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THE INTEGRATION OF CHILDREN WITH DISABILITIES INTO THE MAINSTREAM:

EFFECTS OF SCHOOL & AGE ON MAINSTREAM CHILDREN'S ATTITUDES TOWARD DISABILITY

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ABSTRACT

Two theoretical models of intergroup contact, both claiming to identify precursors for generalised attitude change were applied to the integration of children with disabilities into mainstream schools. One, Hewstone and Brown (1986) distinguishes between interpersonal and intergroup contact and proposes that the second of these, intergroup or categorized contact, will produce the most favourable attitudes towards the outgroup(s) as a whole. The other, Brewer and Miller (1984), argues that the key to successful contact between groups is to abandon all references to the different groups in an effort to "decategorize" the situation. This, they believe, will lead to more interpersonal friendships forming across category boundaries and, eventually, to more positive intergroup attitudes in general. It was hypothesized that the first, categorised, theoretical stance would be the most conducive to generalised attitude change.

256 schoolchildren were interviewed and differences in the children's attitudes towards disability as an effect of the two types of contact with children with disabilities were detected. Data from the study demonstrate the criteria children use to categorise unknown disabled/non-disabled children and the potential relationship between this categorization and their expressions of liking (affect) and some of their perceptions of psychological and physical attributes (stereotypes) of groups of unknown children (disabled and non-disabled). Support was found for the categorized model of contact although findings were in a negative direction.

A follow up quasi-experimental study looked at temporal effects of categorized contact in an integrated programme involving children with severe learning disabilities (SLD). A similar pattern to that in the main study was found in the initial categorizing strategies and evaluative judgements of both integrating and control children. At the end of the programme, the pattern stayed the same for the children in the control class. However, sorting strategies of the integrating children were more idiosyncratic and there were some very clear differences between the 'experimental' and 'control' children on a number of evaluative dimensions.

Implications of findings for Policy and current social psychological models of contact between groups and children's social development are discussed.

DEDICATION

This thesis is dedicated to the memory of my father 'Kit' Firman.

MEMORANDUM

The research for this dissertation was conducted whilst the author was a part-time postgraduate research student at The Institute of Social & Applied Psychology at The University of Kent (October 1988 to July 1993). The major part of the work was written and completed whilst the author was employed as a Research Fellow on a Research Grant from The Leverhulme Trust at the University of Kent (January 1991 to December 1992).

The theoretical and empirical work herein is the independent work of the author. Intellectual debts are acknowledged in the text. The execution of the studies reported required the physical assistance of other people, but their role (other than where specified) was limited to assisting in aspects of the procedure, such as administering questionnaires and in some cases coding data.

The author has not been awarded a degree by this or any other university for work included in this thesis.

ACKNOWLEDGEMENTS

I would first of all like to thank Rupert Brown for his supervision. Rupert's considerable research skills, challenging comments and clear feedback and support throughout work on this thesis have been invaluable. I would also like to thank everyone at The Institute of Social & Applied Psychology for providing support and encouragement and ensuring my time at ISAP has been a happy one. Particularly Jan Lloyd for practical help, and Jo Lemon for tips on the vagaries of word perfect and for stepping in at the last minute with her laser printer!

Geoffrey Stephenson was Head of Department at ISAP for most of the time I have been working on this thesis and I would like to thank him for his encouragement and willingness to listen sympathetically to general requests for practical advice and support. In addition I would especially like to thank Diane Houston, Jim Vivian and Dominic Abrams for their moral support and friendship and Jim for his theoretical and empirical comments.

A number of people were involved with the collection and coding of data. My thanks go to: David Axworthy who carried out a number of interviews; Stephanie Bellour, Gabi Haeger and Jorg Middendorf for help with coding quantitative data; and Ian Bilbao, Jane Vane Tempest, Jon Brown and Ana Silverman for coding data from the semi-structured interviews.

Of course this thesis would not have been possible without the cooperation of members of 'the LEA'. I would like to thank the LEA senior inspector for SENs for his invaluable advice and comments at the preliminary stages of the project. Also the Area Director of the main area in which the research was conducted, the area Inspector for SENs and the SENs Area Coordinator for help in planning the initial survey. Thanks must also go to the other members of the LEA who assisted in arranging access to the schools involved. I would particularly like to express my thanks to all the headteachers, teachers, support staff and, most of all the children who participated in the study. By giving their valuable time they provided a rich source of material and without their cooperation the research would not have been possible.

My thanks also go to all my family and friends for their encouragement and support over the years. Finally my biggest vote of thanks goes to my two best friends - the other members of my most important social group: my daughter Katie for her sense of humour, her independence and for teaching me everything she knows, and most of all my husband Kerry for his love, help and unfailing support in so many ways that it would be impossible to list them.

CONTENTS

LIST OF TABLES

CHAPTER 4.

CHAPTER 5.

CHAPTER 6.

CHAPTER 7.

CHAPTER 8.

CHAPTER 9.

CHAPTER 10.

CHAPTER 11.

APPENDIX E.

LIST OF FIGURES

CHAPTER 6.

CHAPTER 7.

CHAPTER 8.

CHAPTER 9.

CHAPTER 10.

CHAPTER 11.

Child, John (8)	What are you doing this for then, what's it all about?
Interviewer	I want to know what children think.
John	Why?
Int.	Because it's part of a course I'm doing.
Child, Barry (8)	What's a course?
John	School of course. Where do you go to school?
Int.	The University - in Canterbury.
Barry	What's it about your course. Are you a dinner lady?
Int.	No. It's a course on Psychology.
Barry	What's that?
John	We're nuts. Barry's nuts anyway.
Int.	No, its not about people who are nuts, its about how and why we behave in certain ways.
Barry	The dinners are rotten - it's a shame your not a dinner lady.
John	I told you he was nuts.

(Maras, 1988a)

CHAPTER 1

INTRODUCTION:

A SOCIAL PSYCHOLOGICAL PERSPECTIVE

> 'Given a thimbleful of facts we rush to make generalizations as large as a tub. One young boy developed the idea that all Norwegians were giants because he was impressed by the gigantic stature of Ymir in the saga, and for years was fearful lest he met a living Norwegian' (Allport, 1954 p. 9)

OVERVIEW

The purpose of this introductory chapter is: to clarify the issue being addressed and the aims of the research reported; to locate the research reported in the thesis within its background and theoretical context in the very broadest terms[1] and to outline the structure and content of the remainder of the thesis.

THE ISSUE

This thesis addresses the issue of integrated education as an effective method of changing children's attitudes towards people with disabilities.

AIMS

It has two main aims:

1. To evaluate different methods of integration currently being employed in a Local Education Authority (LEA) in Southern England.

2. To examine the implications of findings for current social psychological models of contact between groups and children's social development, providing a framework within which children's attitudes towards people with disabilities generally can be viewed.

---

[1] A more precise analysis of the theoretical background can be found in succeeding chapters.

POLICY BACKGROUND

In recent years there have been major policy moves aimed at the social integration of people with physical, mental, and sensory impairment (Audit Commission, 1986). These have often been community based; for example, moves from institutional to community care (Social Services Select Committee, 1985). Some commentators have suggested that increased amounts of social interaction will arise out of community care and will result in improved attitudes towards people with disabilities (Bayley, 1982). In reality this may not be the case. In the main, the interaction that occurs often revolves around practical everyday aspects of living such as shopping, rather than socialising for its own sake. However, there is one area that can play an important role in changing attitudes towards disabled people generally: the area of integration in education.

INTEGRATION IN EDUCATION

There is little empirical evidence on the effects of educational integration on ordinary children's attitudes towards peers with disabilities and what research there is is equivocal. This omission is unfortunate given the policy changes being planned and implemented by LEAs. This thesis aims to fill this gap, and critically evaluate the policy and practise of one LEA. When the research for the thesis was conducted the LEA was in the process of implementing the 1981 Education Act and integrating children with special educational needs (SENs) into its mainstream primary schools. Attitudes of mainstream children towards peers with disabilities in schools where there were different amounts and kinds of integration will be examined within a framework of current social psychological models of contact between groups and children's social development. In this way it is hoped to provide a framework within which children's attitudes towards disabled people generally can be viewed.

CONTEXT

Three models of integration effective within the LEA were identified: where no obvious integration was taking place; where integration was taking place, but where children with SENs were not clearly identifiable to their mainstream peers as being members of a wider group; where integration was occurring but where children with SEN were clearly identifiable as members of a group of similar others. Within this thesis these three models of integration, that relate to theoretical social psychological models of contact, are compared in terms of the attitudes they generated in mainstream children.

NORMALIZATION

This was an area that was especially important given the emphasis in the last three decades on normalisation (Wolfensberger, 1983), with its accompanying moves towards community living for people with learning disabilities. However, the philosophical background to and subsequent interpretation of normalization is rather unclear. The principle of normalization evolved in Scandinavia during the 1960's (Nirje, 1969). The definition of normalization changed however, from that originally proposed, with the main exponent of the principle, Wolfensberger (1982), interpreting its practice in terms of 'normalizing' people, an idea which is fundamentally at odds with the original concepts as described by Nirje (1976):

> 'The normalization principle means making available to all mentally retarded people patterns of life and conditions of everyday living which are as close as possible to the regular circumstances and ways of life of society'. (Nirje, 1976, p. 231)

Wolfensberger's interpretation is more concerned with adapting peoples behaviour in order to make life in the community accessible, than changing aspects of the community to accommodate people with learning disabilities.

As Szivos (1989) observed, for both Nirje and Wolfensberger normalizing behaviour is an aspect of their theoretical perspectives:

> 'For Nirje, normalized behaviour (greater 'self control') follows naturally from enhanced self regard: for Wolfensberger it is a target for change in its own right'. (Szivos, 1989, p. 17)

These contradictory interpretations of normalization - which in the main focused on community care for people with learning disabilities - mirror problems in the area of attitudes to disability generally and in determining the criteria employed for deciding just what a positive attitude is.

CRITERIA FOR DETERMINING POSITIVE ATTITUDES

A second philosophical problem rests in the measurement of attitudes towards disability and what criteria are used to determine just what a positive attitude is. In other words, when we measure the attitude response are we doing so from the perspective of the person at whom the attitude is directed or from the perspective of the so called 'normal' attitude giver. Edmond (1984) suggests that the general public's social conceptions of people with disabilities are strongly influenced by the 'charity' ethic which directly contradicts the 'independent living' ethic being increasingly espoused by disability action groups. The author goes on to suggest that it is important that account is taken of the views of such groups along with multi-dimensional research paradigms. In a similar vein Makas (1988) looked at the differing perceptions that disabled and non-disabled persons had of what constitute 'positive' attitudes and behaviours to people with disabilities. Makas found significant differences in the perceptions of what constitutes 'the most positive attitudes towards persons with disabilities'. She concluded that:

> 'For the disabled respondents, "positive attitudes" would mean either dispensing with the special category of disability entirely, or promoting attitudes that defend civil and social rights of disabled persons. For non-disabled respondents, "positive attitudes" reflect a desire to be nice, helpful, and ultimately place the disabled person in a needy situation'. (Makas, 1988, p. 58

POWERFUL OR POWERLESS?

The issue of power and empowerment of people with disabilities is becoming increasingly relevant to research in the area. For example, action groups such as The Integration Alliance campaign very strongly not just for 'a voice' but for control both in research and charity organizations. Since starting the work on which this thesis is based I have become increasingly aware that the 'target groups' on which the thesis is focused - children with disabilities - have almost no control or power, either in terms of the contact situations in which they are placed, or the desired outcomes as stated by the contact instigators. This particular group is not unique - just an extreme and vulnerable example. I have endeavoured to take some account of this factor in four ways.

1. Consulting with external groups for people with disabilities.
2. Talking to parents, special needs teachers and in some instances children, to ascertain their views.
3. Obtaining parental permission from parents of disabled children in schools where the research was conducted.
4. Being aware of the vulnerability of the target group (disabled children) when interpreting findings from the studies.

ATTITUDES - POSITIVE, NEGATIVE OR JUST PATRONISING

The obvious conflict, both between the various interpretations of normalization and the different representations of positive attitudes held by people with and without disabilities, poses something of a problem for any research aimed at exploring attitudes to disability. This is more so in the case of research that has children as participants. Much of the literature that is central to this thesis (eg. children's prejudice, contact theory) has at its core notions of 'positive attitude change'. If we take note of members of disability action groups both here and abroad it becomes evident that their priorities do not always match those of able bodied people. They want change in attitudes towards themselves, but they also want more fundamental changes. For example, for a wheelchair user, unlimited access to public buildings is almost certainly more of a priority than whether 200 first year undergraduates rate people in wheelchairs higher than the mid-point on a seven point likert scale. For sure, without the unlimited access, the kind of casual everyday contact that able bodied people take for granted and that must be the right of all, is not even an option. There is an ever increasing body of people with disabilities who suggest that it is only when people with disabilities generally are empowered that attitudes of people without disabilities will change. I have tried both in this chapter and the thesis as a whole, to be cautious about imposing my own criteria as to what constitutes a positive attitude towards people with disabilities, I hope in the process I have not seemed in anyway patronising.

OUTLINE OF THESIS

In chapter two the policy, practice and research in educational integration is reviewed. The theoretical and legislative position in respect of integration at the time the research was conducted is presented and policy within the LEA in which the research was conducted is analyzed. (Policy and practice in the area of integration has moved on since the research was carried out and current thinking in the sphere acknowledged though implications of these developments are considered in the concluding chapter).

Chapter three reviews existing research on attitudes to people with disabilities within education. The experimental paradigms employed in past research are considered and the limitations of these as models for considering children's attitudes to disability are discussed.

Chapter four introduces and evaluates the Contact Hypothesis as a starting point from which to view contact between people with and without disabilities and subsequent consequential attitude change both towards individuals and groups. An argument is made for necessary precursors to contact if positive attitude change is to be generalised to the category as a whole. An analysis of two theoretical perspectives is made. The first maintains that in order that attitudes arising out of contact are generalised then all references to the group should be dropped[2]; the second adopts an opposing viewpoint, suggesting that in order that positive attitude change is to be generalised then the group should be made salient along with features such as the acknowledgement of valued differences and institutional support for the contact situation[3]. It is the second of these theoretical stances that the thesis hypothesises will be the most conducive to generalised attitude change arising out of contact. This intergroup perspective is central to the arguments running through the thesis. A link is made to the next chapter (and indeed to the second strand of the thesis) when it is noted that most of the research in this field has been conducted in an ethnic context as is also the case in the developmental research on attitude formation in young children.

Chapter five outlines and discusses the development of attitudes in young children. It considers aspects such as the development of the awareness of social desirability in children when they are responding to situations which involve them making judgements about others. The potential for theory arising out of the development of attitudes to ethnic groups, as a model for attitudes in other contexts (ie. disability) is considered. The point is made that this transposition is to be tested in this thesis.

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[2] From this point, in this thesis, this will be referred to as "interpersonal" or "decategorized" (DECAT) contact.

[3] From this point, in this thesis, this will be referred to as "intergroup" or "categorized" (CAT) contact.

Chapter six draws together chapters one to five and outlines the main study around which the thesis is constructed. Results of a pilot work, including a survey that identified different research sites, are presented.

In chapter seven, findings of the first part of the main study - the categorisation (sorting) tasks are introduced and reported. It is in this chapter, that the two threads of the thesis start to be drawn together. On the one hand the data are examined to see if children of 5+ and 8+ categorise in the same way. This addresses the developmental theme of the work. On the other hand, consideration is also given to the nature of the contact (ie. interpersonal or intergroup) within which the task is conducted, thus focusing on contact theory. The issue of generalisation of attitudes is introduced and data on categorisation of known (individual) peers with and without disabilities and unknown (individual) children with and without disabilities is compared again within the two contexts (intergroup *vs* interpersonaL).

In order to pursue more general group based attitudes, data presented in chapter eight looks specifically at attitudes towards pairs of children with hearing impairment (HI), learning disabilities (LD) and physical disabilities (PD) and pairs of (matched) non-disabled (ND) children.

The potential relationship between the way the children categorise peers and unknown children with and without disabilities and their expressions of friendship (affect) towards them is introduced and expanded on in data presented in chapter nine.

Results of data on friendship patterns in the different conditions is presented. Again the relationship between these and the type of contact is explored and the issue of generalization of attitudes between known and unknown children is further investigated.

In chapter ten qualitative data from semi-structured interviews is introduced. Content analysis of the interviews is used to look at the effects of age, school and gender on the types of responses the children made. Findings are discussed in relation to the data from the previous measures.

A second, quasi experimental case study is introduced in chapter eleven. In this "natural experiment" temporal effects of contact were measured in a school in which an integrated programme with a special school for children with severe learning disabilities (SLD) took place. Recent literature on social judgements is considered and integrated into the theoretical framework in which different kinds of contact situations have different effects on how able and comfortable judges feel about making judgements about unknown children with disabilities.

Finally, in Chapter twelve, the two strands of the thesis are drawn together and findings are integrated and discussed within the context of the whole thesis. Theoretical and policy findings are summarized, conclusions are drawn and potential future research is discussed.

TERMINOLOGY

Before going on it is important to clarify the terminology used in this thesis to describe children with disabilities. The term 'children with disabilities' is meant to describe those children whose special educational needs lie in the sensory, behavioural or physical domain and for whom, as a result, learning is made difficult. Within the context of this thesis these children would, more often than not, prior to the 1981 Act, have been educated in special schools, segregated away from the mainstream. The decision to adopt the term 'disabilities' was taken after much consideration and is based on the World Health Organisation (1989) classification. This discriminates between impairment (what is wrong), disability (function arising from the impairment) and handicap (societal consequence arising from loss of function). To give an example, in the case of being deaf, the impairment is having something wrong with one's ear, the disabilities are the functions of this, eg. not being able to hear or speak very well. The handicap is the societal consequences of the disfunction eg. reduced access to education or people thinking you one is stupid because of the dysfunction. Because this research is situated within an educational environment, where appropriate, current LEA conventions will be adopted and the term 'special educational needs' (SENs) will be used when describing children with disabilities. In cases where references are made to other authors' work, their specific terms are used. I would, however, like to disassociate myself from any value judgements implied by the terminology used.

CHAPTER 2

INTEGRATION & SPECIAL EDUCATIONAL NEEDS

> Susie is six. When the children in her class play families she's usually chosen to be the baby. At playtimes she mostly spends time skipping around on her own or walking around the playground holding the teacher's hand.
>
> David is eight, children describe him as 'great' though some say he is naughty. At playtimes he plays with the 'other' boys who quite often encourage him to get up to mischief for which he is rarely told off.
>
> Lance is nine. Everyone in his school knows him by name and lots of children say 'he's nice and friendly'. At playtimes lots of children say they play with him.
>
> (Teachers descriptions of children with SENs)

OVERVIEW

Susie, David and Lance are just three of the target children of the empirical work of this thesis. Susie is deaf, David has Down's syndrome and Lance is physically disabled and unable to walk or speak clearly. They all have special educational needs (SENs). Their names and other identifying features have been altered but I would hazard a guess that a large proportion of teachers reading the descriptions above would say they have a Susie, David or Lance in their schools. Whether or not they would be children with SENs would be another matter. The behaviours described are not descriptive of the three types of disability, they usually only come to be seen as so when accompanied by the particular label SENs.

The focus of this chapter is on policy directed at integrating children with SENs into the mainstream. In the chapter I do not intend to refer to all the literature, legislation and policy changes in the area. Rather my aim is to locate the research reported in this thesis within the time frame in which data were collected. I would also like to draw attention to very recent developments in Britain in respect of the integration of children with SENs. The implications of these changes that occurred both during and after data collection will then be set aside for the present and returned to and discussed in the concluding chapter.

Organization of the chapter

The chapter is divided into four sections. In the first I look briefly at the historical background to integration, before moving in section two to discuss legislation for SENs provision including, as already noted, current thinking on integration. In the third section some factors that have been identified as important to research into integration are discussed. Finally, in section four policy in the LEA[1] in which the empirical work of this thesis was conducted is analyzed.

BACKGROUND

One might assume that because of the upsurge in interest over the last twenty years, integrated schooling for children with disabilities is a new concept, this is not the case. For example, in the London area in the 1880's approximately 200 blind and

---

[1] In order to protect the anonymity of the LEA and participants within this thesis the LEA in which the research was conducted is referred to, from this point, as 'The LEA'. Any policy documents referred to are identified only as Policy Document of 'The LEA', again, to protect the anonymity of the issuing authority.

deaf children were educated in units attached to ordinary elementary schools (Pritchard 1963). Following the second world war a number of support units for hearing impaired children were developed and by 1965 the number had increased to almost 100. By 1970 there were 212 and in 1980 the number exceeded 500 (Lynas 1986). In terms of legislation, although the 1976 Education Act encouraged the official recognition of mainstream provision for children with disabilities it was not until the 1978 Warnock Report (DES, 1978) that there were any major legislative moves towards an integrated policy for children with disabilities.

Two ideological perspectives

The philosophy underlying the notion of so called 'special' provision for SENs has been seen in both negative and positive terms and has been raised extensively in recent years, for example, see Soder (1989), Booth (1991), and the rejoinder by Oliver (1992). Underlying the debate are two clear ideological views, one reflecting negative and one positive aspects of 'special' provision. One view suggests that the term 'special' reflects the marginalization of particular groups (in this case those with SENs) and reflects society's need to 'hide away its deviants' (Lunt, 1992). This negative interpretation, it has been suggested, in turn restricts the equal opportunities of children with disabilities. This idea puts the whole issue of provision of education for children with SENs into the domain of human rights. There are a number of flaws with this suggestion, one of which concerns the notion of equality. At a fundamental level it may be easy to accept the argument that any practice that restricts equal access (in this case to the same schools as children without disabilities) is detrimental to equal rights. However, a number of individuals (eg. Oliver, 1992) and organizations (eg. National Deaf Children's Society), whilst agreeing that education for those with SENs is a human rights issue, argue that this is not so much the right to be in the same school, but rather, a right to education. Thus, they argue this does not necessarily have to be in the mainstream but in the best and most appropriate setting. The second, 'positive' interpretation of 'special' provision takes a more altruistic perspective, implying *that the 'special' nature of education is to benefit* children with 'handicaps' - for example, by allowing them access to smaller classes, specialist teaching and protection from the 'rough and tumble' of a 'normal' environment. This philanthropic view is encapsulated in the etymological origin of the word 'handicap': from the charitable saying 'cap in hand' used to describe begging, often one of the main sources of income to people with disabilities in the last century. These two interpretations of the word 'special' in special education have had at least an implicit and often explicit effect on the underlying ideology

LEGISLATION

The Warnock Report

The Warnock Report (1978) was the result of a 5 year enquiry into education for 'handicapped children'. Its main emphasis was on children with 'learning difficulties' that significantly impaired their development and educational progress'. The report suggested that one in five children in ordinary schools may at some time need special educational provision, whilst one in 50 may need special school provision. The Warnock report advocated three types of integration; social, educational and locational. The report made over 200 recommendations in relation to the special educational field (Norwich, 1990). In relation to this thesis one of these, the abolition of the categories of 'handicap' that had been a predominant feature of 'special' provision prior to the inquiry, is of particular interest. It is also one of the changes in provision for children with SENs that has had the most profound impact. At the crux of Warnock's argument for negating the previously used classification of SENs, was the notion that the label 'handicap' and associated terms served no useful purpose in terms of educational provision. As an example of their thinking Norwich (1990) cites the example of a boy with one leg who it could be argued was:

> 'excluded from many activities, but it may not prevent him from making academic progress'. (Norwich, 1990, p.7)

Thus, this lack of relationship between categories of handicap and educational handicap, along with the loosely defined nature of the traditional categories, failed to allow for the individual needs of children to which they were applied. In order to remedy this and ensure more appropriate provision unhindered by category boundaries the Warnock Committee redefined SENs, stating:

> 'We wish to see a more positive approach, and have adopted the concept of special educational needs, seen not in terms of a particular disability which a child may be judged to have, but in relation to everything about him, his abilities as well as his disabilities - indeed all the factors which have a bearing on his educational progress'.
> (DES, 1978, p.37)

Whilst seemingly a step in the right direction in terms of improved provision, a number of anomalies have been identified in the Committees rejection of categories and category boundaries. For example, Norwich (1990) points out that although The Warnock Committee renounced the use of categories, their estimates of the extent of

SENs were based on studies such as Rutter *et al's* well known Isle of Wight Study (Rutter, *et al*, 1970). This relied heavily on a category based medical model of identification of need, a model much criticised by current proponents of SENs provision (eg. Barton & Tomlinson, 1984). Not withstanding its reliance on traditional methods of identification for compilation of statistics, along with the acknowledgement that on occasions categories could help to focus provision appropriately, the Warnock committee rejected the medical model and its associated dependence on labelling. The subsequent 1981 Education Act adopted many of the Committee's recommendations.

The 1981 Education Act

The 1981 Education Act ('81 Act) was the government's response to the recommendations of the Warnock Report. The Act defines a child as having SENs if:

> 's/he has a learning difficulty that is significantly greater than the majority of children of her/his age' or 'has a disability that prevents her/him from making use of the educational facilities generally provided in school' (Education Act 1981).

LEA's are required by the Act to identify children with SENs and, where possible, make provision for them in mainstream schools. However, the third report of the House of Commons Education, Science, and Arts Committee (1987) suggested that

> 'it is not necessary to support the principle of insisting that ALL children be educated in mainstream primary and secondary schools' (DES, 1987).

The report saw the term 'integration' as embracing collaborative ventures between special and ordinary schools and not just integration *per se.* Nonetheless, the legislation has in common parlance come to be seen as mainly concerned with integration into mainstream schools. The Act and subsequent associated regulations and circulars were in the main concerned with reflecting 'prevailing notions of 'good practice', as well as providing 'a legal framework to encourage LEAs to improve practice' (Goacher *et al,* 1988). Although, it has been suggested that in translation from the report stage to legislature some of the principles and 'spirit' of the Warnock Report got lost, this claim was refuted by among others Baroness Young who, when Minister of Sate for Education, is quoted by Goacher *et al* as saying when pre-empting the criticism of misinterpretation of the committees recommendations:

> '... This is not the case. It is simply that in translating recommendations into law we move into the dispassionate world of the lawyers, who like builders have to construct secure foundations on which the building can rise'. (Baroness Young, cited in Goacher *et al,* 1988, p.8)

Despite a number of reinterpretations of various aspects of the Warnock recommendations the principle of removal of the traditional categories was supported. Although the onus of provision was still focused inwardly toward the individual child rather than:

> 'towards 'outside factors', such as the resources and expertise available in the school'. (Goacher *et al,* 1988).

The research of this thesis is set within an LEA within which current policy, at the time the empirical work was carried out, was to integrate children with SENs into the mainstream. This policy reflected not just legislation (Warnock, 1978; Education

Act, 1981), but also a shift in ethos in education from special segregated provision to education in the mainstream. Practice may not in a number of cases have reflected either the aim of the legislation or the general ethos - a point that is pursued at a later stage in this thesis.

SENs since the 1981 Education Act

Following the Warnock report and subsequent '81 Act there have been a number of important developments in education, for example, the 1988 Education Reform Act (ERA) which introduced the National Curriculum (NC). An important note needs making at this point in relation to the state of integration policy when data were collected. The research conducted for this thesis was conducted at a time when policy for implementation of ERA and the NC was at the planning stage and none of the participating schools were implementing it. ERA clearly has important implications for integration, and findings from this thesis are discussed in the light of ERA in the concluding chapter. In the same vein, Local Management of Schools (LMS) has also been introduced. When the data for this research were collected LMS was just starting to be 'phased into' schools both nationally and in 'the LEA'. LMS has important implications for integration, for example, within 'The LEA' children with SENs would carry additional allowances as part of formula funding.

RESEARCH INTO INTEGRATION

The changes and developments in policy along with a general failure of commentators over the last ten years to take account of the many issues involved in integration have prompted a growing debate about the way research into integration has been conducted.

Lindsay (1989) argues that in order to effectively evaluate integration, researchers need to take a multifaceted approach and, in doing so, take account of the child, the peer group, teachers, parents, social interactions, the curriculum, child-curriculum interaction and support. Although at first glance Lindsay seems to be taking an individualistic approach (ie. from the integrated child's perspective) his arguments are not incompatible with an intergroup perspective in which features such as support, peers and teachers would all be important in exploring group perceptions.

There are a few researchers that have included context as a factor in research into integration. Carpenter *et al* (1986)[2] identified a clearly structured policy for integration with stated aims and objectives. As will be shown in chapter four, this type of institutional support is one of the main precursors for successful contact situations within the intergroup perspective taken in this thesis. Carpenter *et al's* study is one of an increasing number generated by practitioners in the field of Education that offer insight into policy, practice and ecology of integrated education. These factors had not been explored in previous research. A similar view in terms of quality of provision for children with special educational needs is reflected in a review by Szaday, Pickering and Duerdoth (1989) who suggest that the current trend of focusing on individuals and not context, results in inadequate special educational

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[2] For a fuller discussion of these studies see chapter three.

needs provision for them.

One of the most consistent findings of practitioners who, as part of their research have considered policy in terms of provision, has been the diversity of such policy. For example, Hackney (1985) identified a large number of very different policies for integrating children with SENs. Brinker and Thorpe (1985) identified two very clear models of state policy for integrating 'severely handicapped' students in a large study that looked at the integration of 245 'severely handicapped' students in community and school settings in 14 districts located in nine states in the USA.

As can be seen, from this brief look at research a number of factors seem emerge as important in determining how successful research into integration is. Of these, the most indicative feature seems to be the inclusion of policy and context both when designing research and considering findings. The empirical work of this thesis was carried out just after initial implementation of policy for integration in 'The LEA'. The final section of this chapter introduces and discusses that policy as it stood at that time.

