

The regression equation is $c20 = 6.51 + 0.0344 \ c63$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	6.5123	0.1334	48.82
c63	0.03440	0.01287	2.67

S = 1.969

R-squared = 3.2%

R-squared = 2.7%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	27.693	27.693	7.14	0.05
Residual	219	849.366	3.878		
Total	220	877.059			

<u>Row</u>	<u>c63</u>	<u>c20</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
9	33.0	3.00	7.647	0.460	-4.647	-2.43RX
30	17.0	3.00	7.097	0.269	-4.097	-2.10R
51	-25.0	4.00	5.652	0.334	-1.652	-0.85 X
54	-25.0	4.00	5.652	0.334	-1.652	-0.85 X
106	-26.0	5.00	5.618	0.345	-0.618	-0.32 X
145	22.0	8.00	7.269	0.327	0.731	0.38 X
147	26.0	6.00	7.407	0.374	-1.407	-0.73 X
153	-9.0	2.00	6.203	0.166	-4.203	-2.14R
157	33.0	4.00	7.647	0.460	-3.647	-1.90 X
197	0.0	2.00	6.512	0.133	-4.512	-2.30R
216	-38.0	3.00	5.205	0.492	-2.205	-1.16 X
217	22.0	8.00	7.269	0.327	0.731	0.38 X
218	23.0	5.00	7.303	0.339	-2.303	-1.19 X
219	30.0	2.00	7.544	0.423	-5.544	-2.88RX

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 7 Breakdown of child desired scores in relation to child actual scores with + and - signs inserted (c61 and c62)

84	children scored between 0 and 8 on the desired questionnaire	38.00%
Of these, 27	(32.14%) scored between 0 and 6 on the actual scale	
34	(40.47%) scored between 0 and -6 on the actual scale	
7	(8.33%) scored between 7 and 12 on the actual scale	
15	(17.85%) scored between -7 and -12 on the actual scale	
1	(1.19%) scored between -13 and -18 on the actual scale	
105	children scored between 0 and -8 on the desired questionnaire	47.51%
Of these, 20	(19.04%) scored between 0 and 6 on the actual scale	
49	(46.66%) scored between 0 and -6 on the actual scale	
4	(3.80%) scored between 7 and 12 on the actual scale	
25	(23.80%) scored between -7 and -12 on the actual scale	
1	(0.95%) scored between 13 and 18 on the actual scale	
6	(5.71%) scored between -13 and -18 on the actual scale	
3	children scored between 9 and 16 on the desired questionnaire	1.35%
Of these, 1	(33.33%) scored between 0 and 6 on the actual scale	
1	(33.33%) scored between 7 and 12 on the actual scale	
1	(33.33%) scored between -13 and -18 on the actual scale	
1	child scored between 17 and 24 on the desired questionnaire	0.45%
Of these, 1	(100.00%) scored between 13 and 18 on the actual scale	
2	children scored between 25 and 32 on the desired questionnaire	0.90%
Of these, 2	(100.00%) scored between -7 and -12 on the actual scale	
20	children scored between -9 and -16 on the desired questionnaire	9.04%
Of these, 3	(15.00%) scored between 0 and 6 on the actual scale	

- 1 (5.00%) scored between 7 and 12 on the actual scale
- 4 (20.00%) scored between 0 and -6 on the actual scale
- 5 (25.00%) scored between -7 and -12 on the actual scale
- 4 (20.00%) scored between -13 and -20 on the actual scale
- 2 (10.00%) scored between -19 and -24 on the actual scale
- 1 (5.00%) scored between -25 and -30 on the actual scale

5 children scored between -17 and -24 on the desired questionnaire 2.26%

Of these, 2 (40.00%) scored between 0 and -6 on the actual scale
 3 (60.00%) scored between -13 and -18 on the actual scale

1 child scored between -25 and -32 on the desired questionnaire 0.45%

Of these, 1 (100.00%) scored between 0 and 6 on the actual scale

Pearson Product Moment Correlation c61 and c62 = 0.290.

A positive correlation. 85.52% (189) of the sample fell between +8 and -8 on the desired questionnaire, and of those 68.78% (130) fell between -6 and +6, and 95.76% (181) fell between -12 and +12. Thus the largest group was grouped around + or -8 on both scales, with some children a long way from zero but desiring so to be, and others a long way from zero but not wanting to be as they perceived themselves.

Table 8 Regression equation: child actual scores and child desired scores with + and - signs inserted (c61 and c62)

The regression equation is $c61 = -2.72 + 0.274 c62$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	-2.7162	0.4405	-6.17
c62	0.27403	0.06120	4.48

S = 6.232

R-squared = 8.4%

R-squared = 8.0%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	778.57	778.57	20.04	0.01
Residual	219	8505.62	38.84		
Total	220	9284.19			

<u>Row</u>	<u>c62</u>	<u>c61</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
3	14.00	7.00	1.120	1.077	5.880	0.96 X
27	-20.00	-15.00	-8.197	1.167	-6.803	-1.11 X
30	-9.00	-19.00	-5.182	0.590	-13.818	-2.23R
39	12.00	14.00	0.572	0.965	-14.572	-2.37R
48	-11.00	9.00	-5.730	0.682	14.730	2.38R
60	-20.00	-1.00	-8.197	1.167	7.197	1.18 X
117	3.00	11.00	-1.894	0.527	12.894	2.08R
122	-1.00	10.00	-2.990	0.426	12.990	2.09R
150	33.00	-7.00	6.327	2.195	-13.327	-2.28RX
151	-2.00	15.00	-3.264	0.419	18.264	2.94R
153	27.00	-10.00	4.683	1.836	-14.683	-2.47RX
161	-15.00	-21.00	-6.827	0.888	-14.173	-2.30R
162	-4.00	10.00	-3.812	0.433	13.812	2.22R
170	22.00	15.00	3.312	1.540	11.688	1.94 X
184	-23.00	-2.00	-9.019	1.340	7.019	1.15 X
199	-14.00	-27.00	-6.553	0.835	-20.447	-3.31R
204	-18.00	-18.00	-7.649	1.054	-10.351	-1.69 X
210	-18.00	-18.00	-7.649	1.054	-10.351	-1.69 X
218	-28.00	2.00	-10.389	1.633	12.389	2.06RX

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 9 Breakdown of child actual scores in relation to teacher questionnaire scores with + and - signs inserted (c61 and c63)

158 children scored between -10 and +10 on the teacher questionnaire 71.49%

Of these, 103 (65.18%) fell between -6 and +6 on the actual questionnaire
 149 (94.30%) fell between -12 and +12 on the actual questionnaire
 9 (5.69%) fell outside -12 and +12 on the actual questionnaire

63 children scored outside -10 to +10 on the teacher questionnaire 28.50%

Of these, 38 (60.31%) fell over -10 on the actual questionnaire
 (6 between 0 and +12 and 33 between 0 and -18)
 25 (39.68%) fell over +10 on the actual questionnaire
 (17 between 0 and +16 and 8 between 0 and -20)

Pearson Product Moment Correlation c61 and c63 = 0.338

This is the strongest correlation of all the various permutations carried out.

Table 10 Regression equation: child actual scores in relation to teacher questionnaire scores with + and - signs inserted (c61 and c63)

The regression equation is $c61 = -3.06 + 0.213 c63$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	-3.0628	0.4150	-7.38
c63	0.21318	0.04005	5.32

S = 6.127

R-squared = 11.5%

R-squared= 11.1%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	1063.7	1063.7	28.36	0.01
Residual	219	8220.4	37.5		
Total	220	9284.2			

<u>Row</u>	<u>c63</u>	<u>c61</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
9	33.0	5.0	3.972	1.431	1.028	0.17 X
28	-6.0	-17.0	-4.342	0.455	-12.658	-2.07R
30	17.0	-19.0	0.561	0.838	-19.561	-3.22R
51	-25.0	-3.0	-8.392	1.038	5.392	0.89 X
54	-25.0	-8.0	-8.392	1.038	0.392	0.06 X
106	-26.0	-2.0	-8.605	1.075	6.605	1.10 X
122	0.0	10.0	-3.063	0.415	13.063	2.14R
145	22.0	1.0	1.627	1.017	-0.627	-0.10 X
147	26.0	-1.0	2.480	1.165	-3.480	-0.58 X
151	15.0	15.0	0.135	0.769	14.865	2.45R
157	33.0	7.0	3.972	1.431	3.028	0.51 X
161	-7.0	-21.0	-4.555	0.473	-16.445	-2.69R
162	-9.0	10.0	-4.981	0.517	14.981	2.45R
164	-5.0	10.0	-4.129	0.439	14.129	2.30R
170	15.0	15.0	0.135	0.769	14.865	2.45R
171	-3.0	-17.0	-3.702	0.418	-13.298	-2.18R
199	1.0	-27.0	-2.850	0.422	-24.150	-3.95R
204	3.0	-18.0	-2.423	0.445	-15.577	-2.55R
216	-38.0	-11.0	-11.164	1.530	0.164	0.03 X
217	22.0	-7.0	1.627	1.017	-8.627	-1.43 X
218	23.0	2.0	1.840	1.054	0.160	0.03 X

219 30.0 5.0 3.333 1.316 1.667 0.28 X

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it a large influence.