POLICY FOR SENs IN 'THE LEA'

Background

In the mid 1980's a consultative document was received and approved by 'The LEA' County Council Members which would, 'The LEA' suggested, if and when fully implemented, have a radical effect on Special Education provision in the county. The document outlined the County's proposed policy response to the 1981 Education Act requirements. Although the document stated that;

> 'the integration of all children with special educational needs is a prime target'. (Policy document of 'The LEA'.)

it seemed possible that practice may well not reflect this aim. To illustrate this point the policy document stated a commitment to integrating ALL children with special needs. However, a further document containing information for parents - School Year 1988-1989 did not appear to reflect this aim. Although eight pages long, only four lines related to mainstream schooling. The remainder of the document listed and described special schools, or units, as options for children with SENs. Further to this example, a senior member of one of the SENs support teams when asked, 'what is the procedure when a child with obvious SENs reached statutory school age', said:

> 'of course, where possible, the child would be put directly into a mainstream school .... I'm not so sure about the wisdom of that .... talking as a mother now.... I mean the little ones would only get upset when they failed would'nt they?'

This type of comment was and is not unique. It might well cause us to ask whether the attitudes of all of the professionals involved in implementing the policy are compatible with its main aims and the underlying philosophies of integrated education. This is an important point given the requirement of institutional support for the contact situation being a necessary precursor for success. Having made that point, what of the content and implications of the consultative document?

Policy directions

'The LEA' policy directions focused on four major concerns:

1. The continuing development of integration opportunities for all pupils with SENs.

2. The development of the concept of parents as partners with clear guidelines for their involvement at every stage of assessment, interventions and review.

3. Strong emphasis on in-service training as a means of achieving change.

4. The redistribution of resources over time, away from specialist provision and late intervention towards early identification and support of special needs in ordinary schools. (Policy Document of 'The LEA')

These concerns, suggested 'The LEA', would result in a 'changed process' of fulfilling the educational needs of special needs children that:

> 'aims to subsume the notion of special educational needs into a broader approach of meeting the educational needs of all children. In seeking to develop a whole school policy, the school will promote a corporate sense of responsibility towards the development of the necessary attitudes, patterns of organisation, and curriculum modification through the introduction of approaches to teaching which address each pupils learning needs'. (Policy document of 'The LEA')

A subsequent curriculum statement (1988) suggested that four critical points dominated 'The LEA's' proposed strategy for fulfilling the aim of the consultative document:

1. The abolition of low-value labels.

2. The determination to review all aspects of school life which may impinge on appropriate provision.

3. The recognition of the problem of teaching as a teaching problem.

4. The commitment to write clear policy statements.
(Policy document of 'The LEA')

It did not appear to be the aim of 'The LEA' to educate all children with SENs in mainstream schools but to 'encourage and achieve' the integration of as many as possible. The main aim seemed to be to ensure that children with SENs mix socially with their peers in a 'regular and planned way'. How was this planned and regular 'mixing' to come about?.

Provision

Historically, in 'The LEA', as in the UK generally, children with SENs had more often than not been segregated in special schools or units away from the mainstream. Following a meeting of the Special Education Review Group of Members in 1985, an alternative way of organising special needs provision based on 'grouping schools and integrating support services to form a coherent network' was proposed. This scheme was piloted and a four stage model of 'learning support' was developed:

Level 1.	Provision within schools - school/department reviews methods and materials used with a view to accommodating pupils. Support offered from within school's own resources.
Level 2.	Provision within school with support - involvement of integrated support team/special needs department in advisory/'peripatetic' capacity within school.
Level 3.	Provision outside by support services - withdrawal to a base provided by support team for an individually determined period of time.
Level 4.	Provision within school - reintegration into full mainstream setting.

(Policy document of The LEA)

This 'model' in effect meant that the existing support services were to be reorganised in order to offer 'an appropriate level of support' to schools in which children with SENs were being integrated.

Perhaps the most striking feature of the consultative document was, despite its claim to provide a 'coherent policy', its lack of coherence to any clear course of action. In the main it described objectives and outcomes and not processes. A network of support teams was set up. The development of these SENs support services was obviously a worthwhile operation, resulting in some special schools becoming centres of expertise with the resources to assist ordinary mainstream schools with pupils. But the type and amount of assistance was unclear, as was the actual number of children who would remain in special schools. Interestingly, a local educational psychologist when asked to comment said that:

> 'the current policy was in the main to only integrate reception children with SENs, the reintegration children already in special schools is not part of any present scheme'.

The aims expressed by 'The LEA' appeared sound, for example, the integration of as many children with SENs as possible and the promotion of a corporate sense of necessary attitudes. Neither the policy document, or the Curriculum Statement, appear to have developed any clear plan, (or concept of a plan) of how attitude change was to come about or, indeed, to have specified just what they considered the 'necessary attitudes' to be. In the policy document much was made of fiscal and administrative change at county and area levels, whilst minimal thought appeared to have been given to the grass roots level of the classroom or school. Pre-existing attitudes of mainstream children towards peers with SENs were not taken into account, neither were any attitudes that they might acquire through contact. Parental attitudes were not discussed. Rather the whole question of attitude was dealt with as an ambiguous corporate entity, which needs to be promoted but which is not clearly specified. In its favour the general ethos of the consultative document was good. It was in line with much of the current thinking at the time behind educational integration. As a statement of policy it was clearly a step in the right direction. It did state a commitment to the principal of integration, allowing for (in principle at least) the option of mainstreaming for children with SENs. In doing so parental involvement would be greater than had previously been the case. It also stressed the importance of training for mainstream teachers with specific teachers taking responsibility for SENs within individual schools.

Implications of policy

But what were the implications of the policy both generally and in terms of the contact that might occur between children with and without SENs when policy was implemented? From a pragmatic point of view children's contact with peers with SENs would in the main be directly related to how amenable heads and class teachers were to the idea of integration. At this point a distinction also needs making between children with simple learning problems and those with moderate to severe disabilities. The old method of categorising SENs would be replaced with a less specific method of statement of need, and it did seem that this distinction may well in time become difficult to make. It is an important distinction since most non-disabled children would have at some time encountered children with simple learning problems. In the main they would not seem to categorise these children in the same group as those with disabilities[3].

'The LEA' proposals were based:

> 'on three years of consultation with representative groups involved in SENs across the county'. (LEA policy document).

Despite attitude change and acquisition being one of the policy's main aims it seems they did include a social psychologist on their consultative panel. From a social psychological perspective the question is asked, can the contact inherent in the proposed policy be fitted into a theoretical framework? Policy for the integration of children with SENs in 'The LEA' revolved around the classification of SENs within a four level[4] model of support for maintaining children with SENs in the mainstream where possible. Nevertheless, there was a certain amount of ambiguity surrounding these levels. Not least because more often than not, whilst seemingly being used to describe the integration of children with SENs, in practise they were being utilised to reclassify children already in the mainstream and not those children previously excluded.[5] In light of the emphasis of Warnock on the removal of categories, it is also interesting to note that anecdotal evidence from both teachers and other professionals in 'The LEA' indicated that the new levels of support were in fact often being used to describe particular individual or groups of children. This point was illustrated by the following quote from an SENs mainstream primary teacher in 'The

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[3] The issue of the amount and type of contact and how it might fit into the theoretical models of contact underpinning the thesis is returned to in chapter four.

[4] Subsequently further levels were added to the model.

[5] Issues surrounding the use of this system of identifying children with SEN are returned to in the concluding chapters.

LEA'.

> 'We take all the level twos on a Monday, the ones on a Wednesday, and Darren the three comes every afternoon'.

It does seem, at least based on this anecdotal evidence, that despite attempts to dispense with traditional categories of need and focus on the individual needs of children with SENs, the traditional category labels may have been replaced with numerical ones. This poses somewhat of a problem for the underlying philosophy of Warnock and the 1981 Education Act. The issue of categorization is returned to in chapter four and explored in data in chapter seven. In the next chapter research into attitudes to disability is discussed and considered in relation to integration.

CHAPTER 3

ATTITUDES TOWARDS DISABILITY

> 'Positive attitudes can result from mainstreaming disabled children, teaching disabled children, caring for or rehabilitating disabled persons, interacting socially with disabled persons, working with disabled persons, and so forth; but so can negative attitudes. Findings such as these indicate that the effects of contact on attitudes is complex. Contact under "favourable" conditions leads to positive attitudes, whilst contact under other conditions either does not affect attitudes or leads to negative attitudes (Amir, 1969).'
>
> (Yuker, 1988, p. 262)

OVERVIEW

It has been acknowledged that the attitudes of others have a significant impact on the lives and behaviour of people with disabilities (Yuker, 1988). In this chapter research on attitudes towards disability is reviewed. Findings of research involving both adults and children is considered, factors affecting attitudes and their measurement are discussed. As the quote at the start of this chapter indicates, findings from research are inconclusive. Much of the work in the area of attitudes towards people with disabilities fails to demonstrate a strong and coherent theoretical base for claims made by it. Claims often focus on contact as a mediating factor in attitude change, yet few theorists have utilized 'contact theory' as a framework from within which to view attitude change, tending instead to make assumptions based on intuition. Once again I do not intend to refer to all the literature in the area, but to highlight the main trends and issues by citing examples of theory in the field of attitudes towards disability. In adopting this strategy one of my main aims is to propose that researchers should identify more clearly than has been the case in the past, an empirical and theoretical framework from within which attitudes towards people with disabilities can be viewed.

Organization of chapter

The chapter is organized into three sections. The first considers attitudes of first adults and then children towards disability. It will be shown that although much of the research cited claims to be founded in theory, this is not the case, with many of the conclusions seemingly being founded on intuitive guesswork. In order to explore some of the problems and issues identified, the second section focuses on two empirical considerations - the structure and the measurement of attitudes. Finally, in section three, some of the potential factors affecting attitudes to disability are considered.

ATTITUDES TOWARDS DISABILITY

Most research in the general area of attitudes towards the disabled has, like much of the research in social psychology, been generated from North America (eg. Voeltz, 1980; Towfighy-Hooshyar & Zingle, 1984), and literature from the USA is still widely cited as a theoretical base for research in the UK. It has been reported that attitudes towards disabled people are frequently negatively biased (Wright, 1988). The consequences for people with disabilities of this bias go without saying. However, there is some debate about the origins of those attitudes. Some theorists have suggested that ambivalent attitudes to people with disabilities are rooted in the same causes as those towards other so called disadvantaged groups. Katz *et al* (1988) suggest they often result in extreme behaviour by people without disabilities. Langer and Canowitz (1988) propose that they are founded in 'mindlessness' and that they can be ameliorated by fostering a 'mindful' approach when perceiving people with disabilities.

Adult attitudes to disability

In terms of the attitudes of adults towards people with disabilities, two strong assumptions are implicit in much of the theory. Researchers have suggested that there is a significant difference in attitudes towards different kinds of disability (eg. Furnham & Pendred 1983) and that contact with people with disabilities is a factor in determining attitude behaviour (eg. Strohmer *et al* 1984).

Furnham and Pendred (1983) found consistent differences in subjects' attitudes towards people with 'mental handicap' and people with physical disabilities. They found that attitudes towards people with 'mental handicap' were more negative than towards people with physical disabilities. The authors suggest that these findings are directly related to the amount of social interaction between people with and without disabilities. Their findings reflect attitudes identified over twenty years ago (eg. Murphy *et al.*, 1960; Freed, 1964, cited in Furnham & Pendred, 1983). Furnham and Pendred conclude - but without offering any direct evidence - that as 'mental handicap' is generally less visible than physical handicap the resulting unfamiliarity produces inadequacies in subsequent interactions. Likewise, Strohmer *et al* (1984) suggested - again without direct evidence to support the suggestion - that whilst demographic variables accounted for limited variance in attitudes to the disabled, 'contact with persons with disability is a major determinant of attitudes'.

This research reflects a general consensus that the lack of contact between adult's with and without disabilities can result in negative attitudes and unrealistic perceptions by the latter of the former. It is also reflective of attitudes towards other stigmatized groups. Indeed in chapter four, the literature on intergroup contact is discussed and much of this is founded in the domain of ethnicity. This view seems intuitively sensible - no or little contact with people with disabilities added to the unavailability of other information might, one could well imagine, result in an increased reliance on stereotypes as a basis on which opinions and attitudes are formed. It is surprising that little research has attempted to explore empirically this seemingly obvious link.

Children's attitudes towards disability

Researchers into the attitudes of children and adolescents have made similar claims. In a review in 1980 Donaldson considered research on the modification of attitudes toward disabled persons in an attempt to, 'delineate factors common to successful interventions'. She concluded that contact *per se* is not enough to reduce prejudice towards the disabled. Donaldson goes on to suggest that contact needs to be structured with 'planned experiences' between children with and without disabilities. The author does not, however, expand on the issue of the nature of the contact other than to state its importance.

Until the early 1980's there was a dearth of empirical evidence on the effects of educational integration on children's attitudes towards peers with disabilities. However, in the literature which did address this issue, together with research that looked at children's attitudes towards disability in other settings, certain broad underlying themes can be identified. The research in the main focused on contact *per se* (Strauch, 1970; Cavallaro & Porter 1980; Voeltz, 1980: Voeltz, 1984; McConkey *et al.* 1983), exposure and visibility (Furnham & Gibbs, 1983; Strohmer *et al.*,1984), and perceived similarities (Siperstein *et al.*, 1982), whilst a number of researchers suggested that younger children would have more positive attitudes towards and be more accepting of the 'handicapped' (Spillers, 1982; Towfighy-Hooshyar & Zingle, 1984; Peterson & Haralick, 1977).

In terms of contact and exposure, Strauch (1970) compared attitudes of 124 'nonretarded' adolescents towards the 'mildly retarded' (EMR). Half of subjects had contact with EMR peers half did not. Strauch reports finding no evidence of more positive attitudes in the children who had social contact than in those who did not. Whilst findings reported by Cavallaro and Porter (1980) concluded that children of seven years showed a clear preference for peers without 'handicaps' as an effect of contact. Siperstein *et al* (1982) also found that in conditions where children were exposed to - and perceived similarities between - themselves and 'retards', resulting attitudes were more positive than where there was no exposure. They also found more positive attitudes amongst girls than boys.

Voeltz (1980, 1984) suggested that the greater the amount of contact children had with students with 'handicaps' the more positive their attitudes to them. In the same vein McConkey *et al* (1983) conducted a major survey of 1300 young people in Ireland which aimed to look at their perceptions of 'mental handicap'. This study focused on 15 and 16 year olds, because the authors suggested they are old enough to appreciate moral issues (Kohlberg 1966). They found that the young people had only a very limited amount of contact with people with a 'mental handicap'. For instance, they found that only one quarter of the young people had ever 'interacted with a mentally handicapped adult', and nearly half had never been in the 'company of a mentally handicapped person'. The authors suggest that the public's isolation from 'mentally handicapped' people has major consequences for their attitudes towards them. They go on to say that:

> 'Young people lack confidence in meeting people who are mentally handicapped and when given options, prefer to help them through impersonal means such as fundraising'. (McConkey *et al*, 1983, p 178)

Esposito and Reed (1986) surveyed attitudes of children who had different types of contact with 'handicapped persons'. They suggest that contact *per se* is sufficient to produce positive attitudes in children and report no effect for time and type of contact. The authors' rationale for identifying type of contact was, however, loosely defined, with measures such as 'implied' structure and second person reporting, (eg. by a person not involved in the contact situation), being used to identify type of contact.

A number of researchers have compared attitudes towards different types of disability.

Spillers (1982) tested children's attitudes to physically disabled peers and found that older children preferred able bodied peers whilst younger children showed no clear preference. Similar findings have been reported by other researchers, eg. Towfighy-Hooshyar and Zingle (1984) and Peterson and Haralick (1977). Furnham and Gibbs (1983) compared children's attitudes to 'physically and mentally handicapped' children. They suggest that their finding that children preferred those with a 'physical handicap' to those with a 'mental handicap' is caused by their lack of exposure to 'mental handicap' in general. The authors go on to suggest (as in the work by Furnham with Pendred cited earlier), but without offering direct evidence, that negative attitudes can be ameliorated by increased interaction.

MEASUREMENT AND STRUCTURE OF ATTITUDES

Measurement

Another area of ambiguity concerns measurement. Findings discussed so far in this chapter have been inconsistent in terms of the types of attitudes measured. Furthermore, many of the authors' conclusions seemed to be based more on intuition than on solid empirical evidence. No direct link between contact and more positive attitudes had been demonstrated and no clear theoretical basis for a potential link had been proposed.

One problem with this failure to forge a strong theoretical link could be due to methodological problems associated with the sociometric nature of the instruments used to measure attitudes (Yuker, Block & Campbell, 1960). An example cited by

Gottlieb & Gottlieb (1977) illustrates this point. In his study of junior high school pupils stereotypes about 'handicapped' children, adjectives were used to elicit responses about 'handicapped' children. The authors found that some responses seemed to be contradictory eg. 'mentally retarded people were smart'. At first glance this seems to be an inaccurate statement. However, once it is considered within the context from which subjects were drawn, an entirely different picture emerges. The subjects came from an urban city background where the term 'smart' could be interchanged with terms such as 'street wise'- an entirely different concept from intelligence which is the interpretation of 'smart' applied by the researchers. This example highlights the need to be aware of social contexts and cultural norms when evaluating attitude responses.

A second point needs making in relation to the taxonomy employed when measuring peoples attitudes towards others who are disabled. Namely, that the choice of method should be directly related to the research questions asked. A number of researchers have expressed concern at the inappropriateness of some methods of investigation (eg. Antonak, 1980, 1981; Yuker & Block, 1979, 1986). The concept of attitudes towards people who are disabled is clearly a complicated one. It has been suggested that researchers have failed to recognize this complexity and have assumed that measuring attitudes to disabled persons is a simple task. This has resulted, submits Antonak (1988), in ill-defined and inadequate measurement instruments and subsequently 'useless research'. He suggests that, although recent studies have utilized more sophisticated statistical analysis they have changed little in content from the early studies of Strong (1931) and Barker (1948) (cited in Antonak, 1988). Of particular concern is the fact that, in the main they:

> 'are designed for specific research situations and are often used only once, without formal validation or detailed psychometric analyses.' (Antonak, 1988, p. 110)

Antonak identified a taxonomy of fourteen methods for measuring attitudes to people who are disabled. Of these, he described ten as direct measures and four as indirect.

Structure

A small number of studies have focused on theoretical issues underpinning attitudes arising out of integrated school contact. For example, Fortini (1987) attempted to identify predictors of positive behaviour towards children with disabilities. Whilst Lewis and Lewis (1987, 1988) looked at cognitive mechanisms which might identify why exposure could be an important feature in attitude formation.

Fortini (1987) utilised the theory of reasoned action (Ajzen & Fishbein, 1980) in an attempt to identify predictors of positive behaviour by students towards peers with disabilities. In her North American study, students in grades five to seven (10 - 13 year olds) were told about a peer tutoring scheme (to tutor 'handicapped' students) and volunteers to participate were asked for. Findings were in line with Ajzen and Fishbein's model of reasoned action with intention (to become a peer tutor) predicting behaviour (becoming a peer tutor). Fortini suggests that the findings have important implications for interventions in integrated contexts especially in terms of recruiting non-'handicapped' students to serve as tutors for their 'handicapped' peers. Whilst admirable in attempting to define a theoretical framework within which to view attitudes this study takes little account of the context within which integration occurs thus making generalisation difficult. Although clearly if research is using a pre-existing and established integrated scheme (as is the case here) as a context within which to explore attitudes to disability, then more likely than not, institutional support is positively geared towards the contact situation, a point which will be explored in depth in the next chapter. Another problem in terms of its generalizability is posited in the interpersonal nature of the attitude/behaviour - the attitude / intention / behaviour is about/towards working with a particular individual (a disabled peer) and not people with disabilities generally. Nevertheless, this research does go some way to addressing the theoretical deficit in past research.

Lewis and Lewis's (1987) study stressed the importance of exposure in the formation of children's attitudes. In their study within a school setting they found that 'normal' children as young as six and seven years acquired attitudes about children with severe learning difficulties (SLD) after only a very limited amount of integrated contact. Previous research by Hazzard (1983) had suggested that children's 'knowledge' of disability was directly related their chronological age (the older the child the greater the knowledge). Lewis and Lewis identified levels of attitude development in the children in their study in line with Katz's (1982) framework of attitude development (Katz & Taylor, 1982). I will return to this framework in chapter five when the developmental aspects of attitude formation in young children are considered. However, it is worth briefly outlining the levels of development identified by Lewis and Lewis:

Stage 1.	differentiation of others according to a defined criteria.
Stage 2.	the development of early unsophisticated concepts. This level was deemed to have been reached - with the children learning to make crude judgements about peers with SLD.
Stage 3.	the recognition of certain cues. This was the level most of the children in the study had reached. They were, the authors suggested, uncertain as to whether SLD was a characteristic like race, which is irrevocable, or whether like age it would change.

It is interesting to consider the two explanations (Hazzard, 1983 & Lewis & Lewis, 1987) for the same phenomenon. Both perspectives suggest that integrated school contact with children with disabilities has an effect on attitudes of children without disabilities. However, one (Hazzard, 1983), suggests the attitude is an effect of age whilst the other (Lewis & Lewis 1987), concludes that it is merely the contact that has the effect.

In a follow up study (Lewis & Lewis, 1988) found that the children had gone through a transition period from

> 'positive attitudes based on a false model of SLD to more realistic, but still positive attitudes'. (Lewis & Lewis, 1988)

They suggest that the findings from this study suggest a need for:

> 'school personnel (to) provide NH children with coherent explanations for SLD and other types of special need'. (Lewis & Lewis, 1988)

They utilise the intergroup perspective of Allport (1954), as cited by Gottlieb (1987), as an explanation for their findings. They do not, however, explore this perspective in any depth, and the studies do not explicitly consider the nature of the contact situation preceding the attitudes. The need to take account of context was considered in chapter two in relation to integration policy and practice. More often than not, in past research it has not been a factor for consideration. A similar case could be made for the effects of contact on attitudes.

FACTORS AFFECTING ATTITUDES

Integration and contact

What limited literature there is seems to be suggesting that contact with children with disabilities will have an effect on the attitudes of children without disabilities. This view is also reflected in research into integration and its effects on children with disabilities. For example, in North America Brinker and Thorpe (1984) found that interactions arising out of integrated contact were a predictive factor in achievement levels of 'Severely Handicapped Students'. Similarly work in Britain has considered the effects of contact on social and educational development in children with disabilities (eg. Lindsay & Dale 1982; Lindsay & Dickenson 1987). Brinker and Thorpe (1985) identified a significant increase in the number of interactions towards and by 'severely mentally retarded' students in integrated settings - as opposed to students in segregated settings. However, the nature of the integrated setting is not explored in depth. Similarly Gilles and Shackley (1988) compared attitudes of students who have integrated contact and those who do not. As in the previous study (Brinker & Thorpe 1985) the authors report that:

> '14-year-olds in a school into which the physically handicapped have been integrated, both academically and socially, are more likely than

> their able-bodied peers in a school without such integration to hold positive views about other young people who are physically handicapped' (Brinker, 1985, p. 108).

The authors conclude that in their study the able-bodied students social perspective of the physically handicapped was influenced by integrated contact with physically disabled peers. Again no link is made between these assumptions and theoretical mechanisms that might underpin them.

More recently there has been an increase in the amount of research looking at attitudes in the domain of educational integration. Most probably this increase is due to the legislation taking place (eg. in Britain the 1981 Education Act; in the United States PL 94-142). However, despite the continuing focus on contact as a factor in reducing prejudice and improving attitudes to the disabled, there has been little change in the position in respect of a solid theoretical basis for claims made by researchers. Furthermore, some research by practising educators (eg. Lindsay, 1989), has suggested that contact may not always result in positive attitudes towards the disabled. Indeed, in some cases the reverse may be the case.

Institutional factors

As noted above and discussed in chapter two, institutional factors can play an important part in determining attitudes. The wider policy implications of institutional support were introduced in chapter two and they will be returned to in chapter four when contact theory is discussed. There is also evidence though, that within the umbrella of institutional support, teaching and learning styles can also play a vital part in determining attitudes. This is particularly true of cooperative learning.

Teaching and learning styles

Teacher interactions

A growing number of researchers have considered the effects of teacher interventions on subsequent attitudes towards children with disabilities. Cole *et al.* (1986) examined the impact of teachers' verbal interactions on dyadic social interactions between elementary school children with and without 'severe mental retardation'. Half of the dyads were also instructed to engage in specific cooperative play behaviour. The authors found that in the dyads where cooperative play and intervention occurred, social interactions were significantly more positive than when just intervention occurred.

Cooperative learning

It is the area of cooperation that affords the most promising leads in terms of changing attitudes towards people with disabilities, reducing anxiety and improving relations between disabled and non-disabled children (eg. Johnson 1980, Armstrong *et al* 1981, Bryan *et al* 1981). A number of studies have reported the effectiveness of cooperative learning.

Johnson *et al.* (1979) compared the effects of integration that had cooperative, individual or *laissez faire* goal structures on mainstream children's attitudes towards 'highly trainable mentally retarded' (MR) peers. They found that there were more interpersonal interactions and attraction between non-disabled (ND) and MR children in the cooperative situation than in the individual or *laissez faire* conditions. Although this study is a strong indicator that cooperative goals are likely to enhance integration, it is not entirely clear that the findings are directly relevant to all kinds of SENs, as the participants were all teenagers and the integrated students were very much more able than many children with SENs. Similar problems arise with two further studies in which Johnson was involved. The first compared the effects of cooperative *vs* individualistic learning on attainment and attraction between learning disabled (LD) and ND elementary school students (Armstrong *et al*, 1981). In this study the results indicated more interpersonal attraction and higher levels of achievement in the cooperative condition than the individualistic one. Once again these findings support the use of cooperation, although there are similar doubts about the generalizability of the findings in view of the sample used (mainly middle class), and the relatively mild level of disability of the children who participated.

Johnson and Johnson (1981) also compared the effects of cooperative and individualistic learning. As in the previous studies the most positive effects were found in the cooperative condition. By structuring the task so that all members both 'handicapped' and 'non-handicapped' could participate, Johnson and Johnson seem to have rebutted a common argument against cooperative learning: that the more able group members may be frustrated by their less able peers, resulting in increased rejection of 'handicapped' students.

A further study lends weight to the efficacy of cooperative learning. Bryan *et al.* (1982) found that by incorporating cooperative goal structures in integrated situations with LD and ND children the most positive effects were identified when participants were trained in cooperative techniques prior to participation.

Findings from these studies are supported by a growing body of literature that has considered learning under the broad umbrella term 'Peer Cooperation' (Foot *et al.* 1990). Foot and his colleagues identify three types of peer cooperation: peer tutoring, peer collaboration and cooperative learning. Often these three types of learning are mislabelled cooperative learning. As Cowie (1992) points out in her recent commentary of a review of Cooperative Learning and Peer Tutoring by Topping (1992), cooperative learning means different things to different people (Cowie 1992): from a form of classroom organisation to a method of enabling children to meet specific NC attainment targets. In terms of integration I see cooperative learning as a situation where participants have important roles but where these roles are interdependent on each other. Within the context of the classroom this would allow, as Cowie and Rudduck (1990) suggest, for the promotion of the 'capacity to negotiate meaning' from the task/group and for the acknowledgement of the 'existence of multiple perspectives on any issue'.

In summary then, research strongly supports the use of cooperative learning in the integration of children with SENs. However, research to date has been limited in three ways: only mildly disabled children have been studied; they were primarily of secondary school age; and it has mainly been conducted in North America. It remains an open question how many of the ideas are transposable to the United Kingdom and how they can be reconciled with the NC. Cooperation is an important feature of newly reformed theories of contact. In the next chapter contact theory is discussed in light of current thinking.

CHAPTER 4

CONTACT: AN INTERGROUP APPROACH

> 'Prejudice (unless deeply rooted in the character structure of the individual) may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom or local atmosphere), and provided it is of a sort that leads to the perception of common interests and common humanity between members of the two groups'. (Allport, 1954/1979[1], p. 281)

OVERVIEW

It has been shown in preceding chapters, that there is a general and widely held assumption underlying research that contact will improve attitudes. However, many of the researchers cited fail to identify any underlying processes of the contact situations. Indeed, most of the assumptions made seem to be based on intuitive or commonsense guesswork rather than sound theoretical or empirical foundations. This is a surprising omission, considering the current rise and reformation of the contact hypothesis as a framework within which to view intergroup encounters. It is even more surprising when we consider that a number of researchers, prior to the widespread increase in integrated education for children with disabilities, were suggesting this would be a fruitful course to take. For example, Budoff and Gottlieb (1976) cited Allport's model of contact as an important base on which integrated schemes could be built and, even earlier, Chesler (1965) suggested that:

> 'for some purposes the physically disabled can be conceptualized as a minority group subject to many of the same attitudinal and behavioral predispositions as are ethnic minorities'. (Chesler, 1965, p. 881)

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[1] From this point date given will be 1954. However, it should be noted that page numbers given are from the 1979 paperback edition.

More recently a small number of researchers have examined attitudes to disability from an intergroup perspective (eg. Desforges *et al*, 1991; Acton & Zarbatany, 1993). Nevertheless, despite these recent and more explicit references to intergroup processes, there still remains a deficit in research that has looked at processes underlying integrated contact between children with and without disabilities.

Organization of chapter

An attempt to remedy this omission is made in this thesis and this chapter considers contact theory as a foundation. The chapter is divided into four sections. The first looks at the theoretical background. Working definitions of 'the group' and 'intergroup relations' are derived and the 'group' nature of classroom situations is introduced. In section two 'the contact hypothesis' is discussed as a starting point from which to view contact between disabled and non-disabled groups. The state of 'Contact' literature as it stands in the 1990's is reviewed and two of the most recent theoretical perspectives on intergroup contact are analyzed. These two perspectives are very different. One (Brewer & Miller 1984) maintains that in order for attitudes arising out of contact to be generalised then all references to the group should be dropped[2]. The second (Hewstone & Brown 1986) adopts the opposing viewpoint, maintaining that if positive attitude change is to be generalised then the group should be made salient along with features such as the acknowledgement of valued

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[2] From this point, this will be referred to as 'interpersonal' or 'decategorized' contact.

differences and institutional support for the contact situation[3]. It is hypothesized that the second of these theoretical stances will be the most conducive to generalised attitude change arising out of contact. This intergroup perspective - with certain addenda - is central to the arguments running through the thesis. An argument is made for a more stringent regard for both the definition of terms used to describe contact situations and desired outcomes of contact. In section three I consider the appropriateness of theory founded in ethnic relations to the domain of disability, before I return in the fourth section, to the policy of 'The LEA', introduced in chapter two, and consider how the two intergroup perspectives fit into its policy and practice.

THEORETICAL BACKGROUND

Groups as a level of analysis

> 'We live in a social environment which is in constant flux. Much of what happens to us is related to the activities of groups to which we do or do not belong; and the changing relations between these groups require constant readjustments of our understanding of what happens and constant causal attributions about the why and the how of the changing conditions of our life'. (Tajfel, 1969, p 81).

As Brown (1988) points out, the 'reality of groups' has been a topic of much debate since the turn of the century. The debate encompasses a number of views that can be crudely divided into those that focus on the experience of being a group member (eg. Lewin, 1948; Campbell, 1958) and those for whom the actual social structure of 'the group' is the most pertinent feature (eg. Sherif & Sherif, 1969).

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[3] From this point, this will be referred to as 'intergroup' or 'categorized' contact.

Notwithstanding, these different theoretical levels of analysis, there is, in fact, relatively consistent agreement about the most important features of group definition. These can be summarily described under three main headings: identity, interdependence and social structure. (Turner *et al.*, 1987)

1. Identity

Detailed accounts of the features of group identity can be found in a growing number of recent books on intergroup relations (eg. Brown, 1986; Turner *et al.* 1987; Hogg & Abrams, 1990; Hogg, 1992). In summary though, identity, refers to an individual's perceptual and cognitive definition of 'one self' in relation to a kind of collective awareness and shared common identity (Tajfel & Turner, 1986).

2. Interdependence

The positive interdependence of group members in one form or other, is viewed by most theorists as a common, underlying and causal element in group situations (eg. Deutsch, 1949; Festinger, 1954; Cartwright & Zander, 1968; Rabbie *et al.* 1974). The notion of 'shared fate' ie. the knowledge that the outcome of a situation is explicitly related to the fate of others; is the most fundamental form of interdependence. However, the impact of interdependence is highest when determined by mutual group goals, the attainment of which necessitates positive interactions between group members all of whom are motivated to attaining a goal and have specific roles in line with achieving that goal. This in turn results in group cohesiveness. As Turner points out:

> 'The concept, (*group cohesiveness* [4]) therefor, embodies the essential property of group belongingness from the interdependence perspective - the degree of mutual satisfaction of individual needs has led to their transformation into a psychological group'. (Turner *et al*, 1987, p. 21).

3. Structure

In relation to group structure, identity, over time, becomes embedded in differentiated roles and status of group members, along with shared norms, attitudes and group behaviour (Slater, 1955; Parsons & Bales, 1956; Sherif, 1967; Waxler & Mishler, 1970). Communication within this structure is fundamental to the group and the most effective form of communication in terms of enhancing group morale is decentralised.

But how do these defined criteria relate to education? Or, more specifically, what relevance do they have for 'education', 'the school' and 'the classroom'?

In many ways 'a class' at its inception, is not dissimilar to the 'minimal group' on which much of modern group processes theory is founded. Often children are randomly assigned to classes, and initially, on starting school, these 'class groups' have little or no history. Clearly 'a class' is not just an arbitrary collection of pupils and a teacher, it is also a group. Within the class/group a teacher is an appointed leader and as such, given the nature of the class holds considerable power (Bar-Tal & Bar-Tal, 1986). Although on the surface all pupils or students may appear to have

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[4] My parentheses.

the same status and roles, in reality this is more often not the case and roles become differentiated (Bar-Tal & Bar-Tal, 1986). Consequently over time, the class/group develops norms and behaviours that affect both within and out group interactions and these follow much the same processes as described in traditional group process theory (Bany & Johnson, 1964; Schmuck & Schmuck, 1983; Slavin, 1986).

Given the emphasis on cooperation and group work in current educational thinking (eg. Miller & Brewer, 1986; Bar-tal & Bar-tal, 1986; Slavin, 1986), it is also not unreasonable to consider the classroom from an intergroup perspective. Clearly children within the class identify with each other at a number of levels - for example, their class title or number, various 'houses' or teams they belong to, ability groups that they are placed in either formally or informally etc.. In relation to integrated contact with children with disabilities it is possible that the child may identify with existing able class members in relation to the disabled new member. Of course it remains to be seen whether, and how salient, this identity remains over time and after contact. Or, indeed, how important it is in relation to other categories, such as gender.

Defining intergroup relations

Implicit in the utilization of the contact hypothesis as a framework for integration is the notion that the resulting encounters and relations between able and disabled children will be of an intergroup nature. I will therefore briefly sketch out the main theoretical prerequisites that have been used to define intergroup situations. In doing so I will provide hypothetical examples from the field of integrated education to illustrate the various perspectives.

Defining a situation as intergroup has been done at a number of levels of analysis from the perspective of both group processes and individual information processing. For some, (eg. Sherif, 1966; Tajfel, 1978) intergroup behaviour occurs when:

> 'individuals belonging to one group, interact, collectively or individually, with another group or its members *in terms of their group identification*' (Tajfel, 1978, p. 401).

An example to illustrate this definition can be seen in 'the class' as discussed above. It can also be seen in a feature of an integrated scheme involving two schools, an example of which was the basis for the second study to be described in chapter eleven of this thesis. Here, children from a school for children with severe learning disabilities (SLD) are integrated into a mainstream school in a planned way for two hour weekly sessions. Thus we have two groups, the mainstream school and the SLD school and children (individuals) from each interact according to their group (school) membership. Fundamental to Tajfel's conception of intergroup behaviour is for the individual, the interaction with another at level of self as a group member in relation to another different or same group member; as apposed to self in relation to another individual. If we take Tajfel's definition it therefore follows that the parties involved in an encounter have, at the cognitive level, to perceive both themselves and a target as being interacting members of different groups. Again in our example we can see how this might be the case.

Similarly, Turner and colleagues (Turner *et al*, 1987), although focusing on self in relation to interpersonal as well as intergroup situations, concur that intergroup behaviour is characterised by in and outgroup comparisons:

> 'That the attractiveness of some ingroup is not constant but varies with superordinate self-category that provides the frame of reference for intergroup comparison, the specific dimensions of intergroup comparison employed and the specific outgroups with whom the ingroup are compared'. (Turner *et al*, 1987, p. 61).

Hogg and Abrams (1990) also suggest that intergroup comparisons are fundamental to intergroup behaviour - serving to enhance self esteem through self enhancement. Intergroup behaviour they suggest,

> 'refers to the way in which people behave towards one another as members of different social groups' (Hogg & Abrams, 1990, p. 12).

A hypothetical example to illustrate this more detailed description might again be found in our integrated situation described above. Here, children from one group in an ordinary mainstream primary school, are assigned the role as helpers to the children from the other group, the SLD school. Their behaviour, helping the SLD children, is only relevant to membership of a group (being from the mainstream primary school). In addition it also requires at both psychological and actual levels the understanding that there is another group (the SLD school) the members of which need helping. Conversely, being helped is consequential to being a member of the SLD school as is seeing the members of the other group (mainstream primary) as helpers.

I ascribe the group membership to the school and not the labels disabled (DIS) or non-disabled (ND) deliberately because I think it is important that we take account of two possibilities. The first that as in the example above, school labels rather the categories disabled and non-disabled may be the most salient and often used descriptives for children, and the second that this may not necessarily be the case in other integrated settings such as schools where integration occurs within a single school). In this second type of integrated setting it may not be so easy to argue that non-disabled (ND) children perceive both in and out group. I will be pursuing this notion in more detail in the empirical and discussion chapters of this thesis. In the meantime, I would like to put forward a possibility to hold in mind. I am particularly referring to the need for recognition of both self as ingroup member (ND) as opposed to other (DIS) in order for an integrated school contact situation to be defined as intergroup. Put simply, in this type of situation does a child think or indeed have to think of herself as ND when interacting with a DIS peer? and, following on from this question, can the outgroup (DIS) be salient and not the ingroup (ND)? If the response to both of these questions is yes, can we truly define such a situation as intergroup - would a different description, personal/intergroup be more fitting? From a self categorization perspective it could be argued that the intergroup context of the situation automatically defines any encounters or relations as intergroup. Recently Abrams has defined what he refers to as 'collective context':

> 'The term "collective context" can apply to a task-focused group, an intergroup encounter, or involvement in a collectively relevant issue'. (Abrams, *in press*)

One important feature of which is that:

> 'The context may have features which affect the salience of particular self-categorizations'. (Abrams, *in press*).

This view, although going someway to address the problems of definition, is based on the assumption that even when not expressed, ingroup categorizations are an implicit feature when outgroup judgements are made.

As an extension of this perspective it has been suggested that both personal and social identity are affected by the particular situations in which a person finds themself. One example of this type of dual approach might be a union/*management negotiation* meeting (Stephenson, 1978). In this instance, the members of the meeting would be meeting as representatives of the two groups (union and management) but could very well at the same time be operating on an interpersonal level with each other. This view might well serve as a useful base from which to view integrated contact within a school. Here as an example, we might have a class of pupils all interacting on a personal level, whilst at the same time any disabled children within the class might also be treated as members of a group - disabled. This view though, still assumes ingroup membership (ND) is salient and indeed is based on research into ingroup bias.

The Social Identity (SIT) approach of Tajfel (1978), Turner and Brown (1981), Hogg & Abrams (1990) assumes a continuum of social behaviour from interpersonal through intragroup to intergroup whilst Social Categorization theory as espoused by Turner *et al* (1987) and Hogg (1992) among others, attributes:

> 'qualitative discontinuity between interpersonal and group processes'
> (Hogg, 1992, p. 114).

However, the two theories offer a similar form of analysis of intergroup behaviour.

A different though related level of analysis can be found in the work of a growing body of research into impression formation (IP). Brewer (1988, 1991) suggests that perception of intergroup and interpersonal encounters can be described by a dual process model of impression formation. In Brewer's model, impressions of others are determined by a combination of the effect of the stimulus and motivation. Responses to stimulus are automatic and determine whether further information will be required. Situational variables determine a person's motivation for, and degree of, further information seeking or gathering to confirm or disconfirm initial information. So, for example, a distinctive feature of a disabled child (eg. a wheelchair or hearing aide) might automatically trigger a stereotype of disability. How the stereotype is operationalized would depend on situational and motivational features of the encounter.

Fiske and colleagues adopt a similar approach (Fiske, 1982, 1988; Fiske & Neuberg, 1990; Fiske & Taylor, 1991). They differentiate between piecemeal and schema-based information processing, suggesting that the first, like Brewer's information processing dual model, is 'data driven' whist the second is automatic and allows for cognitive parsimony. Whilst at a first glance these two information processing approaches may seem incongruous in a discussion of intergroup encounters there is remarkable similarity between the processes they describe and the processes described by more orthodox intergroup processes theorists. However, although Fiske refers to 'stereotypic or schema based evaluations' (Fiske, 1982, p. 61), as Hogg (1992) points out, 'hers is not a theory of group behaviour' (Hogg, 1992, p. 115). Rather, as he goes on to say, 'it is an explanation of individual information processing'. There are two possible rejoinders to this criticism, I will deal briefly with each in turn.

The first might suggest, that if IP is about groups and group referents then presumably it will feed into intergroup perceptions, attitudes, and behaviours. Indeed Tajfel, that champion of social perspective, once wrote an article called 'Cognitive aspects of prejudice' (Tajfel, 1969). In response to this view, I would like to make a simple point. Being 'about groups' is not enough to qualify IP as a theory of group behaviour. If this were so, then most aspects of social psychology could be described in a similar manner. For example, attitude research looking at individuals intention to vote for a particular political party (eg. Ajzen & Fishbein, 1980) is about groups (ie. political parties), but it is seldom described as a theory of group behaviour.

A second rejoinder might be to ask, how is IP 'less of' a group theory than 'Self Categorization Theory' (Turner, *et al*, 1987)? After all, in SCT Turner and colleagues propose variants of cognitive processes to explain group behaviour. My reply to this is that IP is simply a different level of analysis to SCT or SIT. A point implicit in the title of Tajfel's paper 'Cognitive <u>aspects</u> of prejudice'. Put simply, information processing looks mainly at how individuals process sets of information and pays little attention to whether at the time the individual is involved in personal or group relations. Theories of group behaviour on the other hand, may well also <u>include</u> cognitive aspects such as IP. However, they rarely consider individuals in isolation and always include <u>social</u> aspects such as, common experience and experience of shared fate (Lewin, 1948; Campbell, 1958), social structure, (Sherif & Sherif, 1969), shared norms and values (Asch, 1952) and institutional factors (Hewstone & Brown, 1986).

As previously noted, implicit in the use of an intergroup perspective to view integration is the notion of both people with and without disabilities as distinct groups. It remains to be seen whether when traditional theoretical assumptions are applied, this can indeed be said to be the case. Having, made this point, clearly contact is a primary result of integration and the contact hypothesis is therefore a logical framework within which to evaluate its effectiveness.

THE CONTACT HYPOTHESIS

The idea that contact between members of different groups will improve relations between them is not new. In its simplest form its main premise is, that intergroup contact, especially that which involves perceived similarities, will increase the accuracy of intergroup images (Allport, 1954). However, whilst being the basis for many social policy decisions, for example racial integration in schools, housing and sport (e.g. see special edition Journal of Social Issues, 1985), the outcomes of contact have frequently been negative. For example, one only has to look at the equivocal evidence from school desegregation studies (see for example, Stephan, 1978). Furthermore, empirical evidence that identifies the most appropriate kinds of contact is in the main equivocal (eg. Schwarzwald & Amir, 1984; Schofield, 1986). Indeed, even Allport (1954) in his classic book on prejudice states that: 'The case is not so simple'. (Allport, 1954, p. 261).

Traditionally contact theory has had four main limitations:

1. Its emphasis on ignorance.
2. Its failure to generalise.
3. Its failure to take account of the augmentation effects of context such as superordinate goals, cooperation, multigroup membership and the achieving of equal status by the manipulation of "expectation" states. (Hewstone & Brown, 1986)
4. Its failure to take account of the wider social context of situations.

I will discuss these limitations briefly in turn.

The idea that intergroup contact will dispel ignorance about an outgroup and this in turn will increase knowledge and improve intergroup relations has received limited support. For example, Stephan and Stephan (1984) argued that ignorance is an important factor in intergroup prejudice. The authors suggest that intergroup relations can best be improved when the focus is on information that highlights similarities between ingroup and outgroup. This in turn, they suggest, will lead to more interpersonal liking. There are a number of problems with this view. The most obvious being that groups may in fact turn out to have very dissimilar values and attitudes (Brown, 1988). For example, as Trew (1986) points out in Northern Ireland Catholics and Protestants have fundamentally different beliefs. It also seems misguided to encourage people to believe that all others are similar and ignore fundamental differences. As a case in point, how would this approach deal with the Sikh traffic warden who is allowed to wear a turban on duty whilst others are wearing caps?

The second of the problems, generalizability, has come to be seen the most important and indeed pivotal to the other limitations. Possible reasons for this are two fold. On the one hand researchers and practitioners may well not have always ensured that the contact has taken place in a manner as to ensure generalisation of attitudes will occur, for example, by failing to take account of qualitative differences between peoples's group and personal behaviour (see Brown & Turner, 1981; Wilder, 1984). These differences in turn have important implications for research on the contact hypothesis as:

> 'Unless the contact can be characterized as intergroup (ie. between individuals as group representatives or *qua* group members), any positive outcomes will be primarily cosmetic, in the sense that they will leave divisive and conflictual intergroup relations unchanged'. (Hewstone & Brown, 1986).

The other possible reason is that terms used to describe both desired outcomes and necessary precursors of contact, have been so loosely defined that interpretation of research findings may well only be specific to the particular studies they arise from (eg. Harding & Hogrefe, 1952; Palmore, 1955; Sanger & Gilbert, 1950). Although the first of these reasons - the manner of the contact - has been addressed in recent interpretations of the contact hypothesis (eg. Hewstone & Brown, 1986; Miller & Brewer, 1984) little attention has been paid to the second. In order to examine these two issues in more depth it is useful to return to some of the classical work on the contact hypothesis and consider the development of research from there. In doing so I will address the third and fourth limitations, the failure of research to take account of additional mediating factors in contact situations and social context.

Prior to and following the landmark *Brown v Board of Education* decision which declared segregated education illegal and unconstitutional in the United States, support for contact as method of ameliorating prejudice has risen and fallen along with diverse findings of studies related to it. These contradictory findings, it was generally felt by some researchers at the time of the landmark court case, were affected by the conditions under which interaction between groups in contact with each other occurred. Allport (1954) suggested that the effects of the contact would be greatly enhanced by a number of precursors including institutional support, common goals and the perception of communality between groups. This view has grown in popularity and has come to be held by an increasing number of other researchers (eg. Amir, 1969; Cook, 1978; Pettigrew, 1971). However, despite this early awareness, integration policies failed to take account of the potential of ameliorating factors indicated by social scientists such as Allport (1954).

Let us take as cases in point early ethnic integration policy in the USA and Israel. Early integration policy in the USA failed to satisfy any of the criteria needed for success, seeming instead to blindly impose blanket desegregation *per se* with little account being taken of factors such as the different status of students and lack of both community and institutional support (Brewer & Miller, 1984). Ethnic integration of North African and European-American students in Israeli schools failed for similar reasons. Furthermore, in these schools policies of streaming students by ability - a practice destined to highlight status differences due to disproportionate numbers of North African and Asian children in lower streams could have helped the outcome of integration (Schwarzwald & Amir, 1984). Similar findings have been identified in other countries, for example in North America by Schofield (1986).

As well as the failure to take account of the important criteria identified as early as the 1950's by Allport (1954), both social policy and research into contact, also failed to take account of the social context within which contact occurred. By definition much of the research into contact is founded in social conflict situations. Surprisingly, despite the obvious origins of most social conflict in historical, political and economic inequalities much of the research has failed to address this point, tending rather to focus on the mere situational variables of the contact situation (eg. Kerr & Siegal, 1954). This omission is especially surprising when we consider the work of Allport (1954) on which most contact research is based. As already described, Allport, whilst accepting that simple contact could improve or worsen attitudes, was emphatic about the need to consider the nature of the contact situation. He considered it essential that prejudice was clearly defined within the context and climate in which it occurs. Sherif (1966), in later work, summed up this position:

> 'The intermeshing of past, present, and image of the future in human relationships is not confined to encounters between members of different groups. But for several reasons, the comprehension of here-and-present actions in intergroup encounters requires considerable knowledge of past events and future designs." (Sherif, 1966, p. 20).

Allport eschewed the notion held by some sociologists (eg. Lee & Humphrey, 1943), that contact between groups always leads to relationships best described by four simple stages; sheer contact, competition, accommodation and assimilation. Although Allport acknowledged that in everyday life this seemingly peaceful progression of events often occurs, clearly it could not be prescribed as a universal/law. Rather, it is more often a description of <u>individuals becoming assimilated on an individual basis</u> and not as members of a wider group.

In addition to past researchers' failure to take enough account of social context, another point needs making in relation to contact literature. Namely, as a method of reducing prejudice or improving attitudes, contact is, almost without exception, viewed from the perspective of the group whose attitudes 'need changing' (eg. whites attitudes towards blacks; the attitudes of people without disabilities to those with them), and more often than not, this group is of relatively higher status than the 'target group'. Furthermore, as already pointed out in chapter two, little research considers either what constitutes a good or improved attitude, or, more importantly, takes account of what the 'target group' perceives as a positive outcome of a contact situation. Hopefully the position is changing somewhat. Most researchers now acknowledge that inequalities such as status and power are obvious and important factors in social conflict situations, that they should be acknowledged as such, and that research should not trivialize their effects. For example, Hewstone and Brown (1986) state in the introduction to their book on contact and conflict:

> 'Clearly, most social conflicts have their origins deep in historical, political and economic divisions in the society in which they occur, and it would be foolish to pretend that in this area social psychology by itself had any exclusive rights to wisdom. Indeed with Billig

> (1976), we would argue that to place psychology too much in the 'driving seat' - as it were - is to run a serious risk of trivialising our *analyses of, and* prescriptions for, particular social problems". (Hewstone & Brown, 1986, p. 2).

Having said that, few researchers suggest ways that these inequalities may be reconciled.

Two contrasting models of contact

As can be seen, past research into contact failed to take account of all the features of 'contact situations. In an attempt to remedy this omission two seemingly contrasting models of intergroup contact have emerged, both of which have their roots in Social Identity Theory (SIT) (Tajfel, 1978) and which offer very different strategies for optimising the effects of intergroup contact (Hewstone & Brown, 1986; Miller & Brewer, 1984).

One, Hewstone and Brown (1986) distinguishes between interpersonal contact where *the participants' category membership is not very salient, and intergroup* contact in which the participants clearly perceive each other as belonging to their respective groups. When intergroup encounters take an appropriate form - notably, when the group members are engaged in cooperative activities with strong normative and institutional support for the recognition and value of group differences, then Hewstone and Brown argue, one can then expect the most positive outcomes in terms of more favourable attitudes towards the outgroup(s) as a whole. The other, Brewer and Miller (1984), takes a rather different approach. They argue that the key to successful contact between groups is to abandon all references to the different groups in an effort to 'decategorize' the situation. This, they believe, will lead to more interpersonal friendships forming across category boundaries and, eventually, to more positive intergroup attitudes in general.

Although both claim to have developed out of SIT, *these two approaches have taken* rather different routes - Hewstone and Brown having developed directly from traditional group and intergroup processes research background, Miller and Brewer's taking a route *via* research into individual information processing.

Brewer and Miller's decategorized approach starts from the oft described premise that when intergroup encounters occur, individuals will favour the group to which they belong, and de-individuate or depersonalise members of the outgroup - treating outgroup members as homogeneous - a situation that is ripe, Brewer and Miller and others suggest, for intergroup conflict (Brewer, 1979; Quatrone, 1986). Brewer and Miller argue, that it is the category based nature of intergroup encounters that provokes conflict. It therefore follows that if categories are broken down and encounters made more personally orientated then conflict will not occur, or at least will occur to a much lesser extent. By allowing for 'non-category based' responding individuals will then be able to:

> 'attend to information that replaces category identity as the most useful basis for classifying each other' (Brewer & Miller, 1984, p. 288).

As already described (Brewer, 1979, 1991), they propose a dual process model of information processing, encompassing on the one hand 'differentiation' and the other 'personalisation'. Individuals are motivated, they suggest, to attend to information that is relevant to themselves. In the first instance this is likely to be category based. However, categories can be defined in a number of different ways. So in relation to self, an old person might be seen as an 'old age pensioner' (OAP) or a 'grandparent' (Brewer, Dull & Lui, 1981). Intuitively it is easy to see how the personal nature of the label grandparent is likely to be less stereotypic than that of 'OAP'. After repeated encounters of a personalised kind Brewer an Miller suggest that:

> 'such contact experiences are more likely to generalize to new situations because extended and frequent utilization of alternative informational features in interactions undermines the availability and usefulness of category identity as a basis for future interactions with the same or different individuals. Thus permanent changes occur in both the cognitive and motivational aspects of social interaction with outgroup members.' (Brewer & Miller, 1984, p. 288).

Fundamental to Brewer and Miller's perspective is the effect of converging group boundaries on the salience of category-based information. Individuals can share a number of category or group memberships, for example, in the case of a the classroom these might include: gender, age, ability, sports group and class or school team. In line with Brewer and Campbell (1976), Brewer and Miller propose that if distinctions between multiple category memberships can be blurred and categories are perceived to overlap, then conflict will reduce, as apposed to situations where individuals perceive they share group membership in one area only. In this second instance the authors suggest conflict is most likely to occur. The idea that overlapping categories can be an ameliorating factor in reduction of intergroup discrimination is reflected in the work of Deschamps and Doise (1978) and

Vanbeselaere (1987). However, whether it is sufficient to reduce prejudice, as suggested by Brewer and Miller remains to be seen.

Work by Wilder (1981) on deindividuation also lends some support to Brewer and Millers position. Wilder found that individuating information effectively reduced outgroup prejudice particularly when outgroup members were perceived to respond as individuals. Similarly, Langer, Bashner and Chanowitz (1985) found reductions in prejudice towards children with physical disabilities when participating children were 'trained' to differentiate.

Brewer and Miller have with colleagues, found support for their hypothesis in a series of experimental studies (Bettencourt *et al*, 1992; Miller *et al*, 1985). In these studies, subjects were randomly assigned to groups described as either over or underestimators. After tasks in their assigned teams subjects were reconstituted into new heterogeneous teams and given new tasks. The researchers found that subjects impressions of new team members was directly affected by whether the task carried out was of a cooperative or competitive nature - cooperative personalized interactions producing the most favourable evaluations. In an attempt to measure the generalization of attitudes subjects then, in a third phase, had to evaluate unknown individuals allegedly belonging to one of the two groups. In this third phase, Brewer and Miller and colleagues found higher levels of differentiation of outgroup and less own group preference in interpersonal conditions (Miller *et al*, 1985; Bettencourt *et al*, 1992). There are a number of methodological anomalies with the design of these experiments. For example, as Vivian *et al* (*in press*) point out in a recent review of the theoretical and empirical developments in intergroup contact:

> 'Although it is clear that the interpersonal focus produced positive generalized changes, precise interpretations of these effects are still somewhat ambiguous. Because members retained large identification badges denoting initial group membership, it could be argued that categories remained salient throughout the experiment. Thus, it becomes unclear whether the generalized changes were due to the manipulation itself or some combination of social orientation with category salience. Additionally, it is not clear whether the experimental inductions were creating a truly 'personalized' form of contact, as the authors argue'. (Vivian *et al*, *in press*).

Thus, although the studies did have generalization measures of a kind, it is hard to see how any kind of generalization might be operationalized within the theoretical framework being proposed.

In addition, it does seems sensible to assume that personalization of an individual might indeed enhance liking of that individual. In Brewer and Millers terms personalization involves (psychologically) extracting that individual from a category. However, it is hard to see how generalization to another member of the category can then occur. Surely this would involve recategorizing the original target otherwise how would one decide what category to generalize to? If we follow Brewer and Millers argument one would then have to ask whether, when an individual is subsequently categorized back into their original category, liking for that individual subsequently wanes. Furthermore Brewer and Miller's analysis is at the level of the individual and one cannot rule out the notion of a group of individuals within which some attend to personal whilst others attend to category based information when faced with the same context or situation.

Hewstone and Brown's theoretical perspective directly opposes that of Brewer and Miller's. Their stance is founded in the work of Tajfel (1978) and is based on the belief that all social interactions can be located at some point on a continuum ranging from interpersonal to intergroup behaviour. They suggest that past researchers' failure to make distinctions between interpersonal and intergroup behaviour is the reason for the lack of generalization found in intergroup contact situations. They go on to propose that the many negative effects found in past research could well be attributable to a focus on interpersonal rather than intergroup aspects of a contact situation (Cook, 1978). The authors, in line with previous research by Brown and Turner (1981), submit that to focus solely on interpersonal interactions is counterproductive in terms of changing intergroup attitudes and behaviour. They suggest that:

> 'as long as individuals are interacting *as* individuals, rather than group members, there is no basis *either* for expecting any attitude change to be generalized throughout the group *or* for one person to extrapolate the positive attitudes towards one individual to other outgroup members'. (Hewstone & Brown, 1986, p. 19)

Hewstone and Brown (1986) address the issues of generalization in a model which, in contrast to Brewer and Millers's personalized approach, specifically advocates the maintenance and reinforcement of group boundaries and distinctions. In direct contrast to Brewer and Miller the authors suggest, again in line with Turner and Brown (1981), that:

> 'intergroup contact works, if and when it does, because it changes the nature and structure of the intergroup relationship - not because it permits and encourages interpersonal friendships between members of different groups.' (Hewstone & Brown, 1986, p. 34).

Brewer and Miller see the blurring or breaking down of group or category boundaries as essential to personalization and therefore generalization of attitudes. In contrast, for Hewstone and Brown group boundaries are essential - ensuring (inter)group distinctiveness, which is fundamental to their approach. Another important feature of Hewstone and Brown's model, is that the differences as well as being *emphasized*, should be valued equally, thus ensuring that social identity is not threatened by contact. When valued differences exist, along with cooperative tasks, clearly defined roles and equal status, they suggest that such a contact situation is most likely to result in improved and generalized attitudes towards the outgroup.

There are a number of studies that lend support to the role of cooperative working as an important mediator of successful intergroup contact (Brown, 1984; Brown & Wade, 1987; Deschamps & Brown, 1983). In line with findings in Educational contexts discussed in chapter two, these studies support the idea that the most fruitful outcomes are achieved when groups are differentiated and roles, *whilst divided*, are directed at cooperative tasks and the attainment of superordinate goals.