Table 11 Breakdown of child desired scores in relation to teacher questionnaire scores with + and - signs inserted (c62 and c63)

160 children scored between -10 and +10 on the teacher questionnaire 72.39%

Of these, 139 (86.87%) fell between -8 and +8 on the desired questionnaire
 13 (9.35%) fell between -9 and -16 on the desired questionnaire
 4 (2.87%) fell between -17 and -24 on the desired questionnaire
 3 (2.15%) fell between +8 and +16 on the desired questionnaire
 1 (0.71%) fell between +24 and +32 on the desired questionnaire

19 children scored between +10 and +20 on the teacher questionnaire 8.59%

Of these, 14 (73.68%) fell between -8 and +8 on the desired questionnaire
 5 (26.31%) fell outside -8 and +8 on the desired questionnaire
 i.e. +24, +14, -10, -10, -12

5 children scored between 21 and 30 on the teacher questionnaire 2.26%

Of these, 3 (60.00%) fell between -8 and +8 on the desired questionnaire
 2 (40.00%) fell outside -8 and +8 on the desired questionnaire,
 i.e. -10 and -30

3 children scored between 31 and 40 on the teacher questionnaire 1.35%

Of these, all (100.00%) fell between -8 and +8 on the desired questionnaire

34 children scored over -10 on the teacher questionnaire, ranging from -11 to -38 15.38%

Of these, 28 (82.35%) fell between -8 and +8 on the desired questionnaire
 6 (17.64%) fell outside -8 and +8 on the desired questionnaire

27 children scored over +10 on the teacher questionnaire, ranging from +11 to +32 12.21%

Of these, 20 (74.07%) fell between -8 and +8 on the desired questionnaire
 7 (25.92%) fell outside -8 and +8 on the desired questionnaire

Pearson Product Moment Correlation c62 and c63 = -0.023
 A very weak correlation, almost negligible statistically.

Table 12 Regression equation: child desired scores in relation to teacher questionnaire scores with + and - signs inserted (c62 and c63)

The regression equation is $c62 = -2.23 - 0.0150 c63$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	-2.2264	0.4659	-4.78
c63	-0.01503	0.04496	-0.33

S = 6.879

R-squared = 0.1%

R-squared = 0.0%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	5.29	5.29	0.1117	n.s.
Residual	219	10363.14	47.32		
Total	220	10368.43			

<u>Row</u>	<u>c63</u>	<u>c62</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
3	12.0	14.0	-2.407	0.753	16.407	2.40R
9	33.0	-4.0	-2.722	1.606	-1.278	-0.19 X
13	5.0	13.0	-2.302	0.541	15.302	2.23R
27	-4.0	-20.0	-2.166	0.479	-17.834	-2.60R
28	-6.0	-16.0	-2.136	0.510	-13.864	-2.02R
39	-11.0	12.0	-2.061	0.639	14.061	2.05R
51	-25.0	00.0	-1.851	1.165	1.851	0.27 X
54	-25.0	-12.0	-1.851	1.165	-10.149	-1.50 X
60	3.0	-20.0	-2.271	0.500	-17.729	-2.58R
106	-26.0	2.0	-1.836	1.207	3.836	0.57 X
145	22.0	-7.0	-2.557	1.142	-4.443	-0.65 X
147	26.0	-6.0	-2.617	1.308	-3.383	-0.50 X
150	-18.0	33.0	-1.956	0.885	34.956	5.12R
153	-9.0	27.0	-2.091	0.580	29.091	4.24R
157	33.0	0.0	-2.722	1.606	2.722	0.41 X
170	15.0	22.0	-2.452	0.863	24.452	3.58R
184	-1.0	-23.0	-2.211	0.463	-20.789	-3.03R
204	3.0	-18.0	-2.271	0.500	-15.729	-2.29R
210	-20.0	-18.0	-1.926	0.963	-16.074	-2.36R
216	-38.0	-4.0	-1.655	1.718	-2.345	-0.35 X
217	22.0	-9.0	-2.557	1.142	-6.443	-0.95 X
218	23.0	-28.0	-2.572	1.183	-25.428	-3.75RX
219	30.0	3.0	-2.677	1.478	5.677	0.85 X

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it a large influence.

Table 13 Breakdown of peer votes in relation to the child actual scores
with + and - signs inserted (c23 and c61)

55 children scored above 0.6 on the peer rating scale 24.88%
Of these, 16 (29.90%) fell outside the range -6 to +6 on the actual
questionnaire

68 children scored between 0.30 and 0.59 on the peer rating scale 30.76%

Of these, 25 (36.76%) fell outside the range -6 to +6 on the actual questionnaire

98 children scored below 0.30 on the peer rating scale 44.34%

Of these, 41 (41.83%) fell outside the range -6 to +6 on the actual questionnaire

Of the 6 children scoring 1.00 on the peer rating, all fell within the range -6.1 to +6 on the actual scores

Of the 10 children scoring below 0.05 on the peer rating, 6 fell over -6 on the actual scores. The scores ranged from 0.2 to -27.

Pearson Product Moment Correlation c23 and c61 = 0.063

This correlation is not significant. Nonetheless, the highest popularity scores do occur close to zero and the lowest popularity scores spread out either side of zero. It is interesting to note, however, that the latter scores are not spread out over a wide range evenly either side of zero, but range themselves on the minus side rather than the plus.

Table 14 Regression equation: peer votes and child actual scores with + and - signs inserted (c23 and c61)

The regression equation is $c23 = 0.397 + 0.00258 c61$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	0.39658	0.02002	19.80
c61	0.002579	0.002750	0.94

S = 0.2649

R-squared = 0.4%

R-squared = 0.0%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS=SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	0.06175	0.06175	0.8797	n.s.
Residual	219	15.37166	0.07019		
Total	220	15.43341			

Table 15 Breakdown of peer votes in relation to child desired scores with + and - signs inserted (c23 and c62)

72 children scored 0.5 or above on the peer rating 32.57%
Of these, 59 (81.94%) scored between -8 and +8 on the desired scale

54 children scored 0.60 or above on the peer rating 24.43%
Of these, 7 (12.9%) scored outside -8 to +8 on the desired scale

149 children scored below 0.5 on the peer rating 67.42%
Of these, 125 (83.89%) scored between -8 and +8 on the desired scale

6 children scored 1.00 on the peer rating
All 6 fell within 0 to -6 on the desired scale

9 children scored outside -16 to +16 on the desired scale
Of these, 6 (66.67%) scored below 0.12 on the popularity rating

Pearson Product Moment Correlation c23 and c62 = -0.062

This is a negative correlation which one would not expect here. It implies that the higher the popularity rating, the closer to the minus end of the scale the children fall.

Table 16 Regression equation: peer votes and child desired scores with + and - signs inserted (c23 and c62)

The regression equation is $c23 = 0.383 - 0.00241 c62$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	0.38270	0.01873	20.44
c62	-0.002407	0.002602	-0.93

S = 0.2649

R-squared = 0.4%

R-squared = 0.0%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS=SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	0.06009	0.06009	0.8559	n.s.
Residual	219	15.37332	0.07020		
Total	220	15.43341			

Table 17 Breakdown of peer votes in relation to teacher questionnaire scores with + and- signs inserted (c23 and c63)

158 children fell between +10 and- 10 on the teacher questionnaire	71.49%
Of these, 107 (67.72%) scored 0.5 or below on the peer rating	
51 (32.27%) scored above 0.5 on the peer rating	
63 children fell outside the range +10 to -10 on the teacher questionnaire	28.50%
Of these, 16 (25.39%) scored above 0.5 on the peer rating	
47 (74.60%) scored 0.5 or below on the peer rating	

33 children scored 0.7 or above on the peer rating 14.93%
 Of these, 28 (84.84%) fell between +10 and -10 on the teacher
 questionnaire
 5 (15.15%) fell outside the range +10 to -10
 but within +20 to -20

149 children scored below 0.5 on the peer rating 67.42%
 Of these, 102 (68.45%) fell between +10 and -10 on the teacher
 questionnaire
 47 (31.54%) fell outside the range +10 to -10,
 ranging from -39 to +34

72 children scored 0.5 or above on the peer rating 32.57%
 Of these, 56 (77.77%) fell between +10 and -10 on the teacher
 questionnaire
 16 (22.22%) fell outside the range +10 to -10,
 ranging from -20 to +22

8 children scored 0.0 on the peer rating

Pearson Product Moment Correlation c23 and c63 = 0.028

An extremely weak correlation, but the pattern of results is as
 expected. Most of the results above 0.5 on the peer rating are closely
 grouped around zero on the teacher questionnaire, and the scores falling
 below 0.5 are mostly much further from the zero score to both the minus and
 plus sides of the scale.

Table 18 Regression Equation: peer votes and teacher questionnaire scores
with + and- signs inserted (c23 and c63)

The regression equation is $c23 = 0.389 + 0.00073 \text{ } c63$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation</u> <u>of Coefficient</u>	<u>T-Ratio = Coefficient</u> <u>of Standard Deviation</u>
	0.38890	0.01797	21.64
c63	0.000726	0.001734	0.42

S = 0.2654

R-squared = 0.1%

R-squared = 0.0%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS=SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	0.01234	0.01234	0.17523	n.s.
Residual	219	15.42107	0.07042		
Total	220	15.43341			

Table 19 Breakdown of differences between actual and desired scores with +
and - signs inserted (c62 and c61)

Middle of Number of
Interval Observations

-30	1	*
-25	0	
-20	4	**
-15	5	***
-10	13	*****

-5	32	*****
0	72	*****
5	62	*****
10	23	*****
15	5	***
20	1	*
25	1	*
30	0	
35	1	*
40	1	*

APPENDIX 20

Regression equations for the statistical analyses with signs collapsed

Table 1 Child actual scores and teacher general scores with + and - signs collapsed (c51 and c20)

The regression equation is $c20 = 7.71 - 0.0943 \cdot c51$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	7.7065	0.2972	25.93
c51	-0.09425	0.02044	-4.61

S = 1.911

R-squared = 8.9%

R-squared = 8.4%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	77.640	77.640	21.27	0.01
Residual	219	799.419	3.650		
Total	220	877.059			