Wilder (1984) found that subjects ratings of the outgroup as a whole were significantly improved by heightening the typicality of a target in a cooperative task when the encounter was 'pleasant'. 'Pleasant' or 'unpleasant' encounters with atypical members, or unpleasant encounters with typical members did not result in generalized attitude change. These findings on typicality lend support to Hewstone and Browns 'intergroup' perspective. For them it is essential that group membership should be at least preserved and ideally emphasized in order that members should be seen as representative of their respective groups. In a similar vein, Desforges *et al* (1991) carried out an experimental study in which students participated in scripted cooperative learning sessions with (confederate) 'former mental patients'. The authors found that the students initially prejudiced views of a typical 'mental patient' were more positive after participation in the sessions and that these positive attitudes extended to 'mental patients' generally. Desforges (*et al*) suggest that these findings were caused by the imposition of the script for the cooperative task, which they say:

> 'may have constrained the interaction in such a way that the student could learn only about the confederate's ability to work on a learning task (which was probably more positive than negative-attitude students expected), but not about the confederate's friends, hobbies, likes and dislikes or the myriad other attributes that usually come out in a 1-hr interaction'. (Desforges, *et al*, 1991, p. 543)

More recently, Brown and colleagues have found some support for Wilder's findings and for their categorized model in a series of experimental studies and surveys in which they operationalized different types of contact including personal and intergroup. The studies looked at stereotypes and attitudes towards various national groups in the European Community (EC) and support was found for the intergroup (categorized) model particularly when participants were presented with typical stereotypic traits of target EC groups. For example, in a recent study Vivian *et al* (*in press*) British subjects in a cooperative situation were led to believe a German (confederate) partner was either an atypical or a typical member of their national group German. In addition the national group was manipulated to be seen as more or less homogeneous in relation to the EC Community countries. The authors suggested that:

> 'Presumably, contact with the typical member from a relatively homogeneous group is construed as more of an intergroup encounter than contact with atypical members of heterogeneous groups'. (Vivian & Brown, *in preparation*)

In line with Wilder, the authors found that cooperative contact with protypical outgroup members produced the most positive ratings of the outgroup (Germans) as a whole on both stereotype-relevant and irrelevant dimensions. However, they also found evidence that 'on certain dimensions, contact with a typical member also gave rise to more negative evaluations of the outgroup'. They posit that these findings suggest that:

> 'while a categorized form of contact may have some benefits, there may also be certain risks associated with this strategy that cannot be overlooked. One particular risk associated with a categorized form of contact is that it may induce 'intergroup anxiety' (Stephan & Stephan, 1985), especially if there is a history of intense conflict between the groups in question'. (Vivian & Brown, *in preparation*)

As can be seen, there is some laboratory evidence which supports both Brewer and Miller's and Hewstone and Brown's positions (eg. Miller *et al*, 1985; Vivian *et al*, *in press*). As yet the two models of contact are largely untested in 'real life' contexts (although Hewstone and Brown are currently carrying out field work). Furthermore, both models, and the research they stem from, have been mainly concerned with contact between ethnic groups. It remains to be seen how applicable they are to social situations involving children with and without disabilities. Having outlined the position in relation to research into contact it is useful to see how they fit in to our research domain - integrated education for children with disabilities. First though, there are some obvious differences between ethnic and disability integration and these may well have important consequences for the interpretation of findings within a framework developed in the field of ethnic relations.

RESEARCH FOUNDED IN ETHNIC CONFLICT AS A MODEL FOR THE INTEGRATION OF CHILDREN WITH DISABILITIES

There are a number of differences between ethnicity and disability. These discrepancies will be returned to in the concluding chapter of this thesis. However, because they form an important and central component to that discussion, I will highlight seven of what I see as the most salient background features to ethnic integration and consider how each relates to disability.

1. Historical

Historically the racial tensions of North America have their foundations in slavery (Pettigrew 1971). The foundations of discrimination against people with disabilities cannot be so clearly defined, although undoubtedly their low status parallels the often low status of ethnic minorities.

2. Nature of discrimination

Whilst discrimination against ethnic groups has often in the past been extremely overt, discrimination against those with disabilities has more often been of a covert nature. For instance, the existence of anti black groups such as the 'Klu Klux Clan' in

America explicitly discriminate and promote violence against black people, whilst discrimination against people who are disabled is more often seen in terms of the lack of equal opportunities, for example, in terms of access to public buildings, housing education and employment.

3. Media coverage

In fact the covert nature of discrimination against people with disabilities has been abetted by its lack of media attention (in comparison to that on ethnic groups). However when it does occur, media coverage is more often favourable towards people with disabilities than it is to ethnic groups, although also more often than not, it tends to be charity orientated (see chapters one & two).

4. Strength as a group

Because of the nature of disability those who are disabled have less group strength than many ethnic groups.

5. Symbolic racism

'Old fashioned' explicit racist action and expressed ethnic prejudice is seemingly on the decrease - possibly because of the social undesirability of overt racism (Schofield, 1986). There is increasing evidence however, that this is being replaced with a new 'modern' or symbolic' racism (McConahay *et al*, 1982). Underlying this new phenomena is the view:

> 'that Blacks are violating cherished values or making illegitimate demands for changes in the status quo'. (Schofield, 1986, p. 84)

This view is usually accompanied by seemingly unconscious, negative feelings towards minority ethnic groups and subsequently negative acts which are often justified as being beneficial to those ethnic groups. Although on the surface this would seem not to relate to disability it should be considered as a possibility. For example, there is anecdotal evidence that local residents reasons for not having a group home for people with learning disabilities built near them have included reasons such as people would not mind but they didn't think learning disabled people could cope with living on their own.

6. Attitudes and actions of the groups themselves

Many ethnic groups now emphasise their differences and in doing so achieve a high profile. Action such as marches, or events focus on, and promote aspects of various cultures (eg. the Notting Hill carnival). Again because of the nature of disability, along with the history of the 'charity ethic' as discussed in chapter two, organisations that support people with disabilities are often not run by them but by non-disabled people. In the main these organisations either emphasise the fact that 'we are all different' or they emphasise the 'sameness' (to the rest of the world) of people with disabilities. This point illustrates one of the major obstacles in changing attitudes to the people with disabilities. If they do not recognise, and act on their own salience as a group on a societal level, how are attitudes gained from contact with individuals with disabilities to be generalised to others like them? This question is starting to be addressed by disabled people themselves. A number of groups specifically for, and run by, people with disabilities have been formed in the past few years (eg. Disability

Alliance). It could be said that what is at issue in contact research is generalization in the minds of non-disabled people, therefore if they have 'disability' in their minds as a category it doesn't matter whether disabled people see themselves in the same way. Whilst this is probably so, it does seem intuitively sensible to assume that the salience of categories are also affected by how members of those categories see and present themselves.

7. Relative distinctiveness

Disability, particularly learning disability (although not so much in cases such as Down's syndrome), is often not as easily visible as membership of an ethnic group. Let us take, for example, a methodology that uses photographs to test attitudes to African or Indian people. It is obvious that as a group they would be easily recognisable. This is not the case with disability unless some visual cue (eg. wheelchair or hearing aide) is evident, or some 'bizarre' behaviour noted.

As can be seen there are a number of differences in the manifestation of ethnic and disability prejudice. Despite the continuing focus on contact as a factor in reducing prejudice and improving attitudes towards people with disabilities there has been little change in the position in respect of a solid theoretical basis for claims made by researchers. This situation reflects the diverse findings of research into contact with ethnic groups some twenty years ago. Furthermore, a number of practising educators (eg. Lindsay, 1989; Hornby, 1992), have suggested that contact may not always result in positive attitudes towards the disabled. Notwithstanding these issues, LEAs throughout the UK are writing policies for integration - the direct result of which will be increased contact between children with and without disabilities.

CONTACT THEORY, INTEGRATION & 'THE LEA'

In the last section of this chapter I return briefly to the integration policy of 'The LEA' as introduced in chapter two. My reasons for this are twofold. First it is important to consider what type of contact might result when integration occurs within 'The LEA'. Second, much of the contact literature is founded in theory and experimental paradigms. Introducing 'The LEA' policy will help to position the theory discussed in this chapter in the applied context of education. In addressing these two points I will consider parallels between features of the policy and the two models of contact.

From a pragmatic point of view children's contact with peers with SENs will in the main be directly related to how amenable heads and class teachers are to the idea of integrating children with SENs. However a distinction needs making here between children with simple learning problems, and those with moderate to severe disabilities who are likely to be integrated. It will be recalled from chapter two, that in 'The LEA' the old method of categorising SENs will be replaced with a less specific method of statement of need that will be linked to a model of four levels of support. The amount and type of contact children have with peers with SENs will also be related to the levels of support assigned to different children, as the different levels will involve different degrees of extra teacher or other helper support and possible withdrawal.

In relation to the two theories of contact 'Brewer and Miller's model seems to best fit 'The LEA' policy. 'The LEA' scheme is interpersonal, similarities are to be emphasised little mention is made in the document of differences. The procedure for statements of special need in fact involves the decategorization of type of need. A major problem with this is that although the LEA claim their model is generalizable, this claim does not seem feasible. My main reason for taking this view is founded in ambiguities around the decategorization approach. Brewer and Miller talk about what should and not necessarily what does happen. For example, they suggest that once decategorization of an individual has occurred,

> 'we no longer attend to category identity as a basis for future interactions with the same or different individuals... thus permanent changes occur in both the cognitive and motivational aspects of social interaction with outgroup members ' (Brewer & Miller, 1984).

But recent research by Yee and Brown (1988) has found that children as young as six already held consolidated concepts of individuals category membership, and indeed used them to code category based information. For example, the authors found that children categorized on a number of dimensions including gender and ethnicity, as well as *ad hoc* groups to which they had been assigned. Likewise Aboud (1988) suggests that childrens attitudes about racial categories are already formed by the time they reach the age of seven. Surely the goals of integration should be bi-dimensional: aiming on the one hand to improve the self esteem of the child with disabilities, whilst on the other, on a societal dimension improving relations between people with disabilities and others. If these goals are to be attained children's already held and category based attitudes should be applied to a category based model. Brown and Hewstone's model would therefore, by allowing for positive categorisation, bode well for the generalizability of any subsequent positive attitudes.

Notwithstanding these issues, the contact hypothesis does offer the best starting point from which to define a framework from within which to explore attitudes, awareness and prejudice towards people with disabilities. This approach is particularly relevant to education, where clear policy developments can be identified and related to theoretical models. I will therefore utilize the two models with their very different prerequisites for successful contact (see Table 4.1) and consider in what form, and how, contact best improves mainstream children's attitudes towards both known peers with disabilities and disability generally. It is hypothesised that categorised contact will be the most conducive to generalised attitude change. However, it should be noted that I do not rule out the possibility that in 'categorised' contact situations where the additional features of institutional support and valued differences are not evident then resulting attitudes may well still be generalized but may not be positive.

HEWSTONE & BROWN	BREWER & MILLER
Intergroup	Interpersonal
Category based	Based on decategorization
Generalizable to the group?	Generalizable only to the individual?
Emphasis on similarities and differences	Emphasis only on similarities
Takes account of the wider social context	Takes little account of social context

Table 4.1 Showing comparison of some of the main features of the contact models of Hewstone and Brown (1986), and Miller and Brewer (1984.)

CHAPTER 5

CHILDREN AND PREJUDICE

"What do you think about children who, say, can't walk very easily or who can't run?". - (interviewer)

"They're handicaps". - (John age 6)

"Oh. What's that then?". - (I)

"Like Steven. Steven's an handicap". (J)

OVERVIEW

In this chapter I outline and discuss literature on the development of attitudes, awareness and prejudice in young children. Considering aspects such as developmental differences in the social and cognitive abilities of children and the development of the awareness of social desirability. As has already been noted, much of the literature on which the research reported in this thesis is founded, was developed in the field of ethnic relations. Another function of this chapter is to consider the potential for theory arising out of the development of attitudes to ethnic groups as a model for the development of attitudes in different social situations, in this case disability. As in previous chapters, it is not my intention within this chapter to review all of the literature in the development of attitudes - this would be a tedious and unnecessary exercise. Rather, my aim is to present a broad picture within which to locate the developmental strand of the thesis.

Organization of chapter

The chapter is organized into four sections. In the first the background to prejudice in children is introduced and working definitions of children's ethnic attitudes, awareness and prejudice are derived and related to disability. In section two I discuss the development of attitudes and prejudice in children and consider two theoretical approaches in this area. I propose that one of these, a social-cognitive position, offers a useful framework for the developmental strand of this thesis. In the next section two features of prejudice that are specifically relevant to children are considered:

1. Whether children are capable of prejudice.
2. How can children's prejudice, awareness and attitudes be reliably measured?

Finally, in the fourth section I return to the issue of possible differences between prejudice in the domains of disability and ethnicity.

BACKGROUND

One might easily assume that prejudice in children is a similar phenomenon as, or a mirror of, prejudice in adults. Recent research does not support this idea (Aboud, 1988). Research into ethnic prejudice in adults has indicated a decrease in overtly expressed prejudice (eg. Schofield, 1986), in the case of children this does not seem to be the case (Aboud, 1988). The early appearance of own group favouring biases, particularly in majority group children, has continued to be consistently reported since the early studies of Clark and Clark (1947), (eg. see Aboud, 1988). These early studies found that very young children from majority groups had very strong preferences for their own and prejudice against other groups and similar findings are still being identified in recent work. For example, Aboud (1988) concludes, in a review of the evidence on the development of ethnic attitudes in young children, that quite young children (three or four years) are well aware of ethnic distinctions and by the age of six or seven seem to be predisposed to favour their own ethnic group over all others. Katz (1982) and colleagues report similar findings as do a significant number of other researchers (eg. Vaughan, Tajfel & Williams, 1981; Davey, 1983). More recently, Yee and Brown (1988, 1992) found that children as young as five years of age had a salient concept of ethnic categories, were strongly prejudiced in favour of their own gender groups and showed a strong preference for *ad hoc* groups in which they were placed. They also found that this ingroup favouritism was evident in all the age groups in their study.

The discrepancy between findings for adults and children poses somewhat of a problem for contact theory and the intergroup perspective outlined in the last chapter. Whilst an intergroup explanation may well be of use in explaining the overall pattern of attitudes in children between the ages of five and eleven, it may not be so useful as an explanation of developmental differences between children within this age range. Similarly, one has to ask, can established explanations of prejudice, mainly founded in work with adults, explain prejudice, attitudes and awareness in children?

In this thesis I address these theoretical deficits and test the usefulness of traditional contact theory and accompanying notions of prejudice and intergroup relations within a developmental framework. I pay particular attention to potential age and developmental differences in children's responses whilst appraising the usefulness of existing developmental research founded in the field of ethnic relations.

A logical start would be to clarify, within a developmental framework, what is meant by the word attitude and consider its relationship to the concept of prejudice. The attitudes I am interested in, are measures of what I shall refer to from now on as disability awareness. Aboud's (1988) offers a definition of ethnic awareness, where the child, in addition to being able to correctly label and identify members of different ethnic groups, recognises that:

> 'the same ethnic group possesses a number of similar attributes besides this label, and that members of different ethnic groups possess different attributes'. (Aboud, 1988, p. 7).

This encapsulates the concept of disability awareness when the word ethnic is replaced with the word disability.

As I have just said, though, what remains to be seen is whether the developmental factors preceding, and outcomes of, ethnic awareness are the same as those of disability awareness. It also remains to be seen whether, because ethnic awareness is recognised as a prerequisite for ethnic prejudice, disability awareness is a prerequisite for disability prejudice. As far as a working definition of prejudice in children goes, once again Aboud's definition in which the most salient characteristics of ethnic prejudice - negativity along with,

> 'an organised predisposition to respond in an unfavourable manner towards an ethnic (disabled)[1] group because of their ethnic (disabled) affiliation". (Aboud, 1989, p4)

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[1] My parentheses.

will suit the purposes of this chapter.

THE DEVELOPMENT OF ATTITUDES AND PREJUDICE IN CHILDREN

In chapter three a number of studies that looked at attitudes to disability were reviewed. Few of these studies, with the exception of the work of Lewis & Lewis (1987, 1988) and Gottlieb & Leyser (1981), explored theories of either why children may or may not hold negative attitudes, or the developmental aspects that might explain the processes underlying the findings.

If we look at the picture in terms of research into children's attitudes in the domain of ethnic attitudes and awareness it becomes clear that researchers are divided, particularly over the issue of the relationship between the development of children's ethnic awareness and how prejudiced they are. Some, (eg. Brand, Ruiz & Padilla, 1974; Davey, 1983) suggest that prejudice increases with age and awareness, whilst others (eg. Aboud, 1980; Zinser, Rich & Bailey, 1981) found evidence of a decrease in prejudice after the age of seven and eight years. Notwithstanding this division, as has already been noted, the weight of evidence does support a developmental stage model of ethnocentrism - particularly in white majority children.

The general picture that emerges from the literature, is best summed up in Aboud's (1988) review of the literature. Aboud suggests that clear developmental changes can be identified in childrens' expressed preference for their own and other ethnic groups. She says that children's preference for their own group starts around the age of four years, becomes most salient between the ages of six to eight and then starts to decline after children are nine years old. Accordingly she proposes that the extreme ethnocentrism of the six to eight year old's is correlated with cognitive and affective features of their development at that period. In line with traditional Piagetian theory, children of this age are at a preoperational stage - thought is moving towards the abstract from the concrete (Piaget, 1954). Paralleling these cognitive changes, children tend to focus on concrete features of other groups, such as skin colour.

In a similar vein, children's egocentrism at this time means that their attention is shifting from self to groups. Children of this age are also dominated by concrete affective processes in relation to the familiar and unfamiliar nature of other groups. Aboud concludes that, particularly in the case of white majority children, it is the combination of these three processes which facilitates the very high level of ethnocentrism in children between the ages of six to eight years and that the decrease of own ethnic group preference in older children is a result of their achieving a higher level of cognitive and affective development. Running through this research are two approaches: one cognitive and one social. I propose to utilize both of these and take a social-cognitive theoretical approach. First though, I will briefly summarize theory that has taken a cognitive perspective.

Aboud suggests one of the reasons for differences in attitude formation in younger and older children is that they are a consequence of cognitive immaturity in the younger children rather than ignorance or malice. Similarly, Katz (1982) argues that this readiness of young children to discriminate between members of different groups has its origins in their still undeveloped cognitive schema. Katz suggests categorical distinctions are made in very gross terms and the differences and complexities within categories are overlooked. When coupled with children's natural egocentrism up to the age of six or seven and the socialising influences of parents and peers, this cognitive oversimplification lends itself to an owngroup preference or favouritism. Katz's work is important in that it offers a framework from within which to view the course of children's attitude development and relates this to concepts of groups. In summary the six stages are:

1. Differentiation of others according to a defined criteria
   This stage relates to the recognition of others as different from self and the ability to relate the difference to a label or category.

2. Development of early unsophisticated concepts
   This stage is deemed to be reached when children learn to make crude judgements about others in relation to some kind of group membership. Cause(s) of others group membership is seen as internal and stable although often not correlated to outcomes.

3. Recognition of irrevocability of certain cues
   Children come to recognise that some characteristics, such as race, are irrevocable. Whilst others, such as age, will change. Along with this comes the belief that outcomes of belonging to a group are fixed.

4. Perceptual elaboration
   This proceeds from 'us' to 'them' categorizations of groups, and involves greater differentiation between groups, while intra-group differentiation is less pronounced, particularly in the case of 'out' group.

5. Cognitive elaboration
   This is the process by which concept attitudes become racial attitudes, and simply refers to the elaboration of 'incipient' attitudes into 'true' attitudes through school experiences, contact with children of other races, and contact with the attitudes of teachers and peers.

6. Attitude crystallization
   In which the child's attitudes fall increasingly into line with those in the immediate environment, thus becoming resistant to change.

Table 5.1 Summary of Katz's 1978 framework for the development of attitudes toward ethnic groups.

Support for the use of this framework for viewing children's attitudes to disability comes from the work of Lewis & Lewis (1987; 1988). It will be recalled from chapter three, that in their study, they looked at young children's attitudes to peers with 'severe learning difficulties' (SLD) after a period of integrated school contact. Within Katz's (1982) attitude framework Lewis and Lewis found that the children had reached the third level of attitude development in relation to (known) peers with SLD. The authors suggested that after only a limited period of contact the participating children clearly differentiated between themselves and the SLD children, were able to make crude judgements about them, and most of them had begun to consolidate a 'group concept' in terms of SLD - although many of them were unsure whether SLD was a characteristic like race which is irrevocable, or whether like age it would change. This last point is especially relevant in relation to possible differences between the nature of disability and ethnicity as a group concepts.

The work of Lewis and Lewis lends strong support to the use of a cognitive explanation for the development of children's attitudes to disability. When utilizing a cognitive perspective the need for 'cognitive conflict' is consistently reported in order to facilitate social and cognitive development. From the cognitive level of

Piaget (1926) who saw conflict as:

> 'a perceived senses of contradiction between what the child believes and what the world is telling the child' (Damon, 1984),

to the Vygotskian metacognitive level (Wertsch, 1985), most cognitive theoretical perspectives incorporate to a greater or lesser extent a degree of interaction. Whether this is internal in terms of interacting ideas, or, between children and peers and/or teachers, the developing child utilizes the conflict arising out of interactions to 'make sense' or assimilate new knowledge and concepts.

A social-cognitive perspective

I will make three points in relation to past research. The first, that a purely cognitive approach does not take <u>enough</u> account of mediating factors in the child's social world, nor traditionally, does it extend its definition of social development widely enough. The second, that a social approach is limited as it has, in the main, been developed with adults and as such does not allow for age differences in the way children behave. The third, that methodology for looking at children's attitudes needs to take account of age differences in childrens social and cognitive abilities. I will deal with each of these points in turn.

What I propose is that neither a social or a cognitive approach alone can account for children's attitudes, awareness and prejudice towards members of all other groups. Rather, it is only when the two perspectives are integrated and the nature of the outgroup explored that a clear picture will emerge. I also suggest that 'blanket' explanations for the wain in prejudice in children around the age of eight and nine years are also deficient in clear and consistent theoretical and empirical support.

The process of socialization begins at birth (Trevarthan, 1974; Bruner & Sherwood, 1976; Ainsworth *et al*, 1978; Dunn & Kendrick, 1982; Doise & Mugny, 1984; Schaffer, 1984) and is restricted by the culture of the social world in which the child finds herself. It should also be remembered that although parents, teachers and other adults define that world the child is not a passive, but an active participant. At the same time as these influences are occurring the child is also developing cognitively. However, as Ingleby (1986) points out, a conspicuous lack in developmental theory;

> 'is that they tend to concentrate narrowly on cognitive development, abstracted (in a thoroughly traditional way) from affect or emotion'.
> (Ingleby, 1986, *in* Richards & Light, p. 314)

Ingleby goes on to point out, as do Dunn and Kendrick (1982), the obvious but overlooked point that childhood is an extremely emotional time for both child and caregiver(s) - yet social development has mostly been analyzed in terms of cognitive rather than affective dimensions. Even recent research, whilst on the one hand acknowledging the need to account of 'the social' in social development, still leans heavily towards issues such as the infant's competencies in terms of ability to grasp, reach touch etc.. Thus, social influence is often seen as either a side issue rather than an integral part of social development, or in a sort of *post hoc* way as an explanation for children's ability on cognitive tasks (eg. Perret-Clermont, 1980). In this research I intend to address this deficit by taking a social-cognitive perspective.

In the previous chapter a model of contact was proposed from within which to view the effects of integrated education. In this chapter I have outlined existing research on the development of children's attitudes, awareness and prejudice, mainly founded in the field of ethnic relations, and suggested that there may well be developmental features in children's social development. By combining these two perspectives I hope to explore both social and developmental processes that underlie children's attitudes to peers with disabilities in schools where children with SENs are integrated. Of course, it should be remembered that school is not the only influence on children's lives. Home, parents, siblings, the media, peers etc. undoubtably play an important part in the way the child construes her life and formulates attitudes about others. In a similar vein, if we look at children's literature we can see reflected in much of it, either negative or no images of disability. As is the case with black fictional characters, more often than not, any disabilities are either associated with 'baddies', (eg. Peter Pan's Captain Hook or Long John Silver of Treasure Island in the more traditional literature, and more recently the 'goonies' in Steven Speilberg's popular movie of that name), or totally omitted, (eg. how much modern fiction includes an 'ordinary' character who happens to be disabled?). Despite the influence of all these other factors on children's development, school still remains one of the most constant features of children's lives.

The development of children's cognitive and social abilities poses a pragmatic problem in relation to the ability of children at various ages to respond to research conditions and questionnaires. Work by among others Rogers (1978) and Durkin (1986), has indicated that children's descriptions of others are directly related to the development of social cognition. For example, children of six to seven years generally focus on univariate traits, physical features and concrete and immediate or ephemeral issues, whilst older children tend to centre on more sophisticated and abstract concepts. Both Rogers and Durkin would suggest that these differences are inherently related to children's social and cognitive abilities. As such, they present a major difficulty in terms of the design of research that aims to track development, particularly in respect of the difficulty of tasks and procedures and the standardisation of research design across agebands. If we look at past research, little has addressed the relevance of various methodologies for exploring developmental effects across age bands. An explicit aim of this thesis is to redress this omission. For example, all measures and procedures were extensively piloted on children of different ages before the empirical work was carried out, and all children involved in the studies were trained to use the measures and pretested for understanding prior to their participation.

Aboud's (1988) model suggests that the so called 'peaking' of children's ethnic preference in favour of own ethnic group can only be explained by taking account of social, cognitive and emotional changes that occur around the ages of six to seven years. In terms of the child's attitudes towards disability, coincidentally, the first school years are more often than not also the first years or so of contact with children with disabilities. Similarly, recent research by Yee and Brown (1992) supports this premise. When we look at own group gender preference the picture is not so clear. There is little empirical evidence to suggest that 'peaking' of own gender preference occurs in the same way, or within the same ageband. This lack of evidence to support the idea of a general model to account for the development of prejudice in various domains suggests that we should be cautious about 'lumping' outgroups under one umbrella without taking account of the way children perceive them.

As can be seen, research does, in the main, suggest that by nine or ten ethnocentrism seems to recede somewhat (eg. Davey 1983; Aboud, 1988; Yee and Brown, 1992). As well as being a result of developmental changes, another possible reason for this has been suggested. Namely, it occurs because children become aware of the social undesirability of expressing prejudice too openly. Whilst clearly an enticing and seemingly intuitively sensible explanation, there is little empirical evidence in the ethnic attitudes research to support the notion of the development of awareness of social desirability.

Limited support for the idea can however be found in the literature on the development of gender identity. Early research into the development of sex roles suggested that sex role acquisition occurred around the age of three years with girls tending to acquire gender identities sooner than boys (Maccoby, 1967). Although, it is not clear from the literature whether gender preference develops in the same way as ethnic prejudice, nor whether the same processes underlie it. Katz and Boswell proposed, in a review of the literature on sex role acquisition, that socio-political changes in the arena of sex-roles have had a marked effect on the variability of children's gender stereotypic behaviour and attitudes (Katz & Boswell, 1986).

Clearly this proposal has implications for the growth of awareness of social desirability. Previous research in the area had in the main focused on three main features: that children had available to them a clear and consistent body of sex-role confirming information on which to build their gender identities; that parents held the most important roles in 'shaping' children's gender identity and that gender identity was fully developed in preschool (three to four years) children (Weitz, 1974). Katz and Boswell utilized Katz's (1979) model, developed to explain children's attitudes to ethnic groups, and identified three broad developmental stages of gender identification.

1. The knowledge of what gender specific behaviours were acceptable.
2. The acquisition of concepts of how females and males 'should' behave.
3. Behaving in the way males and females 'should' behave and moderating behaviour according to age.

Contrary to past research, the authors found that neither the preschool period or parental influence were the most important factors in children's sex-role acquisition. Rather, they found, in line with Maccoby and Jacklin (1986) and Bem (1989), that the most significant socializing factors were peers and media.

Coming out of this body of research are two inter-related research issues. One relates to the question of whether all children are prejudiced. The second concerns problems with measurement of that phenomenon.

RESEARCH PROBLEMS IN LOOKING AT PREJUDICE IN CHILDREN

Are all children able to be prejudiced?

I would like to make three points in response to this question. The first relates to the issue of generalizability. The second looks at just what we mean when we talk about children's prejudice and the third questions the role of social comparison in relation to children's attitudes towards different groups. Although fundamental to the concept of prejudice, negativity is not the only prerequisite. As was outlined in the last chapter, negative evaluations have to be consistent over time and situations and generalizable to other members of the group at which they are aimed. Most measures of prejudice in children do not take account of all of these other factors. More importantly, nor do they allow for the possibility that children under a certain age (7 years) are cognitively less able to generalise than older children and adults (Aboud, 1988).

If we consider the vast literature on children's cognitive development (eg. Piaget, 1953; Bryant, 1985; Doise *et al*, 1978; Donaldson, 1978; Inhelder *et al*, 1974) along with the growing body of research on the development of children's social attitudes, (eg. Aboud, 1988; Katz & Taylor, 1982), it is easy to see why there may well be developmental differences in children's behaviour and attitudes towards other groups. These differences may also be evident in children's ability to generalise from one situation to the other. For example, in terms of cognitive development, the debate on how this comes about is ongoing - from the traditionalists who adhere to a Piagetian model of developmental stages (eg. Smith, 1986), through to those who still follow broadly Piaget's conceptual framework, though are more flexible about aspects such as the rate of assimilation and accommodation of various schema (eg. Sutherland, 1992), to researchers who support an Information Processing theory of cognitive development (eg. Sternberg, 1986). Although very different, the various theories have two common features, the acknowledgement that there are developmental differences both in the way children approach tasks, and in turn in children's ability to generalize from one experience to another.

The picture painted in this chapter may well appear to have an implicit, and rather gloomy premise underlying it - that children are 'naturally' prejudiced. This is mainly because it is difficult to clarify what, within a developmental context, is meant by prejudice. This question is fundamental to research and yet is virtually unanswerable mainly because its meaning is not constant to all. Does prejudice mean: preferring ones own group above all others? A behavioral response to a (representative) member of another group? Or holding preformed attitudes about an 'outgroup' in general? I suggest, within the context of this thesis, that prejudice can be a combination of all three of these factors, with owngroup preference being the most fundamental of the three factors.

Notwithstanding this problem, there is evidence to support the notion that children do go through various stages in terms of the strength of their preference for their own and other groups. If we look at recent research on children's social development, there is strong evidence to support the notion that children from the age of four or five show strong preferences for groups that they identify with (Yee & Brown, 1988, 1992; Maccoby, 1967; Maccoby & Jacklin, 1987; Aboud, 1980; Davey, 1983). There is also evidence, however, that especially in the case of very young children (around the age of four to five) this ingroup identity is strongly linked to and affected by awareness and social comparisons of own and others' performance (Yee & Brown, 1992). This performance awareness has important implications for working in situations where children have, or are perceived to have, a diverse range of ability - as is the case of integrated education where children's ability is likely to cover a wide range (Manning & Lucking 1992). It is easy to see how, if the integrated setting is not organised and structured appropriately with clearly defined and achievable roles and objectives,

> 'Those children who perceive themselves and/or are perceived as 'worse' performers may easily develop feelings of low self-worth, lowered expectations and ensuing low motivation.' (Yee & Brown, 1988, p. 19).

These three issues are often related to the way in which research paradigms have been operationalized. One way of addressing them is to ensure that methodology takes account of them. This is something past research has failed to do.

Measures of children's ethnic prejudice

Research that has considered children's attitudes to ethnic groups has traditionally utilized a forced choice-question type format (Aboud 1988). This methodology was initially developed by Clark and Clark (1947) who suggested that black American children were prejudiced towards the majority white group and against their own, whilst white American children preferred their own ethnic group. The Clark and

Clark studies focused on attitude questions in which the children had to choose either a white (or brown) or a black doll in response to questions such as: "Which is the good doll?"; Which looks bad?"; or "Which is a nice colour?". Clearly this methodology was limited in the lack of degree of negativity or positivity of the responses because the children only had to choose between one doll or the other. In addition Clark and Clark failed to take account of the cultural climate in America at the time - it may well have been that the black American children were expressing a 'truism' in relation to how they perceived the status of blacks generally at that time. Despite this, similar research was reported in Britain in the early 80's (eg. Davey, 1983).

Two tests designed to override the limitations of tests such as used by Clark and Clark (1947) by using multiple items were Preschool Racial Attitude Measure (PRAM) (Williams, Best & Boswell, 1975) and the Projective Prejudice Test (Katz & Zalk, 1978). The first, the PRAM test, involves presenting the child with 24 racial items along with 12 'filler' gender items. Williams *et al* suggest that degree or intensity of prejudice can be measured by summing the white or black choices (according to their negative or positive nature). In its favour, the test does allow for aggregation of evaluative adjectives from a variety of contexts and to this extent could be said to demonstrate generalization from and to different contexts. It has also been found to be stable over time.

However, as with the earlier tests of Clark & Clark, each response is forced choice, thus, as Aboud (1988) points out, as with the earlier studies, rejection of one group is confounded by acceptance of the other. Indeed, research where children have been allowed to assign more than one choice has found that they do in fact choose this option, and this choice becomes more attractive the older the child is (eg. Davey, 1983; Doyle, Beaudet & Aboud, 1987). Also the moralistic nature of many of the questions, (eg. asking for a decision about a 'good' or 'bad' doll), do not allow for developmental differences in children's reasoning, in terms of the kind of moral judgements they are being asked to make (Kohlberg, 1987). In an attempt to surmount problems of confounding variables associated with forced choice type questions, a number of researchers have utilized measures that use continuous scales. These allow children to respond on a negative to positive continuum. One example of this type of test is the social distance scale developed by Verna (1981). Whilst this test does allow for problems associated with force choice type measures, generally only one evaluation is elicited so it does not allow for generalization from one context to another.

In this thesis I intend to address these deficits in past methodology by utilizing a range of different methodologies and measures. For example, unstructured tasks elicit children's initial responses, and more structured tasks do not use a forced choice paradigm, but allow children to respond about individuals and groups of peers in turn. Care is taken not to impose criteria on the children (ie. no reference is made to disability), and both disabled and non-disabled targets are included. Finally, the issue of generalization is addressed by including both known and unknown targets.

FUNDAMENTAL DIFFERENCES BETWEEN ETHNICITY & DISABILITY

In the last chapter differences between ethnicity and disability were raised. In this chapter the developmental background to research in these areas has been outlined. In this final section I return to differences between ethnicity and disability taking a developmental perspective. I will focus on three factors, considering each in relation to ethnicity. First, the salience of being non-disabled (ND), secondly, the salience of peers who are disabled (DIS), and thirdly, the role of social comparisons in relation to these two previous factors.

As well as the awareness of phenomena such as ethnicity, gender and disability *per se*, awareness of ones own identity on given dimensions has also been seen as an important factor in defining prejudice in children. This has been both in terms perceived contrasts between self and others (eg. Lambert & Klineberg, 1967), and perceived shared or common features or factors (eg. Slaby & Frey, 1975). From a developmental perspective, it is at this level that the fundamental differences between ethnic and disability awareness, first discussed in the previous chapter, may well exist. Ethnic self-identification is focused on perceptual and cognitively based knowledge that one is a member of a particular ethnic group (Aboud 1988). Similarly, other identities, such as own gender identity, are based on similar perceptual and knowledge based assumptions (eg. Maccoby & Jacklin, 1987). Whether a category of 'non-disabled', or at a finer level, '<u>able to</u> hear, walk, think' etc., is as salient in the very general way that ethnic and gender categories are is not so clear and will be examined in the empirical chapters to come.

As well as the intergroup implications of the salience of being 'non-disabled' (ND), there are clearly developmental issues. For example, in relation to disability awareness, is knowledge implicit or automatic? Are its foundations in perceptions and explorations of infancy, or, is it activated by experience with and knowledge of others who are less able? And, at what point does less able come to be perceived as disabled? The last question may go some way towards explaining differences between categories such as gender and ethnicity, and disability. I would like to propose that the former categories, ethnicity and gender, are discrete whilst the later (dis)ability is continuous, often ambiguous and usually multifaceted. Whilst seemingly obvious, this point is overlooked in almost all the developmental literature, as indeed it is in the contact literature.

I would also, like to highlight a second important and inter-related difference between ethnicity and disability. This concerns the stability and visibility of the categories. From the young child's perspective it is easy to see how very visible and salient identities and subsequent group concepts, such as gender and ethnicity are gained at very early ages. After all, skin colour is a permanent feature and comparisons between ones own and others can be easily made. It is somewhat harder to see how individual and group concepts in relation to disability are arrived at.

A further point needs making in relation to non-disabled (ND) children's recognition of their ingroup (ND) membership. As already noted, children's social comparisons are an important feature of self identity both at the individual and the group level (Ruble *et al.*, 1980; Chafel, 1986; Yee & Brown, 1988). It is possible, however, that social comparisons may not play the same part in children's awareness of their own ability. Unlike gender and ethnicity, ability is a developmental feature of childhood, from the earliest level, infancy. In other words, the child's awareness of its own skin colour and ethnic group may well be brought about by comparing herself with others. This may well not be the case with ability, particularly physical ability. For example, the infant may discover its ability to move its arm and control a mobile by accidentally knocking it and not by making social comparisons with other more mobile beings, as is more likely to be the case with ethnicity and gender. Put simply, the infant's knowledge of her ability to move her arm and the subsequent outcome, is based on a combination of a reflex movement, maturation, an accidental outcome and the realization after a period of similar incidents, of self in relation to a physical feature (Smith & Cowie, 1988).

These theoretical differences between the categories of disability and gender and ethnicity are considered and discussed in the empirical chapters of this thesis. Nevertheless, despite their importance and the fact that they are often overlooked, research based within an ethnic context offers the most promising, and indeed one of the only, frameworks presently available from within which to view the development of children's attitudes in other contexts such as disability (eg. Gottlieb & Leyser, 1981; Gottlieb, 1977, 1986, 1987; Lewis & Lewis, 1987, 1988). From an empirical point of view three questions arise out of research cited in this chapter:

1. Are non disabled children 'naturally' prejudiced towards disabled children? In other words do they automatically distinguish between and prefer non disabled groups of which they are a member to disabled groups of which they are not?
2. Are there developmental differences in children's attitudes to disability?
3. Can findings of research in the field of ethnic relations be used to explain children's attitudes to disability?

In order to address these questions a model is proposed that incorporates both social and cognitive factors in relation to children's social development. It will be recalled that this thesis has two strands running through it. Contact, as a mediating factor in children's prejudice towards peers with disabilities and the development of social attitudes. The remainder of the thesis contains empirical work that focuses on these two strands. In the next chapter the strands are pulled together and the main study on which the findings are based is introduced.

CHAPTER 6

SETTING THE CONTEXT:

Pilot work & linking theoretical and empirical work of the thesis

Interviewer:	"Do you think that its good to have a school like that?" (in which children with SENs are integrated)
Child, Jeremy (10):	"Yes, because its an influence on like the other (non-disabled) kids".

(Maras, 1988b, p. 30)

OVERVIEW & ORGANIZATION OF CHAPTER

This chapter draws together the theoretical chapters and sets the scene for the empirical part of the thesis. The chapter falls into four sections. In the first, the rationale for the study is given and the two strands of the theoretical background - children's social development and contact between groups - are drawn together. The issues being addressed and questions asked are stated. In the second section, preliminary and pilot work is introduced and a picture is drawn of the state of integration in 'The LEA' at the time the research was conducted. In the third section I briefly describe how the theoretical models of contact are operationalized in the real life context of eight mainstream primary schools. Finally, in section four the design, method, measures, stimuli and questionnaire materials are introduced. As illustrated by the quote at the start of this thesis, obtaining 'data' from children is not an easy task. In order to address some of the problems that arise in obtaining information from young children extensive pilot work to design and validate measures is introduced. The validation of these and other materials used is an integral part of this research.

BACKGROUND

A number of theoretical areas and policy issues have been introduced in the preceding chapters. In order to draw them together they are briefly summarized in this section and related to the aims of this thesis:

1. To evaluate different methods of integration currently being employed in a Local Education Authority (LEA) in Southern England.
2. To examine the implications of findings for current social psychological models of contact between groups[1] and children's social development, providing a framework within which children's attitudes towards people with disabilities generally can be viewed.

In chapter one, the issue of integration generally was introduced. In chapter two, how the general issue of integration is reflected in educational policy was considered. Current legislation means that more children with disabilities are being educated in ordinary schools. This means there will be increased amounts of contact between children already in ordinary schools and disabled children. It seems sensible to assume that this increased contact will have an effect on the attitudes of ordinary children towards people with disabilities. Existing research on children's attitudes to people with disabilities both within and outside of education suggests contact will improve attitudes (eg. Lewis & Lewis, 1987; Furnham & Pendred, 1984; McConkey *et al.* 1983). However, little empirical evidence or theoretical argument is given to support this suggestion and little or no research has focused on contact theory as

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[1] Which to date are largely untested.

an explanation for attitude change/development within this domain. This research has two strands. The first, contact between groups, the second, the development of attitude formation in children. The first strand utilises two contrasting theoretical perspectives on contact, both of which claim to be identifying the necessary conditions for contact to produce generalised attitude change. The second strand of the thesis considers developmental aspects of attitude formation such as, the development of owngroup favouritism and the awareness of social desirability in children when they are responding to situations which involve them making judgements about others. The empirical work of this thesis is set within an LEA within which current policy is to integrate children with SENs into mainstream schools.

Questions being addressed

In order to address the issues identified in previous chapters five research questions are raised:

1. What attitudes do the children hold towards particular (known) peers with disabilities?
2. What attitudes do the children hold towards the wider specific category of disability with whom they have contact (ie. HI, LD & PD[2].)?
3. What attitudes do the children hold towards the wider general category from which the children with specific disabilities with whom they have contact come (disabled)?
4. How do these attitudes affect the childrens evaluative trait judgements of:
    (i) unknown children from the specific category with whom they have contact (ie. HI, LD or PD)

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[2] Hearing Impaired, Learning Disabled, Physically Disabled.

(ii) unknown children from the wider general category (disabled)?

5. How do these attitudes affect the childrens affective orientation towards:
   (i) unknown children from the specific category with whom they have contact (ie. HI, LD or PD)
   (ii) unknown children from the wider general category (disabled)?

The empirical work of the thesis falls into three phases:

Phase I	Pilot work in which schools relating to the theoretical models are identified, and measures for eliciting childrens' attitudes and evaluations are designed and tested.
Phase II	The main study in which the bulk of the data are collected from children in schools identified in phase one.
Phase III	A follow up study which utilises an experimental design within a natural context and which is designed to add to and clarify aspects of findings from phase two.

Phase one and the background to the research is introduced in this chapter, the other two phases are covered in subsequent chapters.

PRELIMINARY & PILOT WORK

The story starts some five years ago. Exploratory work aimed at looking at the effects of the degree of integration of disabled children on mainstream children's attitudes suggested that the nature of integrated school contact young children had with peers with severe learning disabilities (SLD) may have an effect on their attitudes towards those peers (Maras, 1988b). In the study children with SLD were integrated into mainstream schools either full-time, part-time (semi) or not at all. Utilizing a similar paradigm to that used by Lewis and Lewis (1987, 1988) the attitudes of mainstream children towards peers with SLD were elicited through semi-structured interviews. An overall effect of context (integration = full, semi or none) was found, with the most positive attitudes in the fully integrated context followed by the semi-integrated context and the least positive in the no integration context. Further analysis explored the responses in terms of four attitudinal dimensions - descriptive (questions designed to elicit responses describing SLD), effects (questions designed to elicit responses on the effects of having SLD), empathic (questions designed to elicit responses showing empathy with having SLD) and causation (questions designed to elicit responses on the cause of SLD). The pattern of findings on these attitude dimensions reflected those for overall effect of context, with the highest scores in the fully integrated context followed by semi and then the no contact. These findings, although not explicitly looking at contact within a framework of the contact hypothesis hinted strongly that contact may well be a mediating factor in the reduction of prejudice arising out of integration policy for children with disabilities. Phase I of the research reported in this thesis was conducted to explore this notion in more depth and to identify and assess the relevance of the two theoretical models in the applied context of primary education.

Phase I - pilot work

A survey of approximately 100 primary schools within an area of 'The LEA' identified and clarified aspects of the wider social context in which integrated school contact occurred, as well as supplying detailed information about amounts and types of contact within each particular school. A questionnaire enabled identification of characteristics of each school that relate to the theoretical models of contact as described previously[3]. It also enabled assessment of whether institutional support for integration was high or low in each particular school - institutional support being an essential factor in the intergroup perspective being taken (Hewstone & Brown 1986). Within these models schools were identified where children with three types of disability were integrated - hearing impaired, learning disabled and physically disabled.

As discussed in chapter two, policy for the integration of children with SENs in 'The LEA' revolved around the classification of SENs within a four levels of support model for maintaining a child in the mainstream. It will also be recalled that there was some ambiguity about these four levels. Notwithstanding this ambiguity, the four levels seemed the most appropriate terminology for the survey, mainly because it was familiar to headteachers in the schools surveyed. The aims of the survey were to identify:

1. Primary schools with different numbers of children with SENs on roll and amounts and kinds of contact.
2. Different aspects of integrated schooling that relate to the theoretical models of contact outlined above.
3. Institutional support for integration and headteachers' perceptions of that support from area and county levels.
4. Headteachers' perceptions of pupils attitudes towards, and relationships with, children with SENs.

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[3] A copy of the questionnaire can be found in the appendices.

Profile of the schools surveyed

There are 81 primary schools in the area surveyed. Of these, headteachers in 53% (n=43) responded. These consisted of: 10 infant schools, 5 junior schools and 28 primary schools. The average number of classes in the schools was 7 and they ranged from schools with 2 classes to schools with 20 classes. Average class size was 26 with class sizes ranging from 17 to 31. The questionnaire was in four sections each section relating to one of the four aims of the survey. In order to get a general picture of integration in 'The LEA' data from each of the sections is briefly summarized.

Section 1 - number of children with SENs on role & amounts & kinds of contact

The reported number of children with SENs were fairly low, however, figures from an SENs audit by the LEA within six months of the survey suggested that overall the percentage of children with SENs was almost 20% - it will be recalled that 20% is the figure suggested by Warnock as being representative of the number of children with SENs at any one time. The mean number children with SENs in primary schools at each of the counties designated levels of SENs were: four at level one, one at level two and one at level three. However, there was a very large variation in the number of children with SENs at all the support levels throughout all the schools. With some schools having as many as 15 level three children whilst others had none.

Headteachers estimations of withdrawal ranged from 0 hours a week to full time. The average amount of withdrawal in schools was 30 minutes a week. Apart from withdrawal, another aspect that may well make children with SENs seem more salient as a group is if they have an adult with them in the classroom. The headteachers reported this ranged from none to six hours. All but one school indicated that all children played/ate together. Only one school said that it had a remedial or equivalent class. This is paradoxical since at least 44% of schools indicated that they withdrew children with SENs for lengths of time ranging from half an hour a week to ten hours a week. In addition, as will be seen in chapter eight, a number of the children interviewed in the main study said they were unable to play with disabled classmates as: 'they (disabled classmates) did not play outside.'

Section 2 - aspects of integration that relate to the theoretical models of contact

In this section headteachers were asked for their ideas about, and policy objectives for SENs. Responses tended to focus on statements focusing on human rights type issues,

eg. 'equal opportunities for all'; 'to learn from every aspect of the school day academically, socially, emotionally and spiritually'; 'to take their full place in society';

psychological benefits for the child with SENs,

eg. 'enhanced self esteem'

social benefits for child with SENs,

eg. 'social adjustment'

statements relating to the interpersonal model of contact,

eg. 'to be seen and/or treated as unique individual'; 'make them feel as others'.

Whilst a number took the view that integration was resource driven making suggestions such as:

> 'where needs were severe the only real objective is to save money'

Interestingly, few of the comments saw aspects such as access to curriculum as objectives and none related objectives to ordinary mainstream children. Although one headteacher did say that the main aim of integration should be:

> 'to enable all children to have access to the total curriculum at an appropriate level'.

In the main, objectives concerned issues such as, raising self esteem and children with SENs being seen as either 'unique' in some way or 'normal'. This focus on the individual is particularly interesting in relation to the theoretical models of contact being examined. When describing their policy objectives for children with SENs, approximately 24% of headteachers described these in terms of a 'differentiated curriculum'. Three schools attached policy documents all of which focused on 'differentiation' and a 'whole school policy' approach. At the time the survey was conducted 'differentiation' and 'whole school policy' were key terms in educational policy and practice, the importance of which was reflected in 'messages' from AEO, LEA and national levels. Indeed this is still the case. It is worth briefly considering at this point how they fit into the theoretical framework. Differentiation refers to curriculum <u>delivery</u> that is differentiated to fulfil the needs and abilities of each <u>individual</u> child. Whole school policy refers to policy that coherently addresses curricula delivery for the <u>whole school</u> and is integrated so that each level (class) builds on learning and experience gained in previous classes. In relation to the two models of contact (interpersonal and intergroup), it is easy to see that each of these two concepts may well tag onto the two models - differentiation onto interpersonal, whole school policy on to intergroup. Many headteachers, both in the survey and in interviews conducted since, commented on problems fulfilling both requirements adequately, some even going so far as to say writing policy, 'is an impossible task'. Comments in reply to questions about policy generally focused on notions that could be related to the interpersonal theoretical view. For example, many stressed the need to see the child as 'an individual' or as 'unique'. Often these words were used in conjunction with statements about the child being: 'special' whilst at the same time 'being treated the same'. However, a number of headteachers did express views that could be said to be in line with the intergroup (categorized) perspective. For example, responses such as: 'integration not assimilation' were given by several headteachers. Overall, responses to this question veered more towards educational issues, however, there was still a preponderance of objectives related to possible socio-emotional aspects of integration rather than educational. Headteachers were also asked about their attitudes to integration. Clearly, how the headteachers felt was dependent not just on their attitudes towards integration *per se,* but on many other external factors such as financial limitations, support from the LEA etc. that were outside their control. Several headteachers made this point in comments at the end of the section. The overall mean responses for these questions indicated that on the whole the headteachers were quite positive about integrating children with SENs. The only item on which the headteachers' indicated a more negative view was related to ordinary children gaining educationally from having children with SENs integrated into the mainstream. On balance, headteachers were mildly in favour of 'integrating all children into the mainstream' ($\overline{x}$ = 4.5) rather against placing SENs children in special schools on site ($\bar{x} = 3.2$) and strongly against provision in 'special schools away from the mainstream' ($\bar{x} = 1.9$). In terms of benefits of integration for children with SENs these tended to be more favourable in terms of social ($\bar{x} = 6.9$) rather than educational ($\bar{x} = 5.3$) gains. The pattern in relation to gains for mainstream children was in a similar direction. However, the mean ratings for both social ($\bar{x} = 5.9$) and educational ($\bar{x} = 3.9$) advantages were seen to be lower for children without SENs.

Section 3 - institutional support & headteachers' perceptions of that support

Headteachers were asked to identify areas in which the LEA at AEO level had been most helpful in terms of heads implementation of integration policies or their planning. Very few headteachers responded, however those that did said they had been most helped by courses, extra teacher allocation, and circular.

Section 4 - perceptions of pupils attitudes to & relationships with SENs children

This final section asked for headteachers' impressions of, pupils relationships with, and opinions of peers with SENs. The questions asked relate to some of the kinds of questions the children in phase two were asked. Overall, responses from the headteachers' were positive. They felt that younger children were not generally aware of peers having SENs unless they were quite marked. Older children, the headteachers suggested, would be more aware of them. They generally seemed to feel that in the main ordinary children did not mind having SENs children in classes with them although they felt that this was not the case if a child with SENs was particularly badly behaved. Most of the headteachers felt parents of ordinary mainstream children were quite happy about SENs children being integrated into the mainstream. However, several headteachers felt that there were a few parents who might be concerned about the amount of teachers time children with SENs might take up. A number of headteachers felt class teachers would not be so happy about integration. Suggestions as to why this might be focused on issues such as, class teachers not knowing what to expect, or feeling that they were under resourced to cope with children with SENs. Generally, headteachers felt that children would be kind to peers with SENs although several again brought up the issue of behaviour of children with SENs i.e. if behaviour was disruptive ordinary children would not be so kind. When asked about incidences of bullying, heads felt that children with SENs were either not bullied or at least bullied no more than any other children. In terms of play headteachers generally felt that ordinary mainstream children would play with children with SENs and that a few friendships would continue outside of school though less than with children who did not have SENs.

Implications of the survey for phase II of the research

As can be seen, overall, headteachers were relatively positive about integration although it became clear from the survey that the children identified were, in the main, already in mainstream schools and NOT those previously segregated. It also became clear, after discussions with the LEA, AEO and other professional including headteachers, that, in addition to children with less severe SENs such as literacy and numeracy problems, there were children with three types of more specific disability most commonly integrated: hearing impairment (HI), learning disability (LD) and Physical disability (PD). In the literature, the disability most researched was LD. The survey provided information about the integration of children with HI, LD and PD. This offered an ideal opportunity to include type of disability integrated as an additional independent variable. Both anecdotal evidence from the schools and authority, along with past research (see chapter three), seemed to be pointing to differences both in how children with these three types of disability might be integrated, and in subsequent attitudes of mainstream children with whom they would have contact. I therefore decided to include eight schools in the study. Two schools in which there was no contact - these would serve as control schools. Two in which HI children were integrated, two in which LD children were integrated and two in which PD children were integrated. In order to test the models of contact within each of the three pairs of integrated school, one school that was taking a categorized approach and one where a decategorized approach was being used, were identified within each pair.

THE EIGHT PARTICIPATING SCHOOLS

Three models of integration within the LEA were identified:

1. Where no obvious integration is taking place **(control schools - no contact).**
2. Where integration is taking place but where children with disabilities are not clearly identifiable to their mainstream peers as being members of a wider group **(interpersonal contact - decategorised).**
3. Where integration is occurring but where children with disabilities are clearly identifiable as members of a group of similar others **(intergroup contact - categorised).**

In the survey four schools were identified that fitted our models of contact. Three of these adopted an intergroup (categorized) approach to integration, one to integrate children with HI, the second to integrate children with PD and the third to integrate children with LD. In addition, a school that adopted an interpersonal (decategorized) approach to integrating children with LD was preliminarily identified.

In order to complete the research design we also needed to identify a school that took an interpersonal (decategorized) approach to integrating HI children and a school that adopted the intergroup (categorized) perspective for integrating PD children. In order to do this we went to other areas of the LEA and identified matching schools. These were of similar size, socio-economic class and type of area. Two control schools were then identified, and again these were matched on as many indices as possible. For example, number of children on role, physical layout of school, gender of teachers, demographic features such as area.

Below is a table (6.1) illustrating some of the criteria that helped to identify contact as either interpersonal (decategorized) or intergroup (categorized), in this case in schools where HI children are integrated.

CATEGORIZED CONTACT	DECATEGORIZED CONTACT
Group <u>and</u> individual differences and similarities are acknowledged.	Only individual differences and similarities are acknowledged.
HI unit is in separate building from mainstream school.	HI unit is in same building as mainstream school.
Reverse integration takes place on a regular basis.	Reverse integration does not take place on a regular basis.
Young HI children are actively encouraged to wear body worn hearing aides.	Young HI children are actively discouraged from wearing body worn hearing aides.
HI is discussed with mainstream children as a matter of course and they are given information such as how to communicate with HI children.	HI is <u>NOT</u> discussed with mainstream children as a matter of course and they are given little information such as how to communicate with HI children.

Table 6.1 Examples of how the two models were operationalized in HI schools.

The identification of categorisation (or not) was crucial to the design of phase II and there were limitations in the extent to which schools could be matched. Initially type of contact was assessed by looking at the visibility of SENs children along with criteria such as school size, significant numbers, and spread across classes of children with SENs at support levels two and above. Visibility in terms of withdrawal, adult helpers, and obvious sensory, physical or mental impairments that require aides such as wheelchairs or hearing aides was also considered. As a result of the survey these aspects were identified. However, it became clear from the survey that a purely quantitative approach was not sufficient to identify the type of integration we were looking for.

The next step of the research involved visiting schools initially identified and re-evaluating them to ensure that they fulfilled these criteria. Thirteen schools were visited and evaluated. As part of this evaluation both headteachers and teachers were interviewed along with any other appropriate adults such as special needs teachers etc.. Because this part of the pilot work was so crucial to the design at least two further follow up visits were made to schools thought to fit into the models. Summarized below are brief descriptions of the eight schools that finally participated in the research[4] with particular reference to aspects of each that allowed the type of integration to be described as categorized or decategorized.

Schools where HI children are integrated

Categorized HI school - (CatHI)

Mainstream children on roll:	310
No. at support level 1:	87
No. at support level 2:	21
No. at support level 3:	3
No. HI Children integrated:	15
No. HI children in HI unit:	19
Age range of mainstream children:	5 - 11 years
Age range of HI children:	Nursery - 11 years
Buildings:	Post 1950 with mobile classrooms on site.

Teachers: 10.5 mainstream; 1 headteacher (female); teacher in charge of the unit for HI children + 4 full time staff for HI children in 'the unit'.

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[4] Details are as of June 1989.

This school is on the outskirts of a large town in a semi urban area. It is in a culdesac of a very busy main road and serves a mixed catchment area which includes a large local authority estate as well as a prosperous residential area. A significant number of parents are transient as they are stationed at a large public service establishment nearby. The HI children do not all come from the catchment area but are drawn from an approximate fifteen mile radius. There is a unit for hearing impaired children on the same site (HIC unit) in a <u>separate unit</u> in temporary classrooms. The HIC unit is run by a teacher in charge who has complete autonomy in terms of provision for the HI children. Both the teacher in charge and the headteacher emphasized an ethos that recognized and acknowledged group <u>and</u> individual differences. Reverse integration took place on a regular basis and was encouraged. Younger HI children were actively encouraged to wear body worn hearing aides. Both the TIC and the Headteacher felt it was important to discuss HI with the mainstream children prior to integration although both acknowledged that this did not always happen. Mainstream children were encouraged to ask for information about HI and were given basic information about communicating with HI children. A school policy document for SENs was available and had very clearly defined aims for both identifying existing children with SENs and integrating HI children. This document includes a list of essential points in relation to integrated HI children.

Decategorized HI school - (DecatHI)

Mainstream children on roll:	310
No. at support level 1:	30
No. at support level 2:	30
No. at support level 3:	1
No. HI Children integrated:	18
No. HI children in HI unit:	23
Age range of mainstream children:	5 - 11 years
Age range of HI children:	Nursery - 11 years
Buildings:	Post 1950 with mobile classrooms on site.

Teachers: 11 mainstream; 1 headteacher (female); 1 teacher in charge of the HI children; 3 full time staff for HI children.

The school is situated approximately 2 miles from the centre of a large seaside town a small distance from a motorway. Although countryside can be seen from the school it is surrounded by a dense mixture of housing - some local authority and some private. The school serves a large armed forces base and a significant number of children are transient as they come from this base. The HI children come from a very wide area some from up to 15 miles away. There is a unit for hearing impaired children and this is situated within the mainstream school buildings. The HIC unit is run by a teacher in charge who has complete autonomy in terms of provision for the HI children. Both the teacher in charge and the headteacher emphasized an ethos that is based on individual differences between all children and a de-emphasis of differences such as HI. Reverse integration is not encouraged and although the headteacher indicated on a questionnaire that mainstream children should be told about 'handicap', both the teacher in charge and the headteacher said on a number of occasions they thought this would have a negative effect on mainstream children's attitudes and it was not practice therefore to talk about HI to them. In the same vein younger HI children are actively discouraged from wearing body worn hearing aides in order to de-emphasize their deafness and assimilate them into a 'hearing world'.

Schools where LD children are integrated

Categorized LD school - (CatLD)

Mainstream children on roll: 359

No. at support level 1: 48

No. at support level 2: 20

No. at support level 3: 13

Age range of children: 5 - 11 years

Buildings: Older pre-war with post 1950 additions.

Teachers: 11 mainstream; 1 headteacher (male); 1 teacher with responsibility for SENs.