<u>Row</u>	<u>c51</u>	<u>c20</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
9	9.0	3.00	6.858	0.154	-3.858	-2.03R
31	17.0	10.00	6.104	0.151	3.896	2.05R
87	8.0	2.00	6.953	0.166	-4.953	-2.60R
88	6.0	3.00	7.141	0.194	-4.141	-2.18R
150	35.0	3.00	4.408	0.465	-1.408	-0.76 X
161	37.0	5.00	4.219	0.505	0.781	0.42 X
171	31.0	6.00	4.785	0.387	1.215	0.65 X
197	30.0	2.00	4.879	0.368	-2.879	-1.54 X
199	33.0	7.00	4.596	0.426	2.404	1.29 X
204	32.0	5.00	4.690	0.407	0.310	0.17 X
210	32.0	4.00	4.690	0.407	-0.690	-0.37 X

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 2 Child desired scores and teacher general scores with + and - signs
collapsed (c52 and c20)

The regression equation is $c20 = 7.22 - 0.0701 \text{ c52}$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation</u> <u>of Coefficient</u>	<u>T-Ratio = Coefficient</u> <u>of Standard Deviation</u>
	7.2152	0.2197	32.84
c52	-0.07008	0.01670	-4.20

S=1.925

R-squared = 7.4%

R-squared = 7.0%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	65.241	65.241	17.59	0.01
Residual	219	811.818	3.707		
Total	220	877.059			

<u>Row</u>	<u>c52</u>	<u>c20</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
6	35.0	5.00	4.762	0.427	0.238	0.13 X
31	28.0	10.00	5.253	0.318	4.747	2.50RX
87	0.0	2.00	7.215	0.220	-5.215	-2.73R
88	0.0	3.00	7.215	0.220	-4.215	-2.20R
150	33.0	3.00	4.902	0.396	-1.902	-1.01 X
153	35.0	2.00	4.762	0.427	-2.762	-1.47 X
161	35.0	5.00	4.762	0.427	0.238	0.13 X
173	28.0	8.00	5.253	0.318	2.747	1.45 X
174	31.0	8.00	5.043	0.364	2.957	1.56 X
175	30.0	8.00	5.113	0.349	2.887	1.52 X
178	4.0	3.00	6.935	0.170	-3.935	-2.05R
184	29.0	6.00	5.183	0.333	0.817	0.43 X
218	28.0	5.00	5.253	0.318	-0.253	-0.13 X
219	15.0	2.00	6.164	0.149	-4.164	-2.17R

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 3 Teacher questionnaire scores and teacher general scores with + and - signs collapsed (c53 and c20)

The regression equation is $c20 = 8.07 - 0.153 c53$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	8.0684	0.1510	53.42
c53	-0.15340	0.01103	-13.91

S = 1.458

R-squared = 46.9%

R-squared = 46.7%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	411.46	411.46	193.1	0.01
Residual	219	465.60	2.13		
Total	220	877.06			

<u>Row</u>	<u>c53</u>	<u>c20</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
9	33.0	3.00	3.0063	0.2676	-0.0063	-0.00 X
22	9.0	10.00	6.6878	0.0993	3.3022	2.28R
30	35.0	3.00	2.6995	0.2883	0.3005	0.21 X
51	31.0	4.00	3.3131	0.2473	0.6869	0.48 X
84	7.0	10.00	6.9946	0.1051	3.0054	2.07R
87	38.0	2.00	2.2393	0.3196	-0.2393	-0.17 X
101	7.0	10.00	6.9946	0.1051	3.0054	2.07R

Table 4 Child actual scores and child desired scores with + and - signs collapsed (c51 and c52)

The regression equation is $c51 = 8.56 + 0.428 c52$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	8.5635	0.6123	13.99
c52	0.42822	0.04655	9.20

S = 5.365

R-squared = 27.9%

R-squared = 27.5%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	2435.9	2435.9	84.57	0.01
Residual	219	6304.3	28.8		
Total	220	8740.2			

<u>Row</u>	<u>c52</u>	<u>c51</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
6	35.0	19.00	23.551	1.191	-4.551	-0.87 X
31	28.0	17.00	20.554	0.886	-3.554	-0.67 X
37	8.0	23.00	11.989	0.381	11.011	2.06R
91	6.0	23.00	11.133	0.420	11.867	2.22R
139	8.0	24.00	11.989	0.381	12.011	2.24R
150	33.0	35.00	22.695	1.102	12.305	2.34RX
151	18.0	27.00	16.271	0.498	10.729	2.01R
153	35.0	22.00	23.551	1.191	-1.551	-0.30 X
155	4.0	23.00	10.276	0.475	12.724	2.38R

157	0.0	27.00	8.564	0.612	18.436	3.46R
159	0.0	20.00	8.564	0.612	11.436	2.15R
161	35.0	37.00	23.551	1.191	13.449	2.57RX
171	21.0	31.00	17.556	0.603	13.444	2.52R
173	28.0	13.00	20.554	0.886	-7.554	-1.43 X
174	31.0	10.00	21.838	1.015	-11.838	-2.25RX
175	30.0	15.00	21.410	0.971	-6.410	-1.21 X
184	29.0	2.00	20.982	0.928	-18.982	-3.59RX
199	20.0	33.00	17.128	0.566	15.872	2.97R
204	22.0	32.00	17.984	0.641	14.016	2.63R
210	24.0	32.00	18.841	0.720	13.159	2.48R
218	28.0	24.00	20.554	0.886	3.446	0.65 X

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 5 Child actual scores and teacher questionnaire scores with + and - signs collapsed (c51 and c53)

The regression equation is $c51 = 11.9 + 0.114 c53$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	11.920	80.6458	18.46
c53	0.1147	0.04714	2.43

S = 6.234

R-squared = 2.6%

R-squared = 2.2%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	229.12	229.12	5.896	0.01
Residual	219	8511.05	38.86		
Total	220	8740.17			

<u>Row</u>	<u>c53</u>	<u>c51</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
9	33.0	9.00	15.698	1.144	-6.698	-1.09 X
30	35.0	19.00	15.927	1.233	3.073	0.50 X
51	31.0	7.00	15.469	1.057	-8.469	-1.38 X
87	38.0	8.00	16.271	1.366	-8.271	-1.36 X
106	36.0	4.00	16.042	1.277	-12.042	-1.97 X
117	31.0	17.00	15.469	1.057	1.531	0.25 X
150	20.0	35.00	14.210	0.616	20.790	3.35R
151	17.0	27.00	13.867	0.522	13.133	2.11R
157	33.0	27.00	15.698	1.144	11.302	1.84 X
161	7.0	37.00	12.722	0.449	24.278	3.90R
171	5.0	31.00	12.493	0.491	18.507	2.98R
197	30.0	30.00	15.355	1.014	14.645	2.38R
199	3.0	33.00	12.264	0.546	20.736	3.34R
204	5.0	32.00	12.493	0.491	19.507	3.14R
210	24.0	32.00	14.668	0.765	17.332	2.80R
216	38.0	15.00	16.271	1.366	-1.271	-0.21 X
219	32.0	21.00	15.584	1.101	5.416	0.88 X

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 6 Child desired scores and teacher questionnaire scores with + and - signs collapsed (c52 and c53)

The regression equation is $c52 = 9.36 + 0.121 c53$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	9.3612	0.7989	11.72
c53	0.12127	0.05832	2.08

S = 7.712

R-squared = 1.9%

R-squared = 1.5%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	257.17	257.17	4.323	0.05
Residual	219	13026.66	59.48		
Total	220	13283.83	59.48		

<u>Row</u>	<u>c53</u>	<u>c52</u>	<u>Value</u>	<u>Pred. Y</u>	<u>Residual</u>	<u>St. Res.</u>
6	11.0	35.00	10.695	0.520	24.305	3.16R
9	33.0	8.00	13.363	1.416	-5.363	-0.71 X
27	10.0	26.00	10.574	0.519	15.426	2.00R
30	35.0	11.00	13.606	1.525	-2.606	-0.34 X
31	2.0	28.00	9.604	0.714	18.396	2.40R
51	31.0	00.00	13.121	1.308	-13.121	-1.73 X
60	3.0	26.00	9.725	0.675	16.275	2.12R
87	38.0	00.00	13.970	1.690	-13.970	-1.86 X
106	36.0	2.00	13.727	1.580	-11.727	-1.55 X

117	31.0	13.00	13.121	1.308	-0.121	-0.02 X
149	16.0	27.00	11.302	0.613	15.698	2.04R
150	20.0	33.00	11.787	0.763	21.213	2.76R
153	19.0	35.00	11.665	0.721	23.335	3.04R
157	33.0	00.00	13.363	1.416	-13.363	-1.76 X
161	7.0	35.00	10.210	0.556	24.790	3.00R
173	16.0	28.00	11.302	0.613	16.698	2.17R
174	9.0	31.00	10.453	0.525	20.547	2.67R
175	7.0	30.00	10.210	0.556	19.790	2.57R
184	5.0	29.00	9.968	0.607	19.032	2.48R
216	38.0	14.00	13.970	1.690	0.030	0.00 X
219	32.0	15.00	13.242	1.362	1.758	0.23 X

R denotes an observation with a large standard residual.

X denotes an observation whose X value gives it large influence.

Table 7 Peer votes and child actual scores with + and - signs collapsed
(c23 and c51)

The regression equation is $c23 = 0.512 - 0.00946 c51$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	0.51204	0.04024	12.73
c51	-0.009458	0.002767	-3.42

S = 0.2587

R-squared = 5.1%

R-squared = 4.6%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS = SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	0.78189	0.78189	11.687	0.01
Residual	219	14.65153	0.06690		
Total	220	15.43341			

Table 8 Peer votes and child desired scores with signs collapsed (c23 and c52)

The regression equation is $c23 = 0.489 - 0.00947 c52$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	0.48866	0.02910	16.79
c52	-0.009473	0.002213	-4.28

S = 0.2550

R-squared = 7.7%

R-squared = 7.3%, adjusted for degrees of freedom.

Analysis of Variance

Due to	<u>DF</u>	<u>SS</u>	<u>MS=SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	1.1920	1.1920	18.33	0.01
Residual	219	14.2415	0.0650		
Total	220	15.4334			

Table 9 Peer votes and teacher questionnaire scores with + and - signs collapsed (c23 and c53)

The regression equation is $c23 = 0.444 - 0.00533 \text{ } c53$

<u>Column</u>	<u>Coefficient</u>	<u>Standard Deviation of Coefficient</u>	<u>T-Ratio = Coefficient of Standard Deviation</u>
	0.44355	0.02705	16.40
c53	-0.005332	0.001975	-2.70

S = 0.2612

R-squared = 3.2%

R-squared = 2.8%, adjusted for degrees of freedom.

Analysis of Variance

<u>Due to</u>	<u>DF</u>	<u>SS</u>	<u>MS=SS/DF</u>	<u>F</u>	<u>P</u>
Regression	1	0.49709	0.49709	7.2887	0.01
Residual	219	14.93633	0.06820		
Total	220	15.43342			

APPENDIX 21

The letter to parents.

Dear Parent,

Your child's class has been chosen to take part in a study of the social skills of 1st, 2nd and 3rd year pupils from various parts of the U.K. To show you what is involved, I have attached to this letter a couple of examples of the kind of question we would be asking your child to answer. The study will take up a maximum of two double periods of school time, when children will be asked to fill in a questionnaire. If for any reason you object to your child taking part, would you write to (The teacher's name and the date by which the objection had to be received were inserted here) and I will ensure that this does not happen. May I assure you that these questionnaires will be treated as highly confidential, and that no questions about the family are included.

Many thanks

APPENDIX 22

Instructions to the teachers

Social Skills and Interpersonal Relationships Questionnaires: Instructions For Teachers

First of all, many thanks for participating in this study - I hope you find it interesting and enjoyable. As the questionnaire is being given in various parts of the country, these instructions will, hopefully, ensure the minimum of deviation.

(A) Purpose of the Study

We are attempting to standardize a questionnaire which would identify children who might benefit from "social skills" therapy. We thus require the "normative" responses of a large number of children.

(B) What Has To Be Done

- a/ Each child should fill in the questionnaire according to what is true for him/her.
- b/ Each child should then fill in the questionnaire according to how (s)he would like to be.
- c/ Each child should then list his/her five best friends in the class.
- d/ Each class teacher should fill in a questionnaire on each child in the class, and give a general rating out of ten, indicating how socially skilled (s)he thinks the child is generally.

At a later stage, a few children will be asked to participate in a short video, but this will involve only two or three schools.

(C) Time Involved

- a/ First pupil questionnaire (i.e. what is true for him/her), and the listing of five best friends on the back of the questionnaire: 1 double period.
- b/ Second pupil questionnaire (i.e. how (s)he would like to be): 1 double period.
- c/ Teacher questionnaire (based on a class of thirty pupils): 2/3 hours approx.

(D) General Guidelines For Giving The Pupil Questionnaire

Please give the questionnaire on both occasions as you would a test. It should be face down on the desk, and turned over only on your instruction. Silence should be observed throughout. Anyone with a question should raise a hand and whisper his/her query to you.

If there are any children in the class with particular learning difficulties or reading problems who might find the questionnaire difficult (even though you will be reading it aloud) please just provide me with their name(s). I should like to avoid causing any child embarrassment in front of the class, so if you notice that a child cannot follow the questionnaire, please just note the name.

(E) Specific Instructions To Be Read By The Teacher Before Giving The Questionnaire For The First Time

Introduction: "This is a study about the social behaviour of 1st, 2nd and 3rd year forms in England, Scotland and Ireland. Only the research student will see your name: she will give your questionnaire a number, so no-one else will see your name."

- (1) "Turn your questionnaire over"
- (2) "Fill in your name, age, class, teacher's name and today's date and say whether you are a girl or a boy."
(Please check this as you walk around)
- (3) "There are no "right" or "wrong" answers to any of these questions. Today, you just have to give the answers that are most true for you. Next time, you will answer the same questionnaire, but then you will say what you wish you were like. For example, question 1" (Please read). "What is true for you might be "A", and so you would tick the box under "A" (Please point this out). "Next time though, you will be answering what you wish you were like, so you might tick one of the other boxes, box "C" for example. But remember, today you are answering what is most true for you."
- (4) (Please read aloud the instructions at the top of the first page of the pupil questionnaire. Now you can begin to read each question aloud to the class, along with the optional answers, allowing the children time to tick the answer they have chosen. At the end of each page, please ask the children to check that each question has been answered and that they have ticked one, and only one, answer to each question).
- (5) (When the questionnaire has been completed, please ask the children again to check that each question has been answered, and only one answer ticked. Then read the final instruction on the last sheet of the questionnaire, which allows the child to elaborate on any question).
- (6) "Now please turn to the back of the last page of the questionnaire" (point it out) "and list your five best friends in the class."
- (7) (When they have finished, please thank the children on my behalf, and seal their questionnaires in the appropriate file or envelope, so that they can see that their confidentiality is assured. I will collect them from you at the school).

(F) Specific Instructions To Be Read Aloud Before Giving The Questionnaire For The Second Time

Introduction: "Last time you filled in the questionnaire saying what was true for you. Today you are going to say what you wish were true for you. For example, question 1" (please read aloud)."Last time you might have ticked "A". Today, because you are answering how you wish you could be, you might tick "B" or maybe "C".

(Now you can proceed through the steps as before, omitting nos. 3 and 6)

(G) Instructions For Filling In The Teacher Questionnaire

There is a teacher questionnaire for each teacher participating, and as many answer sheets as are necessary. The teachers who have taken part so far have found it easiest to follow the following procedure:

- a/ Read the first question in the questionnaire
- b/ Answer that question for all the children in your class (either -2, -1, 0, +1, +2)
- c/ Repeat with each subsequent question

Example:	PUPILS	Qu1	Qu2	Qu3	Qu4	Qu5	Qu6
	J. Smith	0	-1	+1			
	F. Jones	-2	-1	-1			

Finally, please give a general rating of social skill for each child out of ten where 1 = exceptionally poor, 5 = average and 10 = excellent.

BIBLIOGRAPHY

- Alexander, J.F. & Parsons, B.V. (1973) "Short-term Behavioural Intervention with Delinquent Families: Impact on Family Processes and Recidivism", Journal of Abnormal Psychology 81, pp. 219-225
- Allen, G., J.M. Chinsky, S.W. Larcen, J.E. Lochman & H.V. Sellinger (1976) Community Psychology in the Schools: A Behavioural Oriented, Multi-level Preventive Approach (Hillsdale, NJ: Erlbaum)
- Anastasi, A. (1968) Psychological Testing (London: Macmillan)
- Anderson, C., L. Horowitz & R. French (1983) "Attributional Style of Lonely and Depressed People", Journal of Personality and Social Psychology 45, pp. 127-136
- Archer, S.L. (1982) "The Lower Age Boundaries of Identity Development", Child Development 53, pp. 1551-1556
- Archer, S.L. (1984) "Where are Those Gender Differences in Identity Research?" Paper Presented at the Second Biennial Conference on Adolescent Research, Tucson, Arizona, March 1984
- Archer, S.L. (1985) "Career and/or Family: The Identity Process for Adolescent Girls", Youth and Society 16, pp. 289-314

- Asher, S.R.,
S.L. Oden &
J.M. Gottman (1977) "Children's Friendships in School Settings", in L.G. Katz (ed.), Current Topics in Childhood Education, Vol. 1 (Norwood, NJ: Ablex Pub. Corp.)
- Asher, S.R.,
L.C. Singleton
B.R. Tinsley &
S. Hymel (1979) "A Reliable Sociometric Measure for Preschool Children", Developmental Psychology 15, pp. 443-444
- Asher, S.R. &
P.D. Renshaw (1981) "Children without Friends: Social Knowledge and Social Skill Training", in S.R. Asher and J.M. Gottman (eds), The Development of Children's Friendships (Cambridge: Cambridge University Press)
- Asher, S.R.,
R.A. Markell &
S. Hymel (1981) "Identifying Children at Risk in Peer Relations: A Critique of the Rate-of-Interaction Approach to Assessment", Child Development 52, pp. 1239-1245
- Arkowitz, H. (1981) "The Assessment of Social Skills", in M. Hersen and A.S. Bellack (eds), Behavioural Assessment: A Practical Handbook (2nd ed.; New York: Pergamon)
- Bandura, A. (1977) Social Learning Theory (Englewood Cliffs, N.J.: Prentice Hall)

- Bash, M.A. &
Camp, B. (1980) "Teacher Training in the Think Aloud Classroom Programme", in G. Cartledge and J.F. Milburn, Teaching Social Skills to Children (Oxford: Pergamon Press)
- Bash, M.A. &
Camp, B. (1978) Think Aloud: Group Manual (Revised) (Denver: University of Colorado Medical School)
- Beck, S.,
R. Forehand,
R. Neeper &
C. Haas Baskin (1982) "A Comparison of Two Analogue Strategies for Assessing Children's Social Skills", Journal of Consulting and Clinical Psychology 50, pp. 596-597
- Begin, G. (1983) "A Reassessment of the Kohn Social Competence Scale and the Walker Problem Behavior Identification Checklist", Journal of Psychology 114, pp. 223-226
- Bellack, A.S.,
M. Hersen &
S.M. Turner (1976) "Generalization Effects of Social Skills Training in Chronic Schizophrenics: An Experimental Analysis", Behaviour Research and Therapy 14, pp. 391-398
- Bellack, A.S. &
M. Hersen (eds) (1979) Research and Practice in Social Skills Training (New York: Plenum Press)
- Bellack, A.S. (1979) "A Critical Appraisal of Strategies for Assessing Social Skill", Behavioural Assessment 1, pp. 157-176