This school is a church school situated in a semi-urban area on the outskirts of a large town. Although the immediate area contains a large number of local authority dwellings a significant number of children travel some distance to the school because of parental wishes for denominational education for their children. The proportion of children identified at the LEA levels 2 and 3 of support was significantly higher than in the general trend. The ethos of both the headteacher and the teacher with responsibility for SENs was on recognition of SEN and withdrawal from the mainstream for regular periods of teaching - much in the way the traditional remedial class system worked. In classes children were grouped according to ability and an ethos of helping those who 'are not so clever' was encouraged.

Decategorized LD school - (DecatLD)

Mainstream children on roll:	340
No. at support level 1:	19
No. at support level 2:	23
No. at support level 3:	23
Age range of children:	5 - 11 years
Buildings:	Post 1950 with mobile classrooms.
Teachers:	11 mainstream; 1 headteacher (male); 1 teacher with responsibility for SENs.

This is a church school in the centre of a small town which is near to a number of heavily populated larger towns. The catchment area is mixed consisting of houses attached to industrial plants and more prosperous 'commuter belt' properties. A number of children travel some distance to the school because of parental wishes for denominational education for their children. The proportion of children identified at the LEA levels 2 and 3 of support was significantly higher than in the general trend. The ethos of both the headteacher and the teacher with responsibility for SENs was on the assimilation of children with SENs, this is reflected in statements such as:

> 'I do not contribute to withdrawal/remedial/sink class philosophy'

that were made by both the head teacher and the teacher with responsibility for SENs.

Schools where PD children are integrated

Categorized PD school - (CatPD)

Mainstream children on roll: 333

No. at support level 1: 62

No. of PD children on roll: 16

Age range of children: 5 - 11 years

Buildings: Site spread out and linked with covered passages - post 1950.

Teachers: 12 mainstream; 1 headteacher (female); 1 teacher with responsibility for SENs; NTAs with PD children in classes.

This school is on the edge of a large town in a mixed catchment area with private dwellings and local authority housing. The headteacher suggested that a number of the private householders in the area chose not to send their children to the school. Because the school is designated to take children with PD, many of the PD children do not come from the surrounding catchment area. The PD children are withdrawn both for teaching where necessary, and also for physical therapy. The ethos of the school is on small group withdrawal for all SENs and its stated aims include the recognition and value of group differences. The school has close contact with a member of a charity for people with physical disabilities. One consequence of which involves children being shown a film on aspects of, and information on, physical disability.

Decategorized PD school - (DecatPD)

Mainstream children on roll:	296
No. at support level 1:	76
No. at support level 2:	49
No. at support level 3:	8
No. of PD children on roll:	16
Age range of children:	5 - 11 years
Buildings:	Split site with separate though close infant and junior departments - post 1950.
Teachers:	13 mainstream; 2 headteachers (female); 2 teachers with responsibility for SENs; NTAs with PD children in classes.

This school is on a split site. With the infant and junior departments in separate but close buildings. It is on the outskirts of a large town, in the centre of a large local authority estate of flats and houses. It has a large number of children from single parent and unemployed families and this is reflected, suggested the Headteachers, in the high number of levels 1 and 2 children identified. It also has a similar number of children from private dwellings which border the estate. Because the school is designated as a school for PD children, they do not come from the immediate catchment area but are drawn from an approximate 20 mile radius. The ethos of the school is very firmly on assimilation as is illustrated by the following two quotes from the headteachers:

> 'most children have some kind of SENs or other so they don't notice the PD children'.

> 'the Lions wanted to take the PD children on a special trip, but we could'nt allow that, it would mean the PD children were identified as special, different, we really don't hold with that, with singling them out for special treatment, well it would make them feel different would'nt it. It would make the other children (ND) wonder why they were getting special treatment'.

Despite this very firmly held view that assimilation is the best way to integrate children with PD, almost all of the PD children are withdrawn for periods of time from 10 to 30 minutes for physical therapy.

The anomaly between practice, policy and ethos, outlined in the PD decategorized school is an important one to note. It was reflected in many of the schools and made identification of the different types of contact problematic. For example, although the initial quantitative approach of the survey identified schools with numbers of children with the various disabilities on roll, follow up visits and interviews with staff found that policy, ethos and practice were often not correlated, either with each other, or indeed, the quantitative data from the survey. I would like to state at this point therefore that my criteria for defining the contact situations was primarily based on stated aims, policy and ethos. Anomalies were noted and these will serve to aid discussion of findings in the concluding chapter.

Control schools - no contact

The six schools with contact were located in or near built up areas, from a small town to the outskirts of large towns, in three areas of the LEA. None of the schools were in the centre of a large town or city. The children were mainly from working and middleclass families. To reflect these and other features of the contact schools, two control schools were chosen to participate from two of the three areas of the LEA. The main criteria for deciding on control schools were: number of children on roll; lower than average number of level 2 and 3 children identified; style of building, environment and catchment areas of schools. Obviously, in the final analysis it is impossible in applied research such as reported in this thesis to match contexts with the same rigidity as would be the case with experimental studies. However every effort was made to match the schools on as many variables as possible. Details of the two control schools are given in Table 6.2 below.

Feature	Control schools	
	School 1	School 2
No. on roll	254	387
Headteacher	Female	Male
Teachers	10	15
No of level 1 children on roll	17	18
No of level 2 children on roll	15	12
Catchment area	Situated on the outskirts of large town. Serving mainly middle class area but with some local authority housing.	Situated in centre of large village. Serving a mixture of local authority and private housing also a number of transient children of travellers and agricultural workers.
Age range of children	5 - 11 years	5 - 11 years
Environment	Post 1950 buildings spread out and linked.	Old pre war buildings with mobiles on site.

Table 6.2 Features of the two control schools

To recap, a main aim of phase II will be to look at the generalisation of children's attitudes towards people with disabilities generally as a result of integrated school contact with peers with SENs. In order to do this the two theoretical models of contact are being utilized. One takes an intergroup (CATEGORIZED) perspective. The other takes an interpersonal (DECATEGORIZED) stance. These two models are reflected in the research design, which considered children's attitudes to disability in eight LEA primary schools. Two age groups - infant 5 - 7 years and junior 8 - 11 years were looked at as these are thought to be critical in terms of social development. Finally there will be control groups at the two ages, consisting of children with little or no known contact with peers with SENs.

Experimental design

The complete experimental design employed three between subjects factors; age(2) x sex(2) x type of disability(3). Additionally, within control schools where there were <u>no</u> children with disabilities there was a between subjects 2 factor design: age(2) x sex(2).

		De-categorised contact (n)			Categorised contact (n)		
Age	Sex	HI	LD	PD	HI	LD	PD
5-7 years	Female	8	8	8	8	8	8
	Male	8	8	8	8	8	8
8-11 years	Female	8	8	8	8	8	8
	Male	8	8	8	8	8	8

Table 6.3 Showing 2(age) x 2(sex) x 3(type of disability) design within experimental schools.

		No contact	
Age	Sex	School 1 (n)	School 2 (n)
5-7 years	Female	8	8
	Male	8	8
8-11 years	Female	8	8
	Male	8	8

Table 6.4 Showing 2(age) x 2(sex) design within control schools

Ethics and confidentiality

In line with current BPS guidelines, LEA and school policy and good practice the following steps were taken to ensure the research was ethical:

1. No schools or individuals were identified either to the LEA or any other parties.
2. Permission was obtained from Parents, Headteachers, and class teachers prior to children being interviewed.
3. The procedure was explained to all children interviewed and their consent obtained prior to their participation.
4. Data and other material made available by the LEA or individual schools is confidential and was be treated as such.

In addition, in line with practice in a number of participating schools at the time the research was conducted, police vetting was carried out on the researchers carrying out data collection, with their permission. A decision was also made prior to the start of data collection on steps that would be taken should a child reveal information on matters pertaining to their personal safety. It was agreed that should this happen the matter would be discussed with Pam Maras and Rupert Brown. If they, in turn, felt the matter was sufficiently serious then they would discuss it with the headteacher in the school concerned. Similarly if in the course of the procedure a child was uneasy about undertaking any of the tasks she would be reassured, if still uneasy or upset the procedure would be stopped. The child would then be reassured by chatting generally and escorted back to their classroom, the incident noted and Pam Maras or Rupert Brown informed. In fact neither of these instances occurred.

DEVELOPMENT OF MEASURES & STIMULI

Stimuli

Various stimuli were pretested[5]. Piloting determined that the most effective form of stimuli were photographs of known / unknown, disabled / non-disabled children[6]. Photographs were taken of 12 children from each designated class[7] - 10 of which were randomly selected, two of which were children with either HI, LD or PD. In control schools all twelve children were randomly selected from each designated class. In order to measure generalisation, photographs of 12 unknown children[8] - two children with learning disabilities (Down's syndrome), two children with physical disabilities (in wheelchairs), two children with hearing impairment (wearing body worn hearing aides) and six children with no disabilities who were matched with the

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[5] Examples of the stimuli can be found in the appendices.

[6] Examples of these can be found in the appendices.

[7] Referred to from this point as known classmates (KC).

[8] Referred to from this point as standard stimuli (SS).

disabled children on indices such as sex, hair colour, smile, gesture and posture - were taken and were standardised for size, background etc.. The standard stimuli were extensively piloted prior to adoption to ensure that:

1. Children in the age range of the study (5 - 11 years), all recognized that some of the children were 'disabled'.
2. Children in the age range of the study were able to differentiate between the different disabilities.
3. The stimuli were indeed matched on the indices already described.

Photographs of the unknown children were black and white in order to eliminate as many extraneous factors as possible. Financial limitations meant that the class photographs were coloured. However, background lighting and other factors were kept constant as far as possible for these.

Measures - affect and evaluation

Further pilot work was carried out with children from a mainstream primary school within the LEA. One new measure (how much of) was designed, and an existing measure (Yee and Brown, 1988) (affect) was modified. The reliability of both was tested. The first, a 5 different sized balloons scale was designed for measuring amount. The second a 5 happy/sad faces likert type scale was modified for measuring affect.

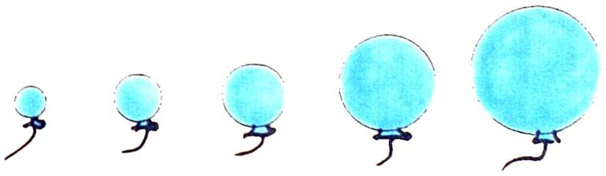

Figure 6.1 Balloon measure of 'amount of'

Figure 6.2 'Smiley face' Measure of affect

These two measures were piloted. The procedure[9] for this involved the 40 children (20 infant & 20 junior) being shown pictures of ten well known television characters. The characters were chosen after piloting determined that some were preferred by boys (eg. Ninja Turtle), some were preferred by girls (eg. Fred Flintsone) and some were preferred or disliked equally by both girls and boys (eg. Ed the Duck & Terry Wogan). Piloting also determined that there were no age differences in the children's preference for the characters. Each child had to use the 'smiley face' 5 point scale to indicate how much they liked each character. They then used the 'balloon' 5 point scale to estimate how tall each one was. No correlations were found between the mean scores for 'like' and height of the ten characters.

In order to show that the measures discriminated between stimuli and that the children used the two measures differently a manova was carried out on the ratings of like and height for each character. This had two 'within subjects' factors Stimuli (the 10 TV characters) and Measures (like & height) and two 'between subjects' factors Sex (f & m) and Age (infant, junior) of participating children.

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[9] The same procedure was also used to train the children in the main study to use the measures prior to their participation.

There were no effects for age therefore ratings were collapsed across the two age groups. As can be seen from the table of means below (Table 6.5) the children differentiated significantly between the two measures when they used them to estimate like and height of six of the characters. There were no effects for sex of the children in terms of estimation of height, although as expected there were some sex differences in how much the children liked the various characters. Figure 6.3 illustrates how clearly the children did differentiate using these measures by taking the shortest and tallest characters who also happened to be the most and least liked respectively,

'TV' CHARACTER	LIKE ($\bar{x}$ rating - 5 point scale)			HEIGHT ($\bar{x}$ rating - 5 point scale)		
	Girls	Boys	Overall	Girls	Boys	Overall
Ninja Turtle	2.8	4.4	3.6	4.1	4.1	4.1
Fred Flintstone	4.3	3.3	3.8	2.9	2.8	2.9
Garfield	4.2	3.7	3.9	2.1	2.0	2.1
Ed the Duck	4.1	4.1	4.1	2.5	2.8	2.6
It	3.1	3.3	3.2	2.9	2.6	3.3
Cilla Black	3.5	2.6	3.0	4.4	4.6	4.5
Timmy Mallet	3.6	4.1	3.8	4.1	4.5	4.3
Nick (from Neighbours)	3.5	3.6	3.5	4.3	4.3	4.3
Rolf Harris	3.8	4.1	4.0	4.6	4.6	4.6
Terry Wogan	1.7	2.1	1.9	4.6	4.6	4.6

<u>Significant findings</u>
Stimuli $F(6,142)=13.2$***; Sex x Stimuli $F(6,142)=2.76$**;
Measures $F(1,38)=5.05$*; Stimuli x Measures $F(9,342)=34.95$***;
Sex x Stimuli x Measures $F(9,342)=2.66$**.

Note: ***p .001; **$p < .01$; *$p < .05$.

Table 6.5 Table of means for like and height of TV characters

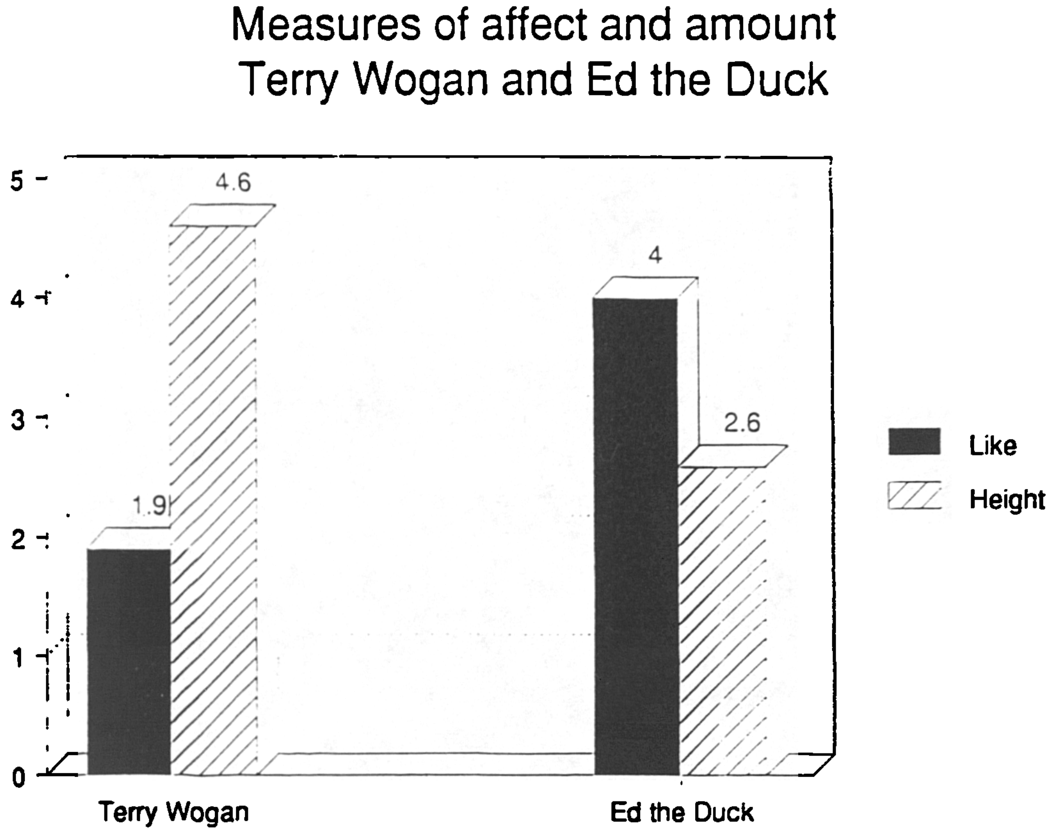

Figure 6.3 Pilot test of measures of affect and evaluation.

Measure - sociometric choice & preference

A final measure was designed and piloted. In the main study stimuli photographs are used, this measure involved children posting the photographs into differently marked post boxes to indicate how much they would like to play with known and unknown children with and without disabilities. The boxes were marked 'all the time', 'a lot', 'sometimes', 'not much' or 'never'. Piloting of this measure involved 40 children in the pilot school posting pictures of various objects and other stimuli first into a seven postbox scale and then a five postbox measure. No formal analysis was carried out on this pilot work as it became immediately obvious that a number of the younger children were unable to use the seven box scale whilst all of the children were able to cope with the five boxes. In addition, initially the boxes were only labelled with words. As a number of the younger children were unable to read, the balloon measure already piloted, was stuck onto the front of the boxes (see figure 6.3).

Figure 6.4 'Postbox' measure of sociometric choice & preference

Questionnaires

Utilizing data from the survey, along with the additional pilot work, three questionnaires for use in phase II were designed and tested:

1. <u>Children</u> - to elicit in a semi-structured interview children's pre-existing stereotypes and attitudes towards and about disability.
2. <u>Children</u> - to measure affect and evaluation and sociometric choice & preference of known and unknown children with/without disabilities.
3. <u>Headteachers/teachers and non-teaching assistants</u> - to measure institutional support for, and attitudes towards, the integration of, and classroom practice in respect of disabled children into the mainstream[10].

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[10] The number of responses for this questionnaire prohibited formal analysis. However, data from these questionnaires are incorporated into the final chapter and serve to supplement and add to the general discussion of findings.

As can be seen, extensive pilot work addressed measurement problems in past research discussed in chapter five. The measures were found to be reliable and valid (eg. discriminatory). Furthermore, they were found to be appropriate and understandable for all children in the primary school age band.

Phase II - the main study

Method

Data were collected from the children over a three month period in order to minimise effects such as time, changes in policy etc.. Forty-five minute sessions were conducted with 256 primary school children.

Participants (n = 256)

32 children were randomly selected from 4 classes: 16 children aged 8 - 11 years (junior) and 16 children aged 5 - 7 years (infant) in eight primary schools. They were drawn from four classes in order to minimise the effects of idiosyncrasies of schools, classteachers, classes and individual children. Participation was entirely voluntary and letters were sent to parents of ALL children in classes from which children were selected.

1. Categorisation: Sorting tasks

The children sorted the photographs (12 SS and 12 KC) into piles in an unstructured sorting task.

2. Affective orientation: 'Play with' task

The children indicated (using the 'postbox' measure of sociometric choice and preference previously described) how much they would or would not like to play with each of the children (known/unknown disabled/non-disabled) on the five point (post boxes) scale - always, a lot, sometimes, not much, never. It should be noted that these data are of individuals. Data in the last task will explore attitudes explicitly towards groups.

3. Semi-structured interviews (tape-recorded)

Semi-structured interviews were carried out with each child. The aim was to elicit pre-existing stereotypes and attitudes about disability. First, about disability generally and then specifically about hearing impairment, physical disability and learning disability. The tapes were transcribed and existing methods of content analysis carried out to analyze them. The qualitative data from the tapes will serve to supplement the findings of quantitative data.

4. Measures of affect and evaluation - 'Smiley' face and 'balloon' tasks

The children used the specially designed scales (affect = likert type 1 - 5 and how much of 1 - 5) to respond to items on a questionnaire. The first question measured like (affect), the remainder measured psychological and physical attributes (stereotypes) of unknown children (disabled and non-disabled). To elicit these responses the unknown stimuli photographs (SS), were used and modified to show the children in pairs and groups.

Observational data

In addition to the three tasks and interview described above. Simple observational data were recorded. These noted aspects such as: classroom environment, numbers of teachers and numbers of non teaching assistants. Unstructured observations were also made in free periods and/or playtime. Constraints of time, the *ad hoc* nature of the observations and the large amount of data already collected using the other measures precluded formal analysis of observational data. A number of observations are however, incorporated into the empirical and discussion chapters of this thesis. Although of an anecdotal nature they do serve to complement and add a further dimension to more concrete findings. They also served to confirm identification of the different types of contact situation.

Format for presentation of data

The empirical work of this thesis is presented in the following six chapters. In chapter seven, findings of the first part of the main study - the categorisation (sorting) tasks are presented. Multi-dimensional scaling techniques (alscal) are used to provide a picture of the criteria children in the different age groups and the different types of school used to categorise known/unknown and disabled/non-disabled children.

In chapter eight, analysis of the children's affective orientations is discussed. These data were obtained with 'the post box' measure described earlier. Again the relationship between these and the type of contact is explored. It is noted that data is of friendship with known individuals and estimated friendship with unknown individuals.

In order to explore the 'groupness' of the children's attitudes, chapter nine introduces data obtained using the 'smiley face' and 'balloon' scales and considers the childrens' judgements about pairs of unknown children with disabilities. The importance of the relationship between judgement of one type of disability and another is presented.

Chapter ten presents qualitative data which help to understand the findings from the quantitative data presented so far. The nature and content of children's attitude responses to questions about disability generally and particular types of disability are considered with particular reference to age differences in the type of responses the children make. This qualitative analysis utilizes a coding framework specifically designed to consider the children's responses on four dimensions: descriptive, effects, affective and empathic.

Chapter eleven introduces Phase III of the thesis - the 'natural experiment'. The experiment explores and builds on issues raised in the main study. New literature on social judgements is briefly considered and integrated into the theoretical framework. The effects of controlled contact situations over time on children's attitudes are considered, and the policy implications of structured integrated sessions are evaluated. Perceptions of homogeneity over time - an area hitherto not investigated in children - are measured, and aspects of the Social Judgeability model are tested.

CHAPTER 7

CATEGORIZATION - THE SORTING TASK

Int:	"Why did you put this picture here?"
Child:	"He's one of them handicaps".

(J. infant boy HI decategorized school)

Int:	"Why did you put the pictures in the piles you did?"
Child:	"There girls, there boys & there handicaps".

(P. junior girl HI categorized school)

OVERVIEW

In this chapter, findings of the first part of the main study - the unstructured categorization (sorting) tasks are presented. These data are from the first task the children carried out. The task was intentionally unstructured - it will be recalled that before moving on to getting more structured information we wanted to get a global picture of how the children would categorize both disabled (DIS) and non-disabled (ND) classmates, and disabled and non-disabled children of a similar age who were unknown. Multi-dimensional scaling techniques (alscal) are used to give a descriptive picture of the criteria the children use to categorize known and unknown DIS and ND children. Multi- and uni- variate statistics are then applied to explore more precisely developmental and other differences in the children's sorting strategies. It is in this chapter that the two threads of the thesis start to be drawn together. On the one hand the data are examined for developmental trends to see if children of infant (5+) and junior (8+) age categorize, and if there are developmental differences in the way they do this. On the other hand, consideration is then given to the nature of the contact (ie. interpersonal, decategorized; intergroup, categorized; or none[1]) within which the task is conducted.

The issue of generalisation of attitudes is introduced and data on categorization of individual known and unknown DIS and ND peers are compared, again within schools *with the three types of contact (CAT, DECAT & NONE).*

ORGANIZATION OF CHAPTER

In this chapter, and throughout the remainder of the thesis, findings are presented by school (ie. type of disability HI, LD & PD) and type of contact (ie. CAT, DECAT & NONE). In addition age and sex of child are included where appropriate. Where data from children's sorting of known and unknown stimuli are presented, sorting of known stimuli (KC) are presented first and then unknown stimuli (SS). To further aid understanding, certain conventions and abbreviations are utilized for many of the tables. The format is consistent throughout. In its most complete form, data are presented by[2]:

- School
  Type of contact (decategorized (decat), categorized (cat), none).
  Type of disability integrated [hearing impaired (HI), learning disabled (LD), physically disabled (PD), control (no integration)].
  Sex - girls, boys.
  Age - infants (inf), juniors (jun).

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[1] DECAT; CAT: NONE.

[2] Where conventions other than these are used they are explained in appropriate text.

A number of other abbreviations[3] are also used:

- DIS - disabled.
- Aff. - affect.
- relate - look related.
- clothes - clothing.
- Physical - physical features.

METHOD

Stimuli

Stimuli were the individual photographs of known (KC) and unknown (SS), disabled (DIS) and non-disabled children (ND). The stimuli are described in chapter six and examples can be found in the appendices.

The sorting task

The children sorted the individual photographs - first the 12 KC, and then the 12 SS stimuli photographs. This sorting was introduced as a game. The class photographs were laid out in front of the child in a predetermined random order and the interviewer said to the child:

> "Can you see them all right? What I would like you to do is take a good look at them - then put into piles any photographs that are alike, that go together. You can make as many piles as you want. Lay them next to each other like this, so we can look at them after. Okay?. Put the photos that you think go together into piles, however you like".

If child was unsure she was told:

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[3] A list of abbreviations can be found at the beginning this thesis.

"Look at each picture carefully - and see which ones you think go together[4]". While the child was sorting the number of piles made and the pictures in piles were recorded, and reasons for sorting were elicited and recorded.

Childrens' sorting strategies

There is evidence that, even when asked to sort stimuli that have no social value, children do seem to employ strategies and categorize by some systematic method (eg. Yee & Brown, 1988). There is also evidence that these sorting strategies may differ according to the age of the child. What was of interest was whether, and how, these findings might relate to social situations such as described in this thesis - in which children are asked to sort, not physical items of different shape, colour and size but photographs of children.

The remainder of this chapter is organised in four sections each reporting a different form of analysis on the sort data. In the first, simple frequency counts of the number of piles the children made and their reasons for sorting are examined. In order to get a sense of the overall picture, in the second section similarity coefficients derived from Multi-dimensional Scaling techniques are presented diagrammatically to give a descriptive picture of the data. In the third section, more precise multivariate analyses of variance are applied to explore the data in more depth. Finally, in the fourth section, the issue of generalization is introduced. It will be recalled that generalization is fundamental to the theoretical underpinnings of this thesis.

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[4] A full transcript of the verbatim instructions can be found in the appendices.

Correlational analysis is used to examine this issue. Two empirical questions are asked in relation to these four sections:

1. How many categories did the children form, and what were they?
2. Were there differences in the type and number of categories the children made according to: school, type of contact, type of disability integrated, age or sex?

HOW DID THE CHILDREN SORT THE PHOTOGRAPHS?

Number of piles

Known Children

As can be seen in tables 7.1 and 7.2 below there was no clear pattern identifiable in terms of the type of school, age or contact and the number of piles children made when sorting the photographs of the known children (KC). They formed between one and six piles - six piles with six pairs being the most used strategy. This was consistent in both contact schools and control schools. There were few differences according to gender and no obvious pattern in the differences that did occur and so gender has been collapsed in these tables. Chi-square tests on the number of piles revealed no age differences in the number of piles formed of either KC or SS. However, the younger children (particularly in the contact schools) did seem to form six pairs more frequently than the older children - perhaps suggesting that the task is easier when approached in this manner. A number of children, 12 in contact schools and two in control schools - chose to put all the photographs in one pile and gave as a reason for doing so reasons such as:

> 'They are all in my class'. Or, more frequently, responses such as:
> 'They are all children'.

Here it seems contact made little difference in the number of piles the children formed of KC.

Contact with HI, LD or PD	Age (n[5])	Number of piles (f) known classmates					
		1	2	3	4	5	6
	Infant (96)	7	18	9	17	9	36
	Junior (96)	5	18	9	25	15	22

Table 7.1 Frequency of number of piles of known children (KC) made in schools with contact (categorized and decategorized).

No Contact	Age (n*)	Number of piles (f) known classmates					
		1	2	3	4	5	6
	Infant (32)	2	10	4	9	1	6
	Junior (32)	0	6	11	5	3	7

Table 7.2 Frequency of number of piles of known children (KC) made in control schools (no contact).

Standard Stimuli

Tables 7.3 and 7.4 summarize the frequency of the number of piles the children with and without contact made when sorting the SS. As with the KC photographs there was no evidence of gender differences in the number of piles the children made. Again the children mainly formed six piles, also this strategy was most preferred by

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[5] n's differ from N due to missing data.

the younger children although once again the difference between the older and younger children was not significant (schools with contact df 1, χ^2 4.5, control schools df 1, χ^2 1.2). Nevertheless, what is interesting in relation to the number of piles the children formed of the SS, is that no child put all the pictures in one pile (a strategy that 6% of the children with contact employed when sorting the photographs of their known classmates).

Once again contact does not seem to be having any effect on the number of piles of SS sorted. Although in the case of the SS the reason for this may be rather different than for the KC. If generalization is to be a feature of the contact situation, one might have expected the number of piles of SS children sorted to reflect the number piles they made of the KC.

		Number of piles (f)Standard Stimuli					
Contact with HI, LD or PD	Age (n*)	1	2	3	4	5	6
	Infant (96)	0	12	11	16	14	43
	Junior (96)	0	15	14	20	14	33

Table 7.3 Frequency of number of piles of standard stimuli (SS) made in schools with contact (categorized and decategorized).

	Age (n*)	Number of piles (f) Standard Stimuli					
		1	2	3	4	5	6
No Contact	Infant (32)	0	7	6	3	4	12
	Junior (32)	0	6	7	5	6	8

Table 7.4 Frequency of number of piles of standard stimuli (SS) made in control schools (no contact)

Reasons for sorting

When the children carried out the sorting task they were able to give as many reasons as they wished for sorting the piles in the ways they had. Preliminary content analysis of the reasons for sorting revealed seven main reasons:

Gender:	boys or girls.
Disability:	some reference to disability or a disability cue such as wheelchair or hearing aide. (eg. 'they are handicapped' or 'they can't hear'.
Affect:	or liking for stimulus - some response such as 'they look nice together' or 'they look like they would be friends'.
Related:	eg. 'they look like brothers/sisters'.
Clothing:	similar clothing.
Physical attributes:	other than hair, disability or gender (eg. 'they look the same', or 'have the same faces').
Hair:	eg. 'they have the same hair styles'.

Data were analyzed in terms of these seven main reasons. Frequencies of occurrence of each of the seven features were recorded and tabulated by school, age and gender.