- Bellack, A.S. (1983) "Recurrent Problems in the Behavioral Assessment of Social Skill", Behaviour Research and Therapy 21, pp. 29-42
- Benton, A.A. (1971) "Productivity, Distributive Justice and Bargaining among Children", Journal of Personality and Social Psychology 18, pp. 68-78
- Berndt, T.J. (1981) "Age Changes and Changes over Time in Prosocial Intentions and Behaviour between Friends", Developmental Psychology 17, pp. 408-416
- Berndt, T.J. (1981) "The Effects of Friendship on Prosocial Intentions and Behaviour", Developmental Psychology 52, pp. 636-643
- Berndt, T.J. (1983) "Children's Friendships", in E.T. Higgins, D.N. Ruble and W.W. Hartup, Social Cognition and Social Development (Cambridge: Cambridge University Press)
- Bigelow, B.J. (1977) "Children's Friendship Expectations: A Cognitive Developmental Study", Child Development 48, pp. 246-253
- Bigelow, B.J. & J.J. LaGaipa (1980) "The Development of Friendship Values and Choice", in H.C. Foot, A.J. Chapman and J.R. Smith (eds), Friendship and Social Relations in Children (New York: Wiley)
- Björstedt, A. (1956) Interpretations of Sociometric Choice Status (Lund: Hakan Hakan Ohlssons Boktryckeri)

- Borke, H. (1973) "The Development of Empathy in Chinese and American Children between 3 and 6 Years of Age: A Cross Cultural Study", Developmental Psychology 9, pp. 102-108
- Bornstein, M.,
A. Bellack &
M. Hersen (1977) "Social Skills Training for Unassertive Children: A Multiple-baseline Analysis", Journal of Applied Behaviour Analysis 10, pp. 183-195
- Bower, E.M. (1960) Early Identification of Emotionally Handicapped Children in School (Springfield, Il.: Thomas)
- Bower, E.M.,
T.A. Shelhamer &
J.M. Daily (1960) "School Characteristics of Male Adolescents Who Later Become Schizophrenics", American Journal of Orthopsychiatry 30, pp. 712-729
- Braukmann, C.J.,
D.M. Maloney,
E.L. Phillips &
M.M. Wolf (1973) The Measurement and Modification of Heterosexual Interaction Skills of Pre-Delinquents at Achievement Place (University of Kansas: unpublished)
- Braukmann, C.J.,
D.M. Maloney,
D.L. Fixen,
E.L. Phillips &
M.M. Wolf (1974) "Analysis of a Selection Interview Training Package for Pre-Delinquents at Achievement Place", Criminal Justice Behaviour 1, pp. 30-42

- Braukmann, C.J.,
D.L. Fixen,
E.L. Phillips &
M.M. Wolf (1975) "Behavioural Approaches to Treatment in the Crime and Delinquency Field", Criminology 13, pp. 299-331
- Bronstein, P. (1986) "Children's Social Behavior: A Cross-Cultural Comparison", International Journal of Behavioral Development 9, pp. 153-173
- Bruininks, R.H.,
J.E. Rynders &
J.C. Gross (1974) "Social Acceptance of Mildly Retarded Pupils in Resource Rooms and Regular Classes", American Journal of Mental Deficiency 78, pp. 373-383
- Buell, G. &
J. Snyder (1981) "Assertiveness Training With Children" Psychological Reports 49, pp. 71-80
- Burns, E. (1974) "Reliability and Transitivity of Pair-Comparison Sociometric Responses of Retarded and Nonretarded Subjects", American Journal of Mental Deficiency 78, pp. 482-485
- Busk, P.L.,
R.C. Ford &
J.L. Schulman (1973) "Stability of Sociometric Responses in Classrooms", Journal of Genetic Psychology 123, pp. 69-84

- Camp, B.W.,
G.E. Blom,
F. Hebert & W.J.
Van Doornick (1977) "Think Aloud: A Programme for Developing Self-control in Young Aggressive Boys", Journal of Abnormal Child Psychology 5, pp. 157-169
- Carlson, G.A. &
D.P. Cantwell (1980) "Unmasking Masked Depression in Children and Adolescents", American Journal of Psychiatry 137, pp. 445-449
- Carroll, B.J.,
M. Feinberg,
P.E. Smouse,
S.G. Rawson &
J.F. Greden (1981) "The Carroll Rating Scale for Depression: 1. Development, Reliability and Validation", British Journal of Psychiatry 138, pp. 194-200
- Carver, C.S. (1979) "A Cybernetic Model of Self-Attention Process", Journal of Personality and Social Psychology 37, pp. 1251-1281
- Carver, C.S. &
M.F. Scheier (1984) "A Control-Theory Approach to Behaviour, and Some Implications for Social Skills Training", in P. Trower (ed.), Radical Approaches to Social Skills Training (Beckenham, Kent: Croom Helm)
- Chandler, M.J. (1973) "Egocentrism and Antisocial Behaviour: The Assessment and Training of Social Perspective Taking Skills", Developmental Psychology 9, pp. 326-332

- Cohen, A.S. &
E.A. Van Tassel (1978) "Comparison: Partial and Complete Paired Comparisons in Sociometric Measurement of Preschool Groups", Applied Psychological Measurement 2, pp. 31-40
- Coleman, J. &
E. Coleman (1984) "Adolescent Attitudes to Authority", Journal of Adolescence 7, pp. 131-141
- Combs M.L. &
D.A. Slaby (1978) "Social Skills Training with Children", in B.B. Lahey & A.E. Kazdin (eds), Advances in Clinical Child Psychology, 1 (New York: Plenum Press)
- Connolly, J. &
A. Doyle (1981) "Assessment of Social Competence in Preschoolers: Teachers versus Peers", Developmental Psychology 17, pp. 454-462
- Connolly, J. (1989) "Social Self-Efficacy in Adolescence: Relations with Self-Concept, Social Adjustment, and Mental Health", Canadian Journal of Behavioural Science 21, pp. 258-269
- Connor, J.,
L. Dann &
C. Twentyman (1982) "A Self-Report Measure of Assertiveness in Young Adolescents", Journal of Clinical Psychology 38, pp. 101-106
- Cox, R.D.,
W.B. Gunn &
M.J. Cox (1976) "A Film Assessment and Comparison of the Social Skilfulness of Behaviour Problem and Non-problem Male Children" (Paper presented at the meeting of the Association for Advancement of Behaviour Therapy, New York)

- Cowen, E.L.,
A. Pederson,
H. Babigian,
L.D. Izzo &
M.A. Trost (1973) "Long-term Follow-up of Early Detected
Vulnerable Children", Journal of Consulting and
Clinical Psychology 41, pp. 438-446
- Curran, J. (1977) "Skills Training as an Approach to the Treatment
of Heterosexual-social Anxiety: A Review",
Psychological Bulletin 84, pp. 140-157
- Curran, J.P. (1979) "Pandora's Box Reopened: The Assessment of
Social Skills", Journal of Behavioural
Assessment 1, pp. 55-72
- Curran, J.P. &
M.J. Mariotto (1981) "A Conceptual Structure for the Assessment of
Social Skills", in M. Hersen, R.M. Eisler & and
P.M. Miller (eds), Progress in Behaviour
Modification (New York: Academic Press)
- Curran, J.P. &
P.M. Monti (1982) Social Skills Training: A Practical Handbook for
Assessment and Treatment (New York: Guilford
Press)
- Curran, J.P.,
A.D. Farrell &
A.J. Grunberger (1984) "Social Skills Training: A Critique and a
Rapprochement", in P. Trower (ed.), Radical
Approaches to Social Skills Training (Beckenham,
Kent: Croom Helm)

- Cytryn, L.,
D.H. McKnew &
W.E. Bunney (1980) "Diagnosis of Depression in Children: A Reassessment", American Journal of Psychiatry 137, pp. 22-25
- Damon, W. (1977) The Social World of the Child (San Francisco: Jossey-Bass)
- DeLange, J.M.,
S.L. Lanham,
J.A. Barton (1981) "Social Skills Training for Juvenile Delinquents: Behavioural Skill Training and Cognitive Techniques", in D. Upper and S.M. Ross (eds.), Behavioural Group Therapy, 1981: An Annual Review (Champaign, Illinois: Research Press Company)
- Demers, R. &
R. Skell (1981) "Mean Scores for Kohn Social Competence Found Markedly Different in Two Samples", Developmental Psychology 17, pp. 463-464
- Dion, K.K. and
E. Berscheid (1974) "Physical Attractiveness and Peer Acceptance among Children", Sociometry 37, pp. 1-12
- Dobson, C. (1980) "Sources of Sixth Form Stress", Journal of Adolescence 3, pp. 65-75
- Dryden, W. (1984) "Social Skills Training from a Rational-Emotive Perspective", in P. Trower (ed.), Radical Approaches to Social Skills Training (Beckenham, Kent: Croom Helm)
- Duck, S. &
R. Gilmour (eds) (1981) Personal Relationships, 1: Studying Personal Relationships (London: Academic Press)

- Dunnington, M.J. (1957) "Investigation of Areas of Disagreement in Sociometric Measurement of Preschool Children", Child Development 28, pp. 93-102
- Duval, S. & R.A. Wicklund (1972) A Theory of Objective Self-Awareness (New York: Academic Press)
- Edleson, J.L., A.M. Ordman & S.D. Rose (1982) "Assessing Children's Social Skills: The Development of and Failure to Validate a Behavioral Roleplay Test", Journal of Social Service Research 6, pp. 47-61
- Eisler, R.M., M. Hersen, P.M. Miller & E.B. Blanchard (1975) "Situational Determinants of Assertive Behaviors", Journal of Consulting and Clinical Psychology 43, pp. 330-340
- Elardo, P.T. & B.M. Caldwell (1977) "The Effects of an Experimental Social Development Programme on Children in the Middle Childhood Period", Psychology in the Schools 16, pp. 93-100
- Erikson, E.H. (1965) Childhood and Society (London: Chatto and Windus/The Hogarth Press)
- Erikson, E.H. (1968) Youth Identity and Crisis (New York: Norton)
- Feffer, M. H. & V. Gourevitch (1960) "Cognitive Aspects of Role-taking in Children", Journal of Personality 28, pp. 383-396