As with the number of piles formed, no effects of gender were found. This was surprising given gender of stimuli was given as reason for sorting both SS and KC by at least a third of the children. There were differences between younger and older childrens reasons for sorting and age is therefore included in the summary tables below. Chi-square statistics and $p <$ are given for significant differences. Chi-square were calculated for each category of reason. Data were the number of times infant and junior children did or did not give each reason for sorting. Thus, 2 (inf/jun), by 2 (yes/no), tables were computed for each reason.

Known Children

In the case of the known children one thing becomes immediately evident, (table 7.5). Affect and physical reasons are the most salient cues in terms of categorizing the photographs. It can also be seen that contact does seem to have an effect of making disability salient - both infant and junior children give disability as a reason for sorting. However, given that we intentionally included two pictures of disabled children in each set of KC this could be a result of forced choice. It is also interesting to note that the pattern of reasons the children with and without contact give for sorting KC (see tables 7.5 & 7.6) are more similar than the pattern of the number of piles they made (see tables 7.1 & 7.2).

If we look at the tables in more detail, there are age differences in the types of reasons the children give for sorting the photographs. For infant children, gender and hair are the most important features whilst for the older children affect and physical features are more salient. If we look at table 7.6 which shows the reasons the control children gave for sorting, findings in relation to gender, affect, physical features and hair, mirror those of schools with contact. Obviously because no children with disabilities are integrated, no reference is made to disability as a reason for categorizing KC. Overall, the younger children give more concrete reasons for their sorting (eg. gender, and hair). whilst the older children give more abstract reasons (eg. affect) although paradoxically they do focus over twice as much as the infant children on physical features.

But how do these findings relate to the reasons the children give for sorting the standard stimuli (SS)? One might expect, if we take the issue of generalization in its most basic form, that the reasons the children give for sorting SS will be the same as for the KC and that the frequency of the reasons given will mirror those for the KC. It will be shown however, that the case is not so clear.

Age (n[7]*)	Reasons for sorting Known Children (f)						
	Sex	DIS	Aff.	Related	Clothes	Physical	Hair
Inf (96)	35	14	69	0	43	35	25
Jun (96)	27	14	102	1	45	80	0
χ^2, df 1, $p <$	1.5 *ns*		21.0 .005			59.8 .005	28.7 .001

Table 7.5 Frequency of reasons for sorting known children (KC) in schools with contact (categorized and decategorized)

Age (n*)	Reasons for sorting Known children (f)						
	Sex	DIS	Aff.	Related	Clothes	Physical	Hair
Inf (32)	15	0	9	0	15	15	20
Jun (32)	8	0	16	0	5	58	5
χ^2, df 1, $p <$	3.3 *ns*		3.2 *ns*		28.0 .005	24.4 .005	14.8 .005

Table 7.6 Frequency of reasons for sorting known children (KC) in control schools (no contact).

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[7] * notes: n = number of children responding in each cell. Children were able to give a reason for each pile that they sorted - this could be up to 12.

Standard Stimuli

As can be seen in tables 7.7 and 7.8, 'hair' is the most frequent reason for sorting given by younger children in both contact and control schools. Whilst again disability is the main reason given by older (junior) children, in both contact and control schools. In terms of affect, nearly twice as many junior children gave reasons in this category as did infant children. Whilst more infant children gave clothing and gender as reasons for sorting. Once again, contact here seems to be making little difference in the way the children categorize either the KC or the SS[8].

In summary then, there was no evidence in these simple analyses for gender differences in the way the children categorized. Nor was there any support for differences as an effect of contact - although it does seem to have made the children more aware of disability, as can be seen by the childrens' use of this as a reason for categorizing their classmates. This very preliminary analysis did indicate that there may be developmental differences in the way the children categorized the known and unknown stimuli and this can be seen in the above tables in which type of disability with which the children have contact is combined and the data are examined according to age - infant (5+) and junior (8+). What they don't show is how the categories were interrelated. In order to get a clearer sense of this and to explore and compare the school contexts in more depth, multi-dimensional scaling techniques (MDS) were used.

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[8] The reasons given for sorting were not ranked in the order they were given by each child. Had they been, examination of reasons for sorting could have been restricted to first choice.

Age (n*)	Reasons for sorting Standard Stimuli (f)						
	Sex	DIS	Aff.	Related	Clothes	Physical	Hair
Inf (96)	27	44	35	13	18	53	66
Jun (96)	23	73	73	23	6	61	32
χ^2, df, 1 $p <$		18.4 .005	34.7 .005	3.4 *ns*	6.9 .01	1.4 *ns*	24.1 .005

Table 7.7 Frequency of reasons for sorting standard stimuli (SS) in schools with contact (categorized and decategorized).

Age (n*)	Reasons for sorting Standard Stimuli (f)						
	Sex	DIS	Aff.	Related	Clothes	Physical	Hair
Inf (32)	21	14	5	1	6	22	14
Jun (32)	18	47	8	5	5	20	8
χ^2, df 1, $p <$		21.7 .005					2.5 *ns*

Table 7.8 Frequency of reasons for sorting standard stimuli in control schools (no contact).

CHILDRENS' SORTING STRATEGIES

In order to run the MDS, raw data were coded onto 12 x 12 similarity matrices according to the proportion of co-occurrences of pairs of stimuli in a given group of respondents. The MDS analyses were run by school, age and sex of participating children. This meant that at the lowest level of analysis each matrix contained sort data from eight children. New matrices were then computed by combining these basic matrices (eg. in schools, across age or sex). The resulting findings are too extensive to include here - analysis at this basic level resulted in 32 separate dimensional plots and corresponding similarity matrices.

In order to simplify the picture, therefore, the focus of this section will be on the categories and dimensions used and their relationship with each other. I will return to the developmental issues in the following section. Data are presented in the form of plots of similarity coefficients for the sorting of known children on two dimensions. Plots of the way they categorized the unknown children are also presented in relation to two main dimensions, and then a third dimension is added to expand on findings of the initial two dimensional picture. It will be seen that known children were sorted mainly by gender, with the two disabled children some distance from their ND peers, and in some instances put together regardless of gender. Analyses of the unknown children also yielded gender as a main dimension but a second was also found - DIS *vs* ND. Evidence of a third dimension - subtype of disability was found and this seemed most evident in some of the categorized schools.

Format of figures

Plots of the similarity coefficients (on three dimensions) of each of the KC and SS stimuli can be seen in each of the diagrams below. Each child is represented by a spot: red (girls) or green (boys) to represent gender. Disabled children are represented by an additional spot within the gender symbol (blue HI, orange LD, yellow PD). For example, a non-disabled (ND) boy is represented by a green spot, whilst the hearing impaired girl is represented by a red spot with a blue spot in the centre.

Girls: 🔴 Boys: 🟢 HI: 🔵 LD: 🟠 PD: 🟡

The alscal procedure was run using first two and then three[10] dimensions. Data are presented by type of disability integrated and school. First, the two schools where HI children are integrated, then the two schools in which LD children are integrated, followed by schools where PD children are integrated, and finally, control schools where no children with obvious disabilities are integrated. The KC stimuli are derived from combining two different KC in each class, therefore, each KC plotted represents four different sets of children in each school. One consequence of this may well be to balance out any effects for idiosyncrasies of individual known children. The SS plots, on the other hand, are derived from all of the children sorting the same set of standardized stimuli photographs.

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[10] It should be noted that although ideally there were insufficient stimuli to run three dimensions, examination of the similarity coefficients supported this procedure.

Schools where hearing impaired (HI) children are integrated

Known classmates - two dimensions

The MDS procedure was run on matrices of the proportion of times children put the KC together. Plots of the similarity coefficients can be seen in figures 7.1a and 7.1b. In both the categorized and decategorized schools the children appear to be sorting the photographs of their classmates (KC) on one main dimension gender - girls and boys. In the categorized school (figure 7.1a) the plots of the two known hearing impaired children are some distance from their peers suggesting that, in addition to the gender dimension, the children are sorting on a second dimension - HI *vs* their hearing peers. The picture in the decategorized school (figure 7.1b) although similar is not nearly so clear. In this school the HI boy is placed some distance from the other boys in the stimuli but the HI girl can be found nearer to the hearing boys than the hearing girls.

Standard stimuli - two and three dimensions

The MDS procedure was then run on the 'sort data' from the SS. It can be seen clearly in Figures 7.2a and 7.2b that the children in both contact situations (categorized and decategorized) sort the unknown stimuli on two dimensions - gender and disability. At this level of analysis there is no evidence of subtyping (eg. specific disabilities together) within the disability dimension. In terms of the different contact situations the stimuli are in tighter clusters in the categorized (figure 7.2a) than the decategorized conditions (figure 7.2b). When a third dimension was run and plotted, in the categorized school (figure 7.3a), as when two dimensions were run, stimuli are clustered more tightly than in the decategorized school (figure 7.3b). More interestingly though, there is some evidence of subtyping, particularly of the HI stimuli and in the CAT school. Overall, in the HI schools, children in both CAT and DECAT schools sort the KC photographs on one main dimension gender - clearly differentiating between girls and boys. In both contexts the HI girl and boy are placed some distance from their peers and this is more evident in the categorized school. In the decategorized school the HI is put nearer to the ND boys than the rest of the girls. When sorting the SS, the children sort first on two main dimensions - gender and disability and when a third dimension is explored there is evidence of subtyping of specific disabilities within the disability dimension.

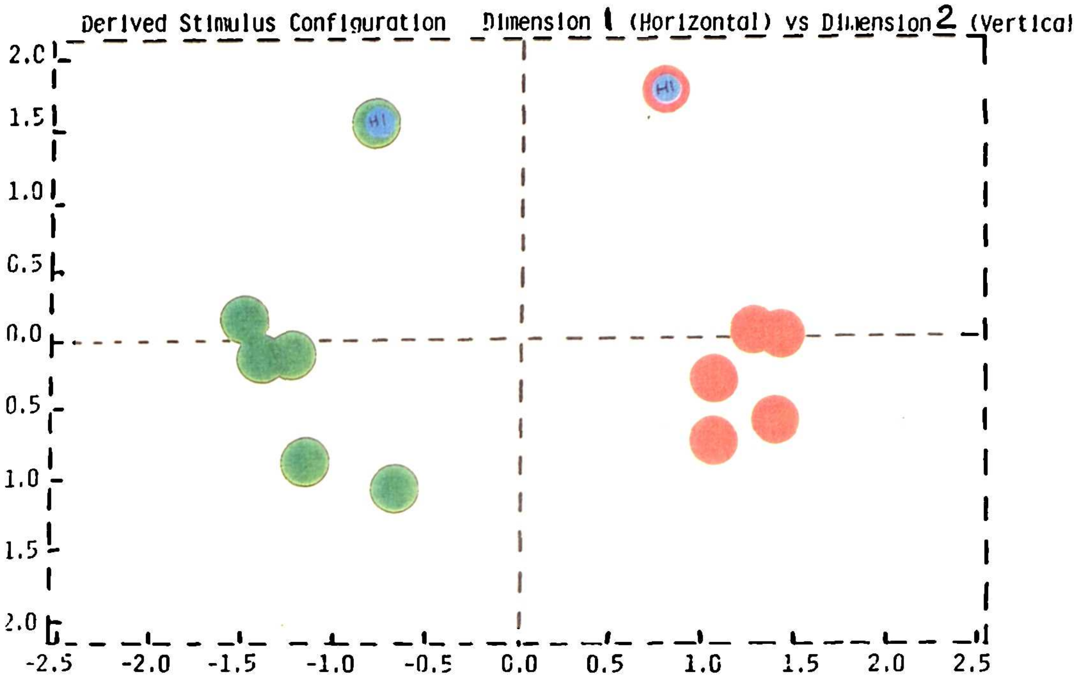

Figure 7.1a Plots of sorting KC in HI CAT school on two dimensions.

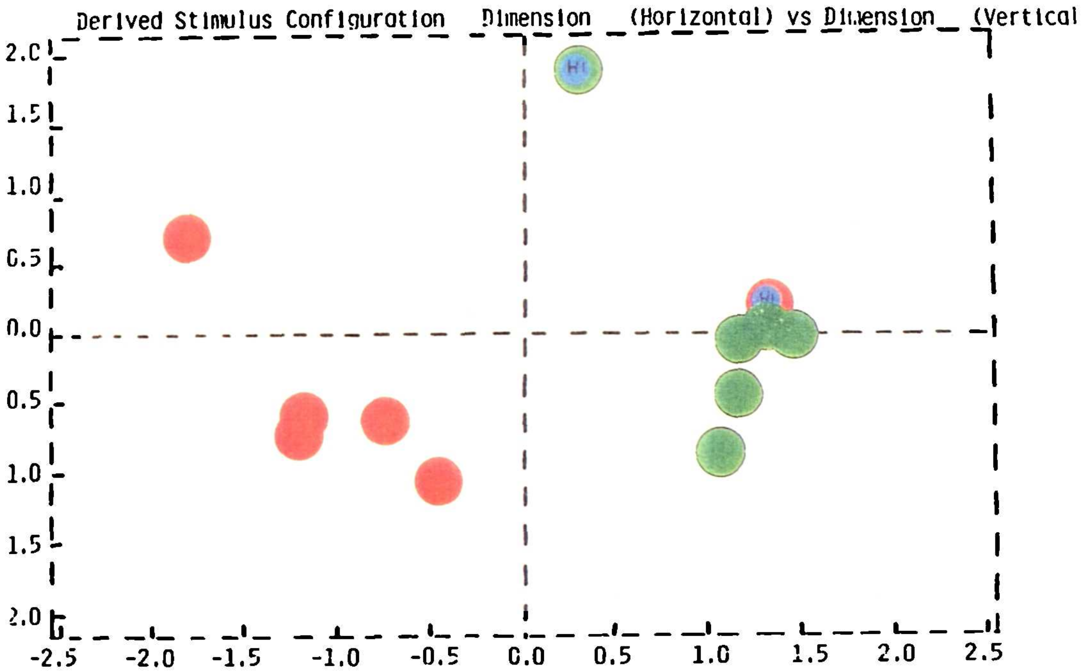

Figure 7.1b Plots of sorting KC in HI DECAT school on two dimensions.

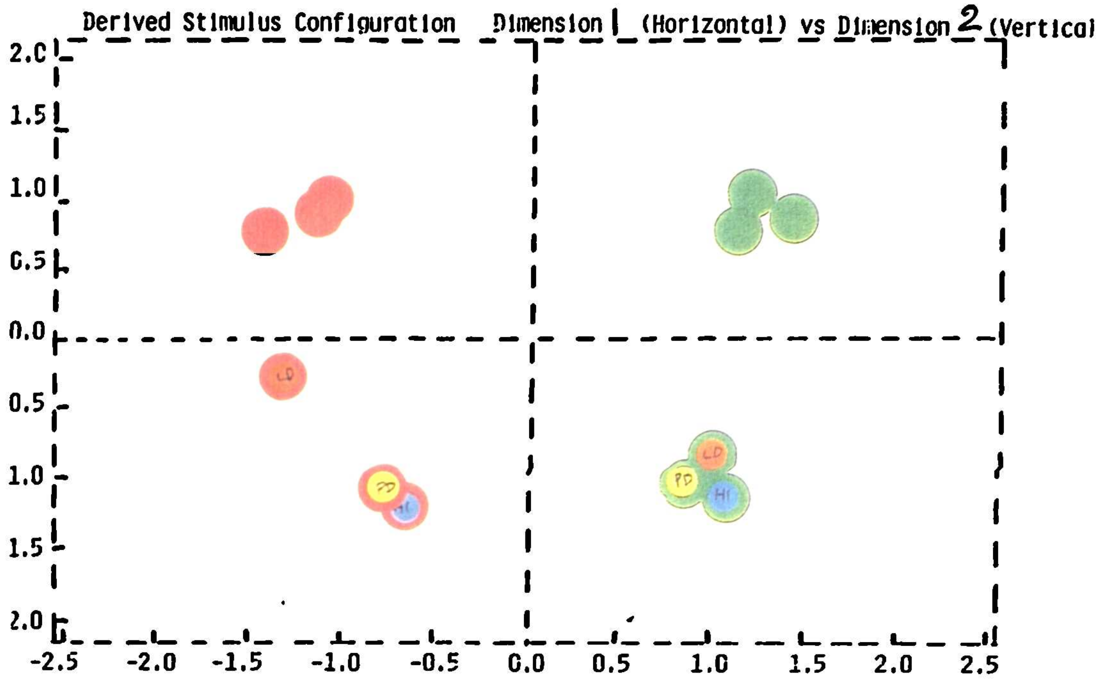

Figure 7.2a Plots of sorting SS in HI CAT school on two dimensions.

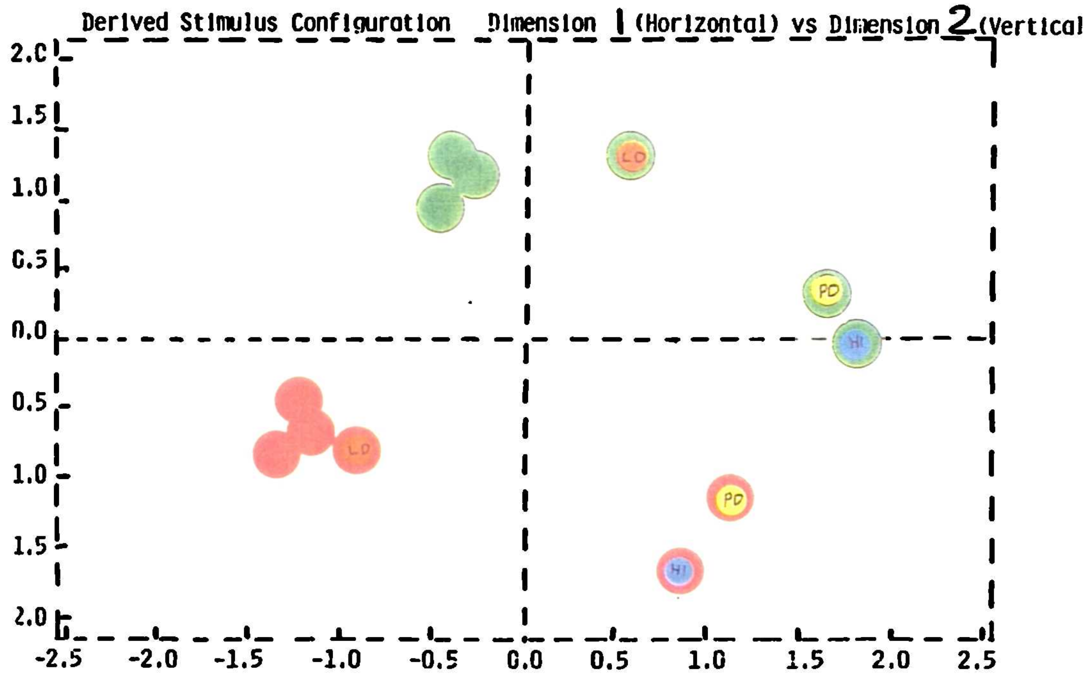

Figure 7.2b Plots of sorting SS in HI DECAT school on two dimensions.

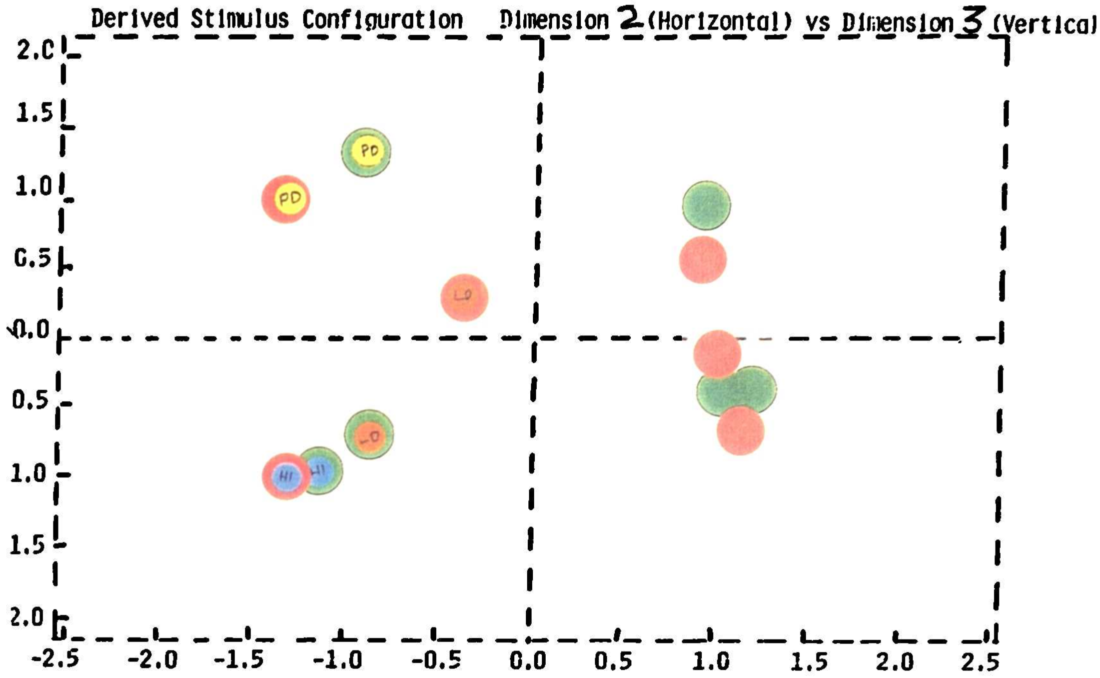

Figure 7.3a Plots of sorting SS in HI CAT school showing third dimension.

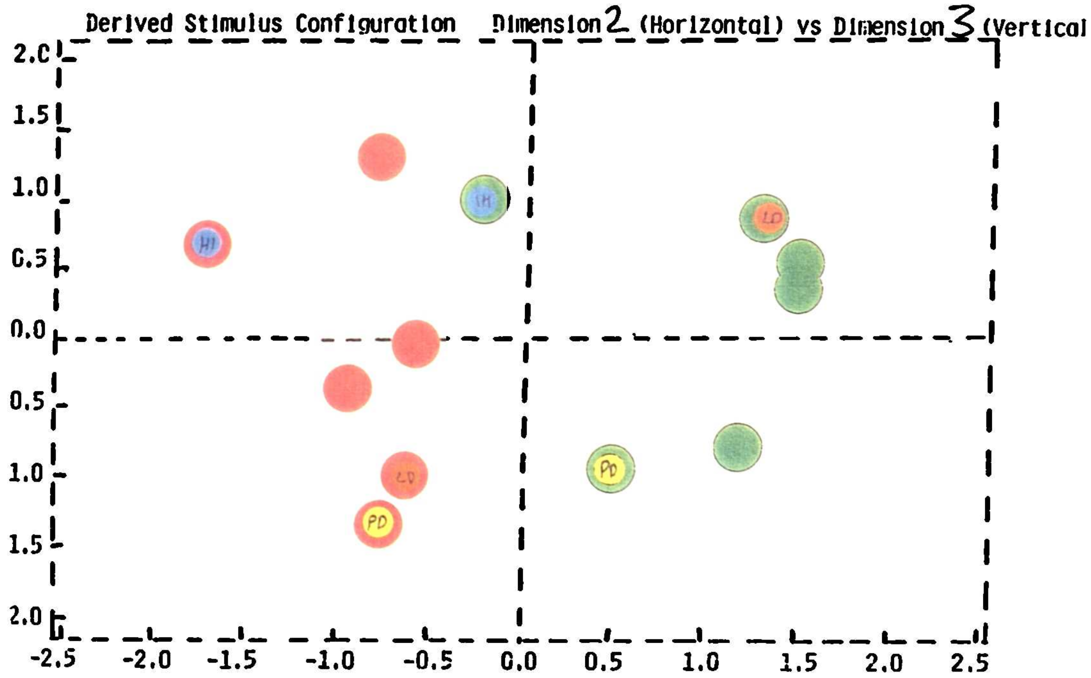

Figure 7.3b Plots of sorting SS in HI DECAT school showing third dimension.

Schools where learning disabled (LD) children are integrated

Known children - two dimensions

Figures 7.4a and 7.4b are graphical representations of plots of the similarity coefficients of childrens' sorting of KC in LD schools. In the school where contact is categorized (figure 7.4a), as with the schools where HI children are integrated, the children seem to be sorting, once again, primarily by gender - girls and boys. In this school, however, the LD children are put quite close together, with LD girls being put nearer to the boys end of the gender dimension than the girls. In contrast, children with decategorized contact with peers with LD sorted the KC stimuli on just the gender dimension (figure 7.4b).

Standard stimuli - two and three dimensions

Moving on to the standard stimuli. First the data were examined by running the MDS procedure with just two dimensions (figures 5a & 5b). As was seen in the HI schools, again the children sort the SS on two main dimensions - gender and disability. Likewise, there was no evidence of subtyping of specific disabilities. A look at figures 7.5a and 7.5b also reveals that there is little difference in the way children from either the categorized (figure 7.5a) or decategorized (figure 7.5b) schools sort the SS although the stimuli do appear to be more tightly clustered in the categorized context. As with the HI schools the alscal procedure was run with three dimensions and plots of the similarity coefficients can be seen in figures 7.6a and 7.6b. Once again there was evidence of subtyping of specific disabilities within the disability dimension. There was however, little difference between the two types of contact.

The overall pattern coming out of the schools where children who are LD are integrated (although not dissimilar from that in the HI schools), does not show such clear differences between the two types of contact - particularly in relation to the SS. Sorting of KC is once again primarily on the basis of gender although children in the categorized school do put the two children with LD quite close together with LD girls being put nearer to the boys end of the gender dimension - a strategy found in the decategorized school where HI children are integrated. Contact here seemed to make little difference. Perhaps one reason for this may be to do with the visibility of the disability integrated. The integrated children, although LD, had no obvious physical features or aides to distinguish them from their classmates. In addition, the disability - LD - relates to an impairment that can be measured on a continuum from very able to very disabled - a feature discussed in chapter four as a possible important factor in describing intergroup encounters. This issue will be returned to in the discussion chapters. In the meantime, let us move on and consider the schools where children who are physically disabled are integrated - PD being a much more salient and discrete category than LD.

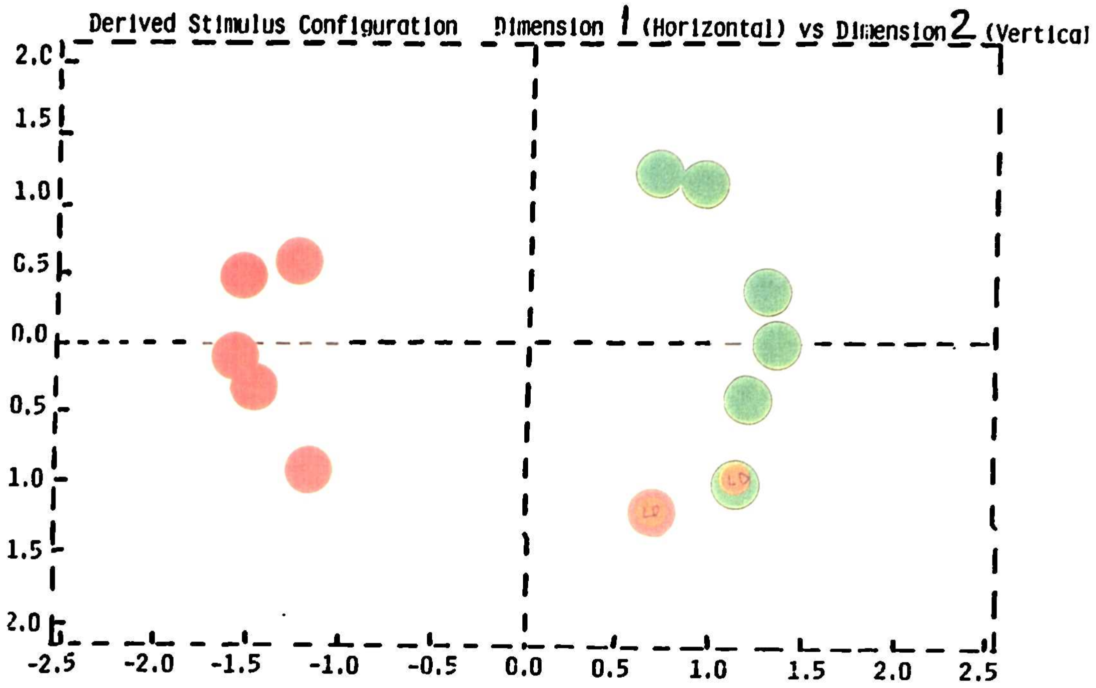

Figure 7.4a Plots of sorting KC in LD CAT school on two dimensions.