- Feshback, N. &
K. Roe (1968) "Empathy in 6 and 7 Year Olds", Child Development 39, pp. 133-145
- Feshback, N. (1969) "Sex Differences in Children's Modes of Aggressive Response Toward Outsiders", Merrill-Palmer Quarterly of Behaviour and Development 15, pp. 249-258
- Feshback, N. &
G. Sones (1971) "Sex Differences in Adolescent Reactions Toward Newcomers", Developmental Psychology 4, pp. 381-386
- Festinger, L.,
H.W. Riecken &
S. Schachter (1956) When Prophecy Fails (Minnesota: University of Minnesota Press)
- Fiedler, D., &
L.R. Beach (1978) "On the Decision to be Assertive", Journal of Consulting and Clinical Psychology 46, pp. 537-546
- Fincham, F. (1978) "Recipient Characteristics and Sharing Behaviour in the Learning Disabled", Journal of Genetic Psychology 133, pp. 143-144
- Fine, G. (1981) "Friends, Impression Management and Preadolescent Behaviour", in S. Asher and J. Gottman (eds), The Development of Children's Friendships (New York: Cambridge University Press)
- Foot, H.D.,
A.J. Chapman
J.R. Smith (1980) Friendship and Social Relations in Children (New York: Wiley)

- Foot, H.D.,
A.J. Chapman &
J.R. Smith (1977) "Friendship and Social Responsiveness in Boys and Girls", Journal of Personality and Social Psychology 35, pp. 401-411
- Foster, S. (1983) "Critical Elements in the Development of Children's Social Skills", in R. Ellis and D. Whittington, New Directions in Social Skills Training (London and Canberra: Croom Helm)
- Freedman, B.J.,
L. Rosenthal,
C.P. Donahoe,
D.G. Schlundt &
R.M. McFall (1978) "A Social Behavioural Analysis of Skill Deficit in Delinquent and Non-delinquent Adolescent Boys", Journal of Consulting Clinical Psychology 46, pp. 1448-1462
- Furnham, A. &
M. Henderson (1981) "Sex Differences in Self-reported Assertiveness among British Adults", British Journal of Clinical Psychology 20, pp. 227-238
- Furnham, A. &
M. Henderson (1984) "A Content and Correlational Analysis of Five Assertiveness Inventories" Behavioural Assessment 6, pp. 79-88
- Furnham, A. (1986) "Social Skills Training with Adolescents and Young Adults", in C.R. Hollin & P. Trower (eds), Handbook of Social Skills Training, 1 (Oxford: Pergamon Press)

- Gaffrey, L.R. &
R.M. McFall (1981) "A Comparison of Social Skills in Delinquent and Non-delinquent Adolescent Girls Using a Behavioural Role-playing Inventory", Journal of Consulting and Clinical Psychology 49, pp. 959-967
- Gamer, E. (1977) "Children's Reports of Friendship Criteria" (Paper presented at the meeting of the Massachusetts Psychological Association, Boston, May 1977)
- Gergen, K.J. (1978) "Experimentation in Social Psychology: A Reappraisal", European Journal of Social Psychology 8, pp. 507-527
- Gottman, J.M.,
J. Gonso &
B. Rasmussen (1975) "Social Interaction, Social Competence and Friendship in Children", Child Development 46, pp. 709-718
- Gottman, J. (1977) "The Effects of a Modeling Film on Social Isolation in Pre-school Children: A Methodological Investigation", Journal of Abnormal Child Psychology 5, pp. 69-78
- Green, K.D.,
R. Forehand,
S.J. Beck &
B. Vosk (1980) "An Assessment of the Relationship among Measures of Children's Social Competence and Children's Academic Achievement", Child Development 51, pp. 1149-1156

- Gresham, F.M. (1981) "Validity of Social Skills Measures for Assessing Social Competence in Low Status Children: A Multivariate Investigation", Developmental Psychology 17, pp. 390-398
- Gresham, F. (1983) "Social Validity in the Assessment of Children's Skills: Establishing Standards for Social Competency" (Paper presented at the Association for Behavioural Analysis Convention, Milwaukee)
- Guerney, B.G., E.B. Shapiro & L. Stover (1968) "Parental Perceptions of Maladjusted Children: Agreement between Parents and Relation to Mother-Child Interaction", Journal of Genetic Psychology 113, pp. 215-225
- Hallinan, M.T. (1974) The Structure of Positive Sentiment (New York: Elsevier)
- Harré, R. & P.F. Secord (1972) The Explanation of Social Behaviour (Oxford: Blackwell)
- Harré, R. (1984) "Public-Collective Psychological Processes and Social Skills", in P. Trower (ed.), Radical Approaches to Social Skills Training (Beckenham, Kent: Croom Helm)
- Hartshorne, H., M.A. May & J.B. Maller (1929) Studies in the Nature of Character: II, Studies in Service and Self Control (New York: Macmillan)

- Hartup, W.W. (1970) "Peer Interaction and Social Organization", in P. Mussen (ed.), Carmichael's Manual of Child Psychology, vol. 2 (3rd edition; New York; Wiley)
- Hazel, J.S.,
Schumaker J.B.,
Sherman, J.A. & J.
Sheldon-Wildgen (1981) "The Development and Evaluation of a Group Skills Training Programme for Court-adjudicated Youth", in D. Upper and S.M. Ross (eds) Behavioural Group Therapy, 1981 : An Annual Review (Champaign, Illinois: Research Press Company)
- Hazel, J.S.,
Schumaker J.B.,
Sherman, J.A. & J.
Sheldon-Wildgen (1982) "Group Training for Social Skills. A Programme for Court-adjudicated, Probationary Youth", Criminal Justice and Behaviour 9, pp. 35-53
- Hayes, D.S. (1978) "Cognitive Bases for Liking and Disliking among Preschool Children", Child Development 49, pp. 906-909
- Henderson, M. &
A. Furnham (1983) "Dimensions of Assertiveness: Factor Analysis of Five Assertion Inventories", Journal of Behaviour Research and Experimental Psychiatry, 14, pp. 223-231
- Henderson, M. &
Hollin, C.R. (1986) "Social Skills Training and Delinquency", in C.R. Hollin and P. Trower (eds), Handbook of Social Skills Training (Oxford: Pergamon Press)

- Herbert, M. (1986) "Social Skills Training with Children", in C.R. Hollin & P. Trower (eds), Handbook of Social Skills Training, 1 (Oxford: Pergamon Press)
- Herbert, M. (1987) Living with teenagers (New York, Oxford: Blackwell)
- Herjanic, B.,
M. Herjanic,
F. Brown &
T. Wheatt (1975) "Are Children Reliable Reporters?", Journal of Abnormal Child Psychiatry 3, pp. 41-48
- Hersen, M. &
A.S. Bellack (1977) "Assessment of Social Skills", in A.R. Ciminero, K.S. Calhoun & H.E. Adams (eds), Handbook for Behavioural Assessment (New York: Wiley)
- Hollin, C.R. &
P. Trower (1986) "Social Skills Training: A Retrospective Analysis and Summary of Applications", in C.R. Hollin & P. Trower (eds), Handbook of Social Skills Training, 1 (Oxford: Pergamon Press)
- Hops, H. &
M. Finch (1983) "The Relationship between Observed Social Behaviour and Reciprocated Sociometric Choices: A Dyadic View of Friendship", Paper presented at the biennial meeting of the Society for Research in Child Development, Detroit
- Hymel, S. &
S.R. Asher (1977) "Assessment and Training of Isolated Children's Social Skills", Paper presented at the Biennial Meeting of the Society for Research in Child Development, New Orleans

- Jones, J. &
J. Ray (1984) "Validating the Schoolchildren's Attitude Toward Authority and Authoritarianism Scales", Journal of Social Psychology 22, pp. 141-142
- Jones, W.,
J. Freeman &
R. Goswick (1981) "The Persistence of Loneliness: Self and Other Determinants", Journal of Personality 49, pp. 27-48
- Kane, J.S. &
E.E. Lawler (1978) "Methods of Peer Assessment", Psychological Bulletin 85, pp. 555-586
- Kazdin, A.E.,
J.L. Matson &
K. Esveldt-Dawson (1981) "Social Skill Performance among Normal and Psychiatric Inpatient Children as a Function of Assessment Conditions", Behaviour Research and Therapy 19, pp. 145-152
- Kazdin, A.E.,
K. Esveldt-Dawson
& J.L. Matson (1982) "Changes in Children's Social Skills Performance as a Function of Preassessment Experiences", Journal of Clinical Child Psychology 11, pp. 243-248
- Kazdin, A.E. &
T.A. Petti (1982) "Self-Report and Interview Measures of Childhood and Adolescent Depression", Journal of Child Psychology and Psychiatry 23, pp. 437-457

- Kazdin, A.E.,
K. Esveldt-Dawson
& J.L. Matson (1983a) "The Effects of Instructional Set on Social Skills Performance among Psychiatric Inpatient Children", Behavior Therapy 14, pp. 413-423
- Kazdin, A.E.,
N.H. French &
A.S. Unis (1983b) "Child, Mother, and Father Evaluations of Depression in Psychiatric Inpatient Children", Journal of Abnormal Child Psychology 11, pp. 167-180
- Kazdin, A.E.,
N.H. French &
A.S. Unis &
K. Esveldt-Dawson (1983c) "Assessment of Childhood Depression: Correspondence of Child and Parent Ratings", Journal of the American Academy of Child Psychiatry 22, pp. 157-164
- Kendall, P.C.,
D.S. Pellegrini &
E.S. Urbain (1981) "Approaches to Assessment for Cognitive-Behavioural Interventions with Children", in P.C. Kendall and S.D. Hollon, Assessment Methods for Cognitive Behavioural Interventions (New York: Academic Press)
- Keller, M. &
P. Carlson (1974) "The Use of Symbolic Modeling to Promote Social Skills in Pre-school Children with Low Levels of Social Responsiveness", Child Development 45, pp. 912-919

- Kohn, M. &
B.C. Rosman (1972) "Relationship of Pre-school Social-emotional Functioning to Later Intellectual Achievement", Developmental Psychology 6, pp. 445-452
- Ladd, G.W. (1979) "Social Skills and Peer Acceptance: Effects of a Social Learning Method for Training Verbal Social Skills" (Paper presented at the biennial meeting of the Society for Research in Child Development, San Francisco)
- Ladd, G.W.
& S. Oden (1979) "The Relationship Between Peer Acceptance and Children's Ideas about Helpfulness", Child Development 50, pp. 402-408
- La Gaipa, J.J. (1981) "A Systems Approach to Personal Relationships", in S. Duck & R. Gilmour (eds), Personal Relationships, 1: Studying Personal Relationships (London, New York, Toronto, Sydney, San Francisco: Academic Press)
- La Greca, A. (1981) "Social Behaviour and Social Perception in Learning-Disabled Children: A Review with Implications for Social Skills Training", Journal of Pediatric Psychology 6, pp. 395-416
- Leon, G.R.,
P.C. Kendall &
J. Garber (1980) "Depression in Children: Parent, Teacher, and Child Perspectives", Journal of Abnormal Child Psychology 8, pp. 221-235

- Lewine, R.R.J.,
N.F. Watt &
J.H. Fryer (1978) "A Study of Childhood Social Competence, Adult Premorbid Competence and Psychiatric Outcome in Three Schizophrenic Subtypes", Journal of Abnormal Psychology 87, pp. 294-302
- Liberman, R.P.,
L.W. King,
W. deRisi &
M. McCann (1975) Personal Effectiveness (Chicago: Research Press)
- Lindsay, W. &
J. Lindsay (1982) "A Self-Report Questionnaire about Social Difficulty for Adolescents", Journal of Adolescence 5, pp. 63-69
- Loranger, M. &
R. Arseneault (1989) "Self-Evaluation Questionnaire of Social Skills for Adolescents in High School", Journal of Adolescent Research 4, pp. 75-91
- Lovaas, I.,
K. Freitas &
C. Whelen (1972) "The Establishment of Limitation and its Use for the Development of Complex Behaviour in Schizophrenic Children", Behaviour Research and Therapy 5, pp. 171-181
- Maloney, D.M.,
T.M. Harper,
C.J. Braukmann,
D.L. Fixen,
E.L. Phillips &
M.M. Wolf (1976) "Teaching Conversation-Related Skills to Pre-Delinquent Girls", Journal of Applied Behavioural Analysis 9, pp. 127-139

- Mannarino, A.P.,
J.A. Durlak,
M. Christy &
M.G. Magnussen (1982) "Evaluation of Social Competence Training in the Schools", Journal of School Psychology 20, pp. 11-19
- Matson, J.L.,
A.F. Rotatori
& W.J. Helsel (1983a) "Development of a Rating Scale to Measure Social Skills in Children: The Matson Evaluation of Social Skills with Youngsters (MESSY)" Behaviour Research and Therapy 21/4, pp. 335-340
- Matson, J.L.,
K. Esveltdt-Dawson
& A.E. Kazdin (1983b) "Validation of Methods for Assessing Social Skills in Children", Journal of Clinical Child Psychology 12, pp. 174-180
- McCall, R.B. (1975) Fundamental Statistics for Psychology (2nd ed.; New York: Harcourt Brace Jovanovich)
- McCandless, B.R. &
H.R. Marshall (1957) "A Picture Sociometric Technique for Preschool Children and its Relation to Teacher Judgements of Friendship", Child Development 28, pp. 139-147
- McClure, L.F.,
J.M. Chinsky &
S.W. Larcen (1978) "Enhancing Social Problem-Solving Performance in an Elementary School Setting", Journal of Educational Psychology 70, pp. 504-513

- McConnell, S.R. &
S.L. Odom (1986) "Sociometrics: Peer Referenced Measures and the Assessment of Social Competence", in P.S. Strain, M.J. Guralnick and H.M. Walker, Children's Social Behaviour (Orlando: Academic Press)
- McDavid, J.W. &
H. Harari (1966) "Stereotyping of Names and Popularity in Grade School Children", Child Development 37, pp. 453-459
- McGurk, B.J. &
T.C. Newell (1981) "Social Skills Training with a Sex Offender", The Psychological Record 31, pp. 277-283
- McKnew, D.H.,
L. Cytryn,
A.M. Efron,
E.S. Gershon &
W.E. Bunney (1979) "Offspring of Patients with Affective Disorders", British Journal of Psychiatry 134, pp. 148-152
- Michelson, L.
A. Mannarino (1986) "Social Skills Training with Children", in P.S. Strain, M.J. Guralnick and H.M. Walker, Children's Social Behaviour (Orlando: Academic Press)
- Michelson, L. &
R. Wood (1982) "Development and Psychometric Properties of the Children's Assertive Behavior Scale", Journal of Behavioral Assessment 4, pp. 3-13

- Minkin, N.,
C.J. Braukmann,
B.L. Minkin,
G.D. Timbers,
B.J. Timbers,
D.L. Fixen,
E.L. Phillips &
M.M. Wolf (1976) "The Social Validation and Training of
Conversation Skills", Journal of Applied
Behavioural Analysis 9, pp. 127-139
- Mischel, W. (1973) "Toward a Cognitive Social Learning
Conceptualization of Personality", Psychological
Review 80, pp. 252-283
- Moore, S. &
R. Updegraff (1964) "Sociometric Status of Preschool Children
Related to Age, Sex, Nurturance-Giving, and
Dependancy", Child Development 35, pp. 519-524
- Moreno, J.L. (1934) Who Shall Survive? A New Approach to the
Problem of Human Interrelations (Washington
D.C.: Nervous and Mental Disease Publishing
Company)
- Morris, H.H. (1956) "Aggressive Behaviour Disorders in Children: A
Follow-up Study", American Journal of Psychiatry
112, pp. 991-997
- Newcomb, A.F. &
J.E. Brady (1982) "Mutuality in Boys' Friendship Relations",
Child Development 53, pp. 392-395

- Newcomb, A.F.,
J.E. Brady &
W.W. Hartup (1979) "Friendship and Incentive Condition as Determinants of Children's Task-Oriented Social Behaviour", Child Development 50, pp. 878-881
- Northway, M.L. (1942) "Social Acceptability Test", Sociometry 5, pp. 180-184
- O'Connor, R.D. (1969) "Modification of Social Withdrawal Through Symbolic Modeling", Journal of Applied Behaviour Analysis 2, pp. 15-22
- Oden, S. &
and S.R. Asher (1977) "Coaching in Social Skills for Friendship Making", Child Development 48, pp. 495-506
- Odom, S.L. &
R.F. DuBose (1981) "Peer Rating Assessments of Integrated Preschool Classes: Stability and Concurrent Validity of the Measures and Efficacy of the Peer Model", Paper presented at the National Convention for the Council for Exceptional Children, New York
- Ollendick, T.H. &
M. Hersen (1979) "Social Skills Training for Juvenile Delinquents", Behaviour Research and Therapy 17, pp. 547-555
- Orvaschel, H.,
M.M. Weissman,
N. Padian &
T.L. Lowe (1981) "Assessing Psychopathology in Children of Psychiatrically Disturbed Parents: A Pilot Study", Journal of the American Academy of Child Psychiatry 20, pp. 112-122

- Orvaschel, H.,
J. Puig-Antich,
W.J. Chambers,
M.A. Tabrizi &
R. Johnson (1982) "Retrospective Assessment of Child Psychopathology with the Kiddie-SADS-E", Journal of the American Academy of Child Psychiatry 21, pp. 392-397
- Ostrom, T.,
C. Steele,
L.K. Rosenblood &
H. Mirels (1971) "Modification of Delinquent Behaviour", Journal of Applied Social Psychology 1, pp. 118-136
- Pellegrini, D.S. (1980) "The Social-Cognitive Qualities of Stress-Resistant Children", Dissertation Abstracts International, 41
- Pelman, W.E.
M.E. Bender (1981) "Peer Relationships in Hyperactive Children: Description and Treatment", in K.D. Gadow and I. Bialer (eds), Advances in Learning and Behaviour Disabilities, vol. 1 (Greenwich, Conn., JAI Press)
- Piers, E.V. (1972) "Parent Prediction of Children's Self-Concepts", Journal of Consulting and Clinical Psychology 38, pp. 428-433
- Pitcher, S.W. &
S. Meikle (1980) "The Topography of Assertive Behavior in Positive and Negative Situations", Behavior Therapy 11, pp. 532-547
- Popper, K. (1981) Objective Knowledge: An Evolutionary Approach (6th ed.; Oxford: Oxford University Press)

- Porteous, M. (1979) "A survey of the problems of normal 15-year-olds", Journal of Adolescence 2, pp. 307-323
- Poznanski, E.O., S.C. Cook & B.J. Carroll (1979) "A Depression Rating Scale for Children", Pediatrics 64, pp. 442-450
- Puig-Antich, J. & W. Chambers (1978) Schedule for Affective Disorders and Schizophrenia for School-Age Children (6-16 Years) - Kiddie-SADS (New York State Psychiatric Institute)
- Reardon, R.C., M. Hersen, A.S. Bellack & J.M. Foley (1979) "Measuring Social Skill in Grade School Boys", Journal of Behavioural Assessment 1, pp. 87-105
- Reisman, J.M. & S.I. Shorr (1978) "Friendship Claims and Expectations among Children and Adults", Child Development 49, pp. 913-916
- Richard, B.A. K.A. Dodge (1982) "Social Maladjustment and Problem-solving in School-aged Children", Journal of Consulting and Clinical Psychology 50, pp. 226-233
- Rigby, K. & E. Rump (1981) "Attitudes Towards Parents and Institutionalised Authorities During Adolescence", Journal of Psychology 109, pp. 109-118
- Rizzo, T.A. (1989) Friendship Development among Children in School (Norwood NJ: Ablex Publishing Corporation)

- Robbins, D.R.,
N.E. Alessi,
S.C. Cook,
E.O. Poznanski &
G.W. Yanchyshyn (1979) "The Systematic Assessment of Depression in Adolescent Psychiatric Inpatients", paper presented at the Meeting of the American Academy of Child Psychiatry, Atlanta, Georgia
- Roistacher, R.C. (1974) "A Microeconomic Model of Sociometric Choice", Sociometry 37, pp. 219-238
- Romano, J.M. &
A.S. Bellack (1980) "Social Validation of a Component Model of Assertive Behavior", Journal of Consulting and Clinical Psychology 48, pp. 478-490
- Rotenberg, G. (1974) "Conceptual and Methodological Notes on Affective and Cognitive Role-taking (Sympathy and Empathy): An Illustrative Experiment with Delinquent and Non-Delinquent Boys", Journal of Analytic Psychology 125, pp. 177-185
- Rothenberg, B. (1970) "Children's Social Sensitivity and the Relationship to Interpersonal Competence, Intrapersonal Comfort and Intellectual Level" Developmental Psychology 2, pp. 335-350
- Rubin, K.H. (1978) "Role Taking in Childhood: Some Methodological Considerations", Child Development 49, pp. 428-433
- Savin-Williams, R.C. (1980) "Social Interactions of Adolescent Females in Natural Groups", in H.C. Foot, A.J. Chapman and J.R. Smith (eds), Friendship and Social Relations in Children (New York: Wiley)

- Schopler, E.,
R.J. Reichler (1972) "How Well Do Parents Understand Their Own Psychotic Child?", Journal of Autism and Childhood Schizophrenia 4, pp. 387-400
- Seligman, M.E.P. (1975) Helplessness (San Francisco: Freeman)
- Selman, R.L. (1981) "The Child as a Friendship Philosopher: A Case Study in the Growth of Interpersonal Understanding", in S.R. Asher and J.M. Gottman (eds), The Development of Children's Friendships (Cambridge: Cambridge University Press)
- Shapiro, S.B. &
M. Sobel (1981) "Two Multinomial Random Sociometric Voting Models", Journal of Educational Statistics 6, pp. 287-310
- Shepherd, G. (1984) "Assessment of Cognitions in Social Skills Training", in P. Trower (ed.), Radical Approaches to Social Skills Training (Beckenham, Kent: Croom Helm)
- Singleton, L.C.
& S.R. Asher (1977) "Peer Preferences and Social Interaction among Third Grade Children in an Integrated School District", Journal of Educational Psychology 69, pp. 330-336
- Shoemaker, M.E. (1979) "Group Assertion Training for Institutionalized Male Delinquents in Progress", in J.S. Stumphauzer (ed.), Behaviour Therapy with Delinquents (Springfield, Ill.: Charles C. Thomas)

- Shotter, J. (1974) "The Development of Personal Powers", in M.P.M. Richards (ed.) The Integration of the Child into a Social World (Cambridge: Cambridge University Press)
- Solano, C.,
P. Batten &
E. Parish (1982) "Loneliness and Patterns of Self-disclosure" Journal of Personality and Social Psychology 43, pp. 524-531
- Spence, S.H. &
J.S. Marzillier (1979) "Social Skills Training with Adolescent, Male Offenders, 1: Short Term Effects", Behaviour Research and Therapy 17, pp. 7-16
- Spence, A.J. &
S.H. Spence (1980) "Cognitive Changes Associated with Social Skills Training", Behaviour Research and Therapy 18, pp. 265-272
- Spence, S. (1980) Social Skills Training with Children and Adolescents: A Counsellor's Manual (Windsor: NFER-Nelson)
- Spence, S.H. &
J.S. Marzillier (1981) "Social Skills Training with Adolescent Male Offenders, 2: Short-term, Long-term and Generalized Effects", Behaviour Research and Therapy 19, pp. 349-368
- Spence, S.H. (1981) "Differences in Social Skills Performance Between Institutionalized Juvenile Male Offenders and a Comparable Group of Boys Without Offence Records", British Journal of Clinical Psychology 20, pp. 163-171

- Spivack, G. &
M.B. Shure (1974) Social Adjustment of Young Children: A Cognitive Approach to Solving Real-Life problems (San Francisco: Jossey-Bass)
- Staub, E. &
L. Sherk (1970) "Need for Approval, Children's Sharing Behaviour and Reciprocity in Sharing", Child Development 41, pp. 243-252
- Strain, P.S. &
M.A. Timm (1974) "An Experimental Analysis of Social Interaction Between a Behaviourally Disordered Pre-School Child and her Classmate Peer", Journal of Applied Behaviour Analysis 7, pp. 583-592
- Strain, P.S.,
R.E. Shores &
M.A. Timm (1977) "Effects of Peer Social Initiations on the Behaviour of Withdrawn Preschool Children", Journal of Applied Behaviour Analysis 10, pp. 289-298
- Strawson, P.F. (1959) Individuals (London: Methuen)
- Thelen, M.H.,
R.A. Frey,
S.J. Dollinger &
S.C. Paul (1976) "Use of Videotaped Models to Improve the Interpersonal Adjustment of Delinquents", Journal of Consulting Clinical Psychology 44, pp. 492

- Todd, N.M.,
H.M. Walker,
C.R. Greenwood &
M. Hops (1976) "Manipulating Peer Social Interactions Within an Experimental Classroom Setting" (Paper presented at the 84th annual meeting of the American Psychological Association, Washington, DC)
- Trower, P.,
B.M. Bryant, &
M. Argyle (1978) Social Skills and Mental Health (London: Methuen)
- Trower, P. (1980) "Situational Analysis of the Components and Processes of Behavior of Socially Skilled and Unskilled Patients", Journal of Consulting and Clinical Psychology 48, pp. 327-339
- Trower P. (1982) "Towards a Generative Model of Social Skills: A Critique and Synthesis", in J.P. Curran & P.M. Monti, Social Skills Training: A Practical Handbook for Assessment and Treatment (New York: Guilford Press)
- Trower P. (1984) "A Radical Critique and Reformulation: From Organism to Agent", in P. Trower (ed.), Radical Approaches to Social Skills Training (Beckenham, Kent: Croom Helm)
- Tuma, E. &
N. Livson (1960) "Family Socio-Economic Status and Adolescents' Attitudes to Authority", Child Development 31, pp. 387-389
- Twentyman, C.T.
& R.M. McFall (1975) "Behavioural Training of Social Skills in Shy Males", Journal of Consulting and Clinical Psychology 43, pp. 384-395

- Van Hasselt, V.B.,
M.M. Hersen,
N.B. Whitehill
& A.S. Bellack (1979) "Social Skill Assessment and Training for Children: An Evaluative Review", Behaviour Research and Therapy 17, pp. 413-439
- Van Hasselt, V.B.,
M. Hersen &
A.S. Bellack (1981) "The Validity of Role Play Tests for Assessing Social Skills in Children", Behavior Therapy 12, pp. 202-216
- Vaughan, B.E. &
E. Waters (1981) "Attention Structure, Sociometric Status, and Dominance: Interrelations, Behavioural Correlates, and Relationships to Social Competence", Developmental Psychology 17, p. 275, 288
- Vener, A.,
M. Zaenglen &
C. Stewart (1977) "Traditional Religious Orthodoxy, Respect of Authority and Non-Conformity", in Adolescents Adolescence 12, pp. 43-56
- Waldrop, M.F. &
C.G. Halverson (1975) "Intensive and Extensive Peer Behaviour: Longitudinal and Cross-sectional Analysis", Child Development 46, pp. 19-28

- Waterman, J.M.,
W.E. Sobesky,
L. Silvern,
B. Aoki &
M. McCauley (1981) "Social Perspective-Taking and Adjustment in Emotionally Disturbed, Learning Disabled and Normal Children", Journal of Abnormal Child Psychology 9, pp. 133-148
- Waterman, A.S. (1985) Identity in Adolescence: Processes and Contents (San Francisco, London: Jossey-Bass)
- Watson, D.L.
& D.L. Hall (1977) Self-control of Hyperactivity (La Mesa, Calif.: Pupil Services Division, La Mesa-Spring Valley School District)
- Weissberg, R.P.,
E.L. Gesten,
B.D. Rapkin,
E. Cowen,
E. Davidson,
R. Flores de Apodaca
& B.J. McKim (1981) "The Evaluation of a Social Problem-Solving-Training Programme for Suburban and Inner-City Third-Grade Children", Journal of Consulting and Clinical Psychology 49, pp. 251-261
- Weissman, M.M.,
H. Orvaschel &
N. Padian (1980) "Children's Symptom and Social Functioning Self-Report Scales: Comparison of Mothers' and Children's Reports", Journal of Nervous Mental Disorders 168, pp. 736-740

- Werner, J.S.,
N. Minkin,
C.J. Minkin &
L. Bonnie (1975) "Intervention Package: An Analysis to Prepare
Juvenile Delinquents for Encounters with Police
Officers", Criminal Justice Behaviour 2, pp. 22-
36
- Woolfolk, R.L. &
S. Dever (1979) "Perceptions of Assertion: An Empirical
Analysis", Behavior Therapy 10, pp. 404-411
- Wright, B.A. (1942) "Altruism in Children and the Perceived Conduct
of Others", Journal of Abnormal and Social
Psychology 37, pp. 218-233
- Youniss, J. (1980) Parents and Peers in Social Development
(Chicago: University of Chicago Press)