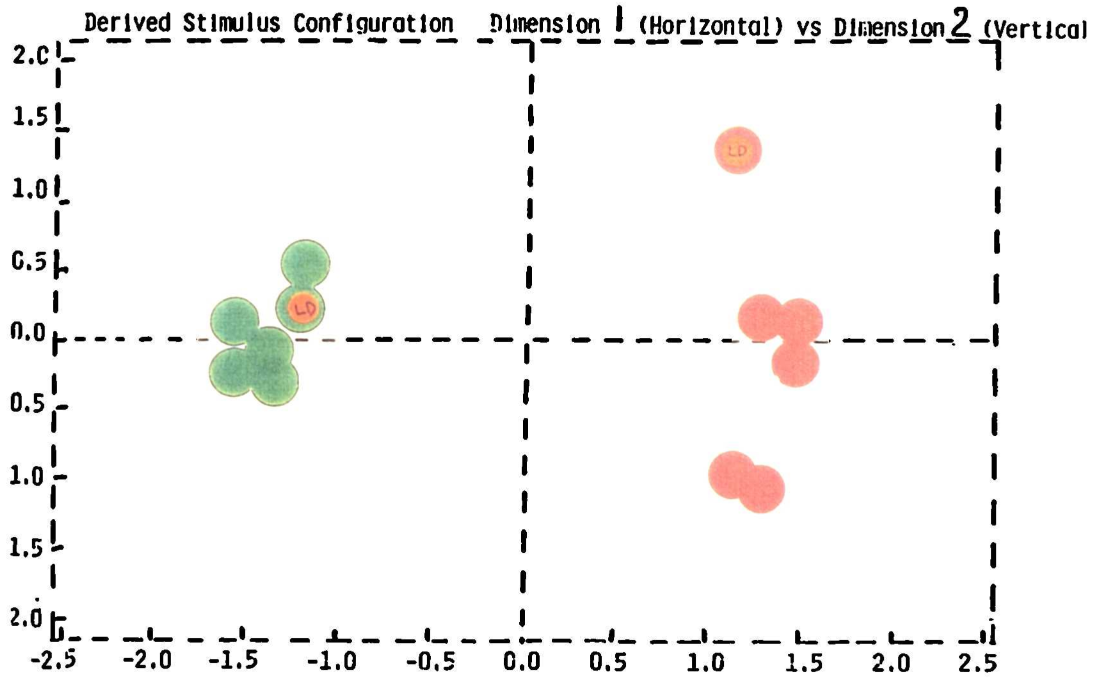

Figure 7.4b Plots of sorting KC in LD DECAT school on two dimensions.

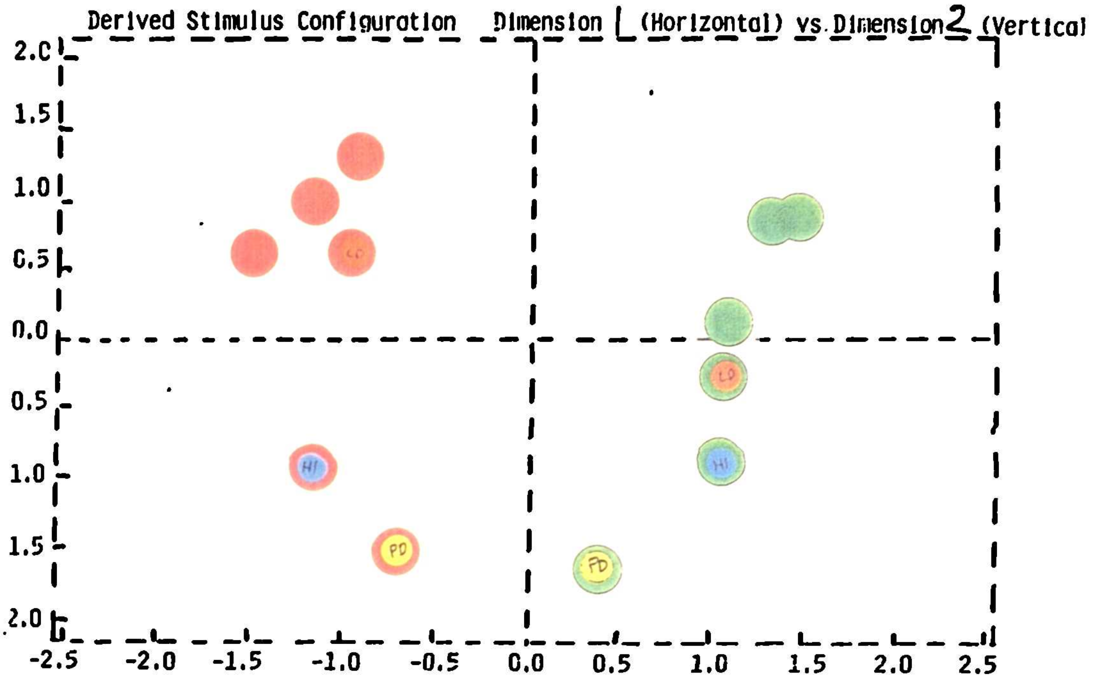

Figure 7.5a Plots of sorting SS in LD CAT school on two dimensions.

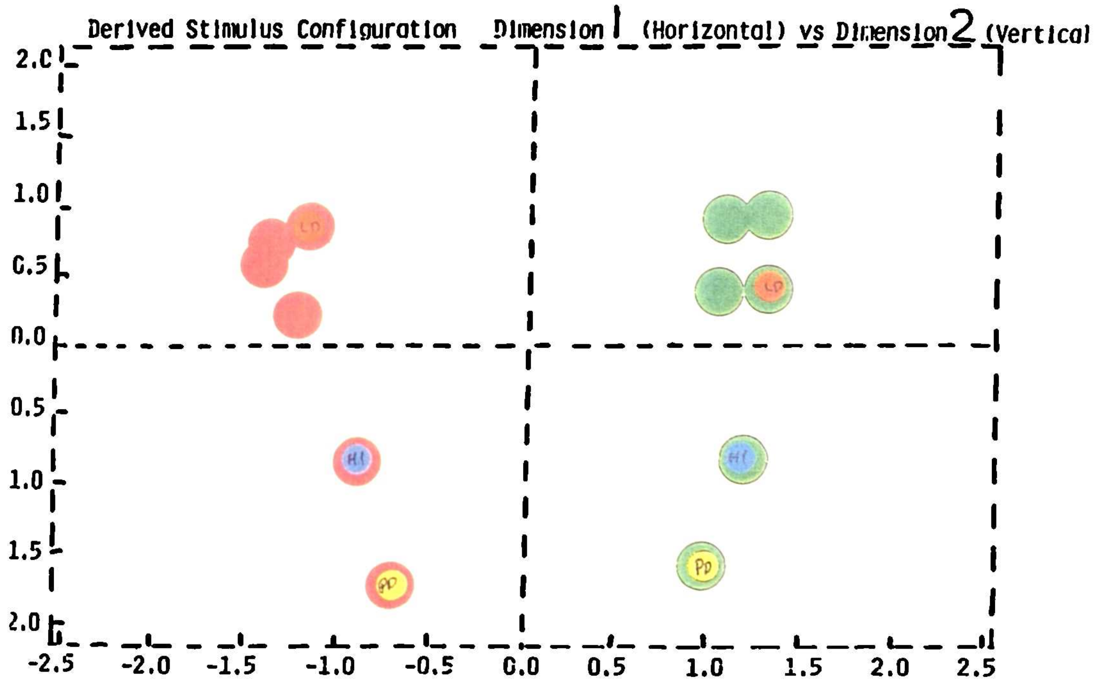

Figure 7.5b Plots of sorting SS in LD DECAT school on two dimensions.

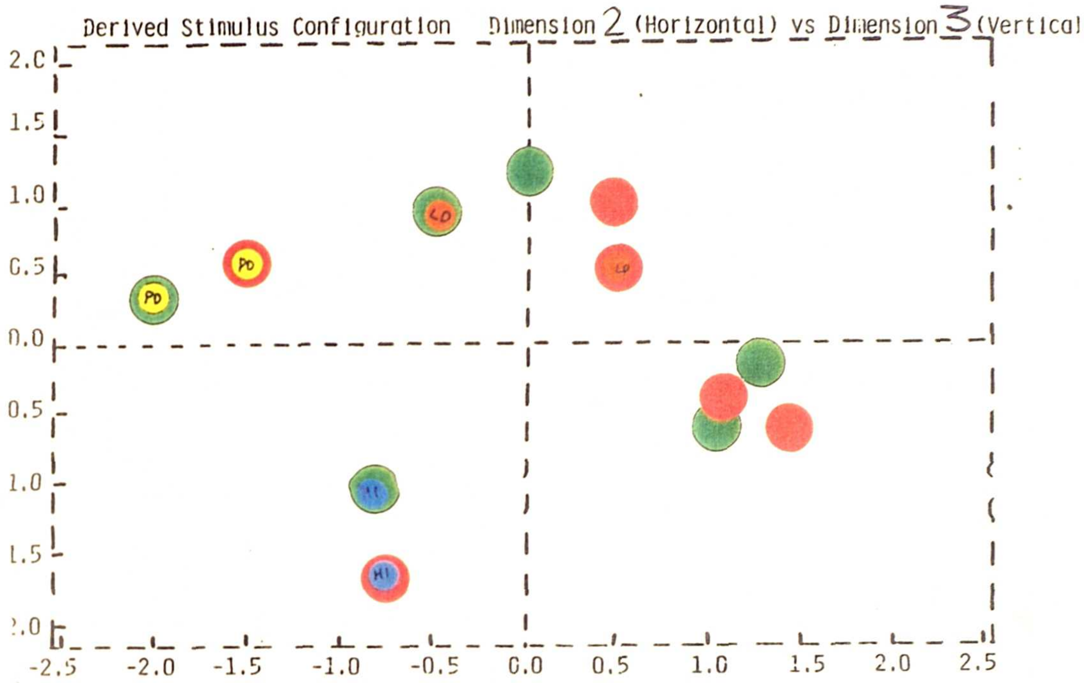

Figure 7.6a Plots of sorting SS in LD CAT school showing third dimension.

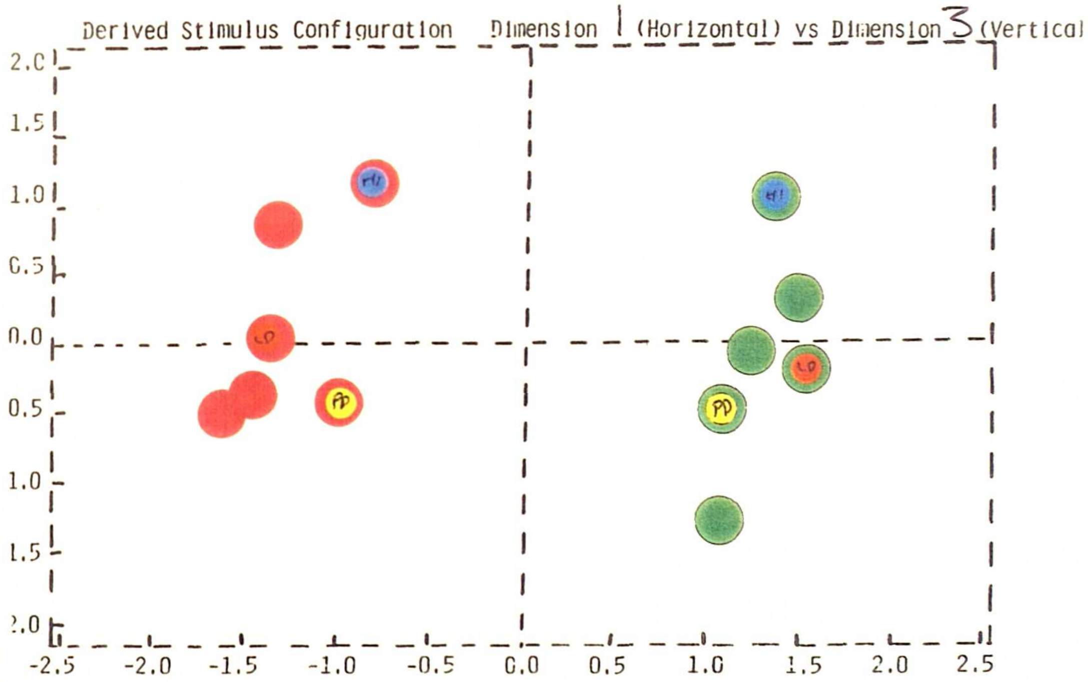

Figure 7.6b Plots of sorting SS in LD DECAT school showing third dimension.

Schools where children who are physically disabled (PD) are integrated

Known children - two dimensions

Once again, as with HI and LD schools, the children in the PD schools seem to be employing gender as a main criteria for sorting. Also, as in the other integrated contexts, the two PD children are placed quite close together - again this is achieved by placing the PD girl, in the case of categorized contact (figure 7.7a) and the PD boy in the decategorized school, (figure 7.7b) nearer to the opposite gender group.

Standard Stimuli - two and three dimensions

Sorting in the categorized PD school is on the same two main dimensions seen previously - gender and disability. However, in the decategorized PD school, the gender and disability dimensions previously seen, are not nearly so clearly identifiable - this is particularly so with the disability dimension. As in the HI categorized school, the stimuli seem to be more tightly clustered in the PD categorized (figure 7.8a). As was seen in the other schools, when the data were analyzed on two dimensions, there is no evidence of subtyping within the disability dimension in the categorized school (figure 7.8a). However, in the decategorized school the PD girl and boy are placed close together (figure 7.8b). This point is returned to later as it was in the PD decategorized school that a number of children made comments suggesting conflict between what they wanted to do and what they thought they should do when carrying out more structured tasks. As with the other schools the MDS analysis was run with three dimensions to explore the disability dimension more explicitly (figures 7.9a and 7.9b). In the categorized school, (figure 7.9a) this resulted in tighter clustering of the ND than in the decategorized school, (figure 7.9b) where these seemed much more dispersed. The subtyping of HI and PD stimuli was evident in both categorized and decategorized contexts and there appeared to be little difference between how close together SS were placed within these pairs. In the case of the LD pair, however, these were only placed together in the categorized school. In the decategorized school there was no evidence of subtyping LD children within the disability dimension.

Overall, the picture in the PD schools is not dissimilar from that in the HI schools. However, in all six schools, regardless of contact and type of disability integrated, certain common features are evident. All the children sort the KC on a gender dimension clearly differentiating between girls and boys. There are differences in the way they categorize the KC with specific disabilities, and these most often involve placing the two stimuli close together and some distance from the ND children often with at least one of the disabled children nearer to their opposite sex peers than their same sex group. There is also a clear picture arising out of the way the children sort the standard stimuli. Two clear dimensions predominate - gender and DIS *vs* ND. Furthermore, within the DIS *vs* ND dimension there is evidence of subtyping of particular disabilities. In the HI and PD schools where contact is categorized, the stimuli do seem to be more tightly clustered and this is particularly evident in the HI schools.

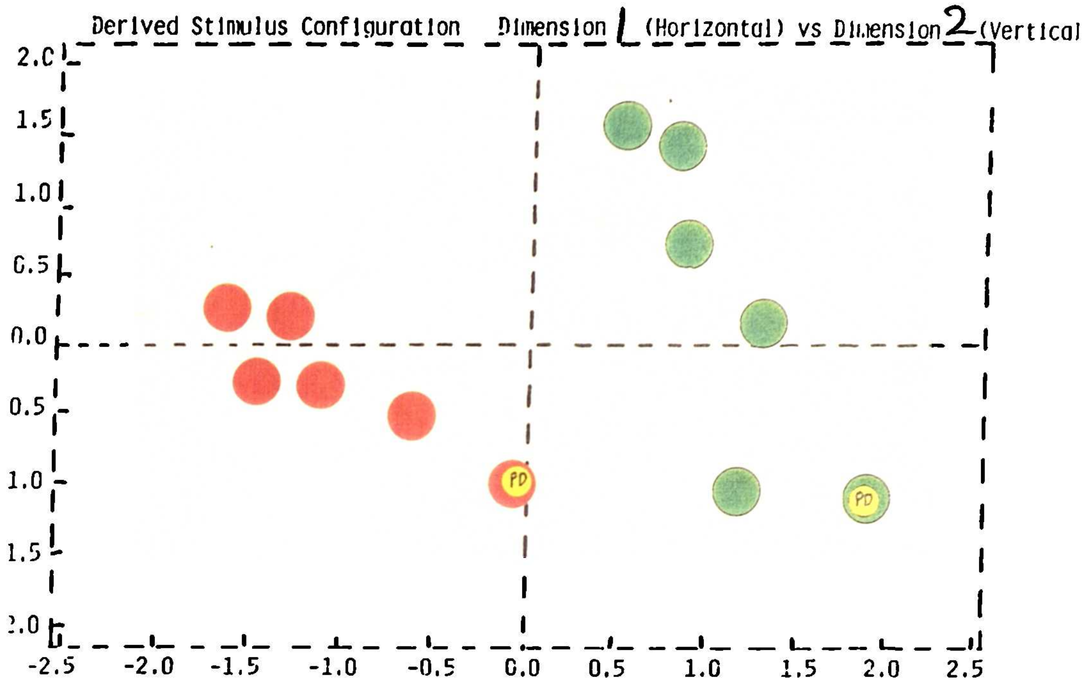

Figure 7.7a Plots of sorting KC in PD CAT school on two dimensions.

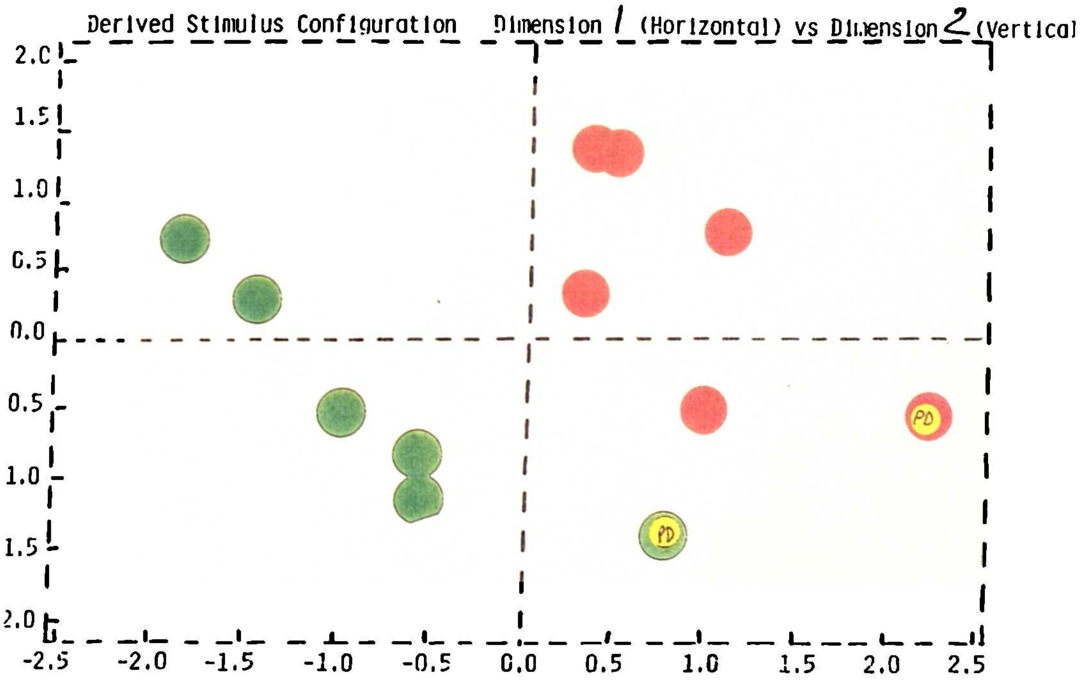

Figure 7.7b Plots of sorting KC in PD DECAT school on two dimensions.

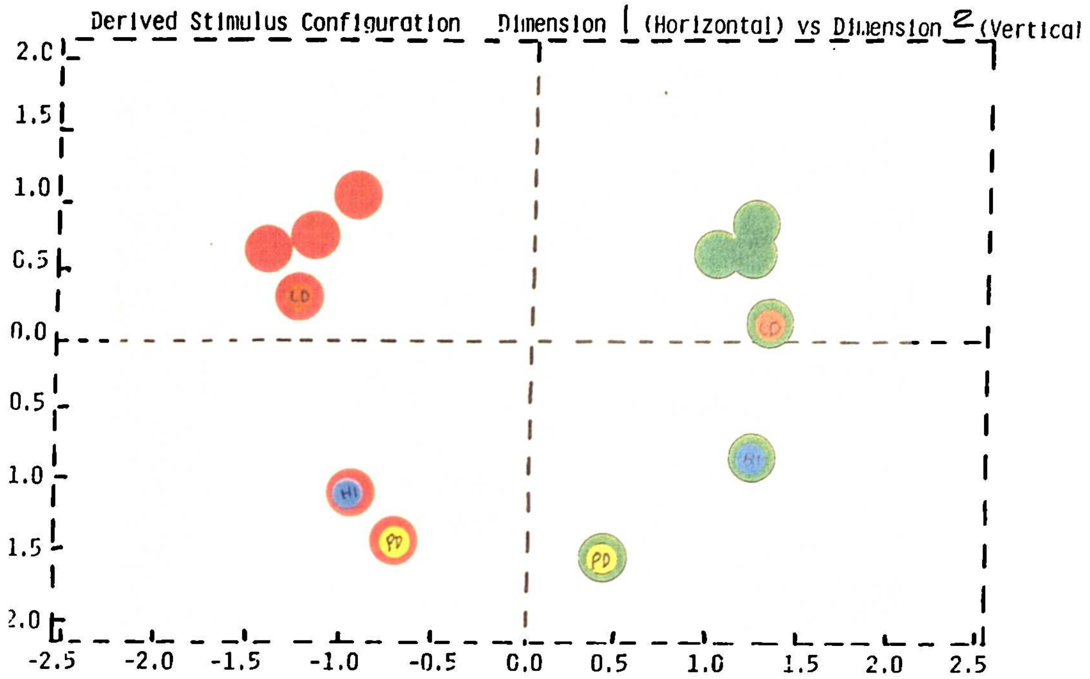

Figure 7.8a Plots of sorting SS in PD CAT school on two dimensions.

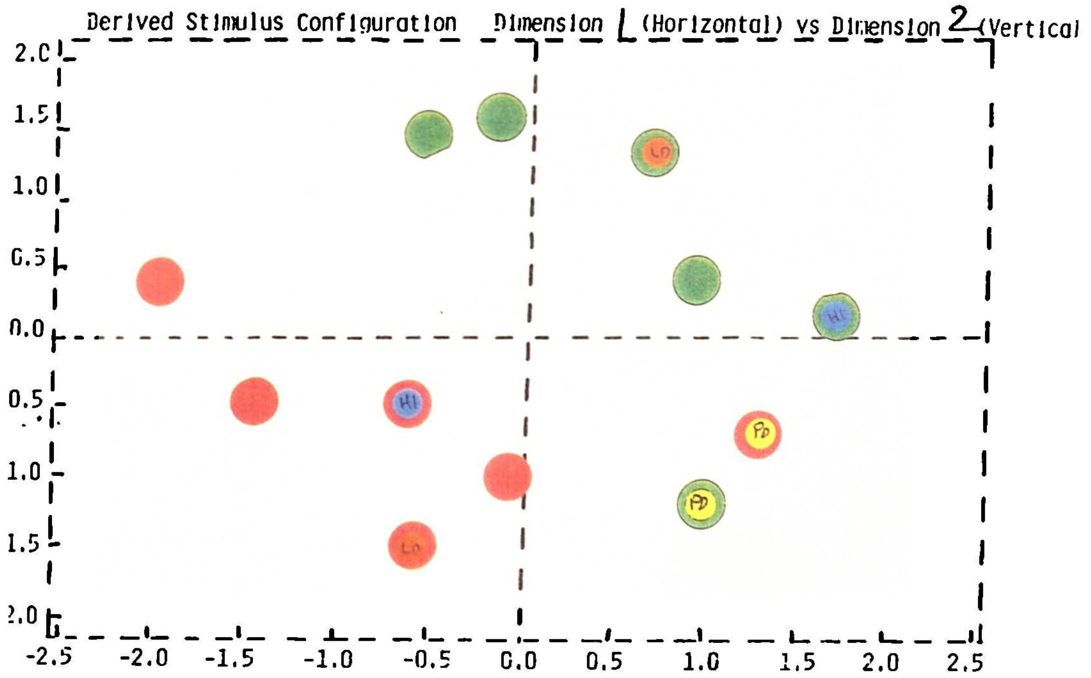

Figure 7.8b Plots of sorting SS in PD DECAT school on two dimensions.

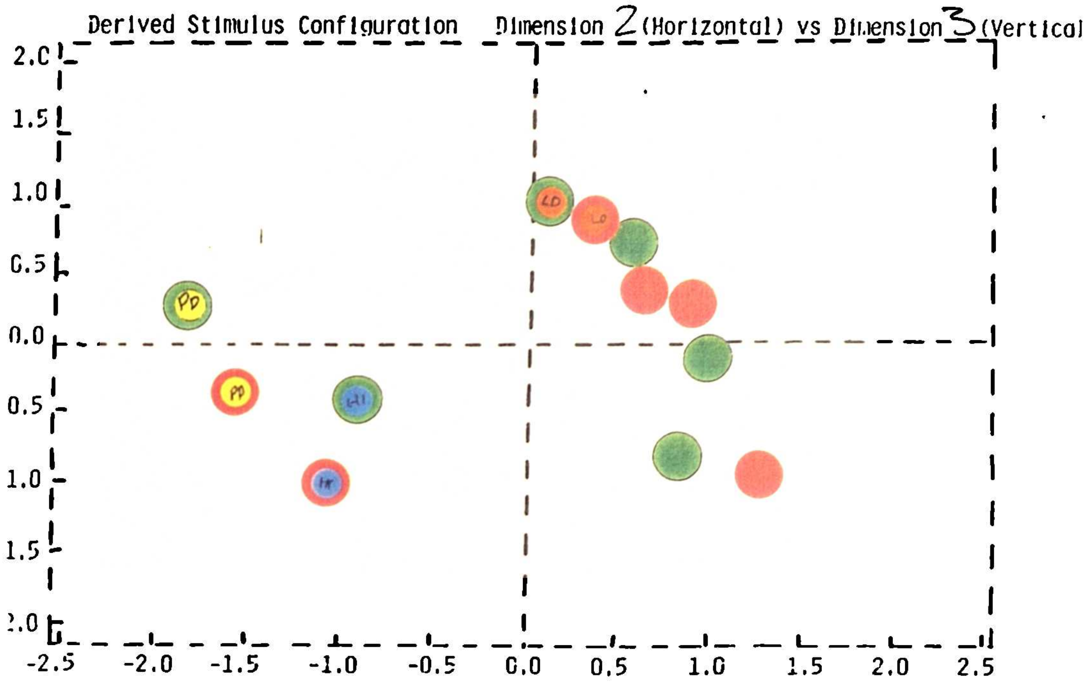

Figure 7.9a Plots of sorting SS in PD CAT school showing third dimension.

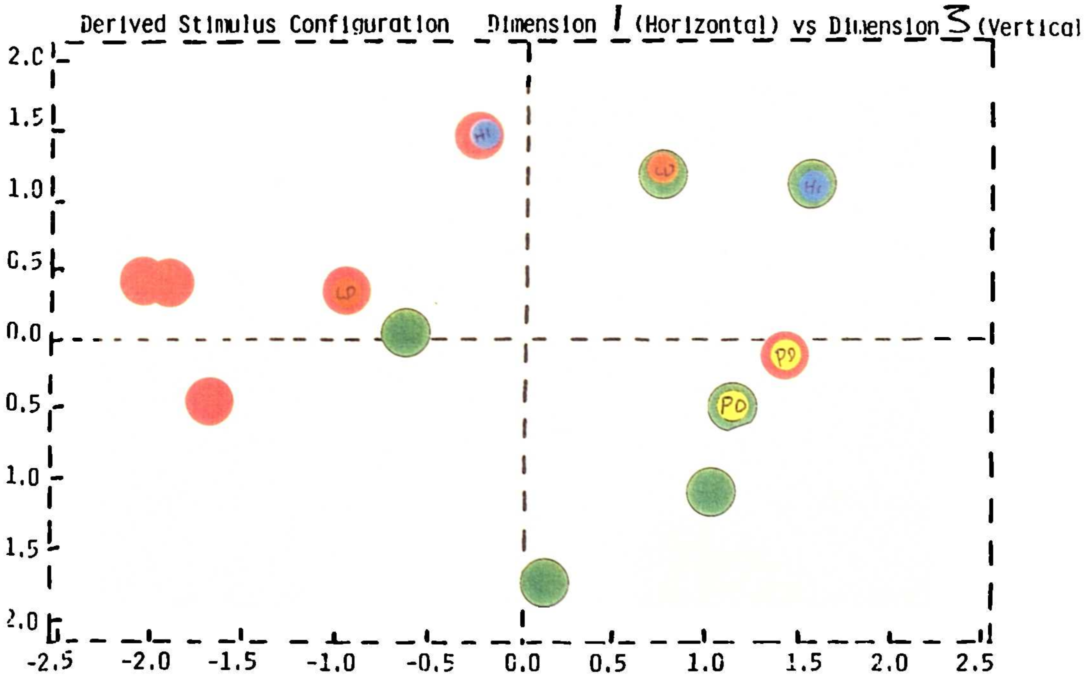

Figure 7.9b Plots of sorting SS in PD DECAT school showing third dimension.

In order to provide a baseline it is useful to look at how the children in schools who had no contact with children with disabilities sorted the photographs. These children carried out exactly the same tasks as the children with contact and the MDS procedure was run on the data obtained.

Schools where no children with disabilities are integrated

Known children - two dimensions

The children in these schools sorted photographs of twelve randomly selected ND peers. As can be seen in figure 7.10 the children sort the KC on the same dimension as was seen in the contact schools. In these schools however, the stimuli are clustered very tightly unlike in the contact schools where the stimuli although still sorted on the gender dimension are more dispersed. Obviously these data cannot be compared with data from the schools with contact as no disabled stimuli were included. Nevertheless, they do show that gender is an extremely salient category.

Standard stimuli - two and three dimensions

The picture for sorting SS reflects that found in the contact schools. Once again the children sorted on two main dimensions - gender and disability (figure 7.11). The stimuli, as in the HI categorized schools, are clustered quite close together and there is no evidence of subtyping. Also, as was the case in several of the integrated schools, the LD children, particularly the LD girl, are nearer to the ND children than the HI or PD children. Figure 7.12 illustrates the plots when a third dimension is included. Again, there is evidence of subtyping, and, in line with the integrated schools, this is most evident in relation to the HI and PD stimuli. Overall then, there is little difference in the main criteria the children seem to employ for classifying either the known or unknown children either as an effect of contact or type of disability integrated.

In line with the reasons they give for sorting (tables 7.5 to 7.8) what they do does seem to match what they say. Gender seems to be the primary reason for sorting with disability as a second. Within the disability dimension there is evidence of subtyping of specific disabilities.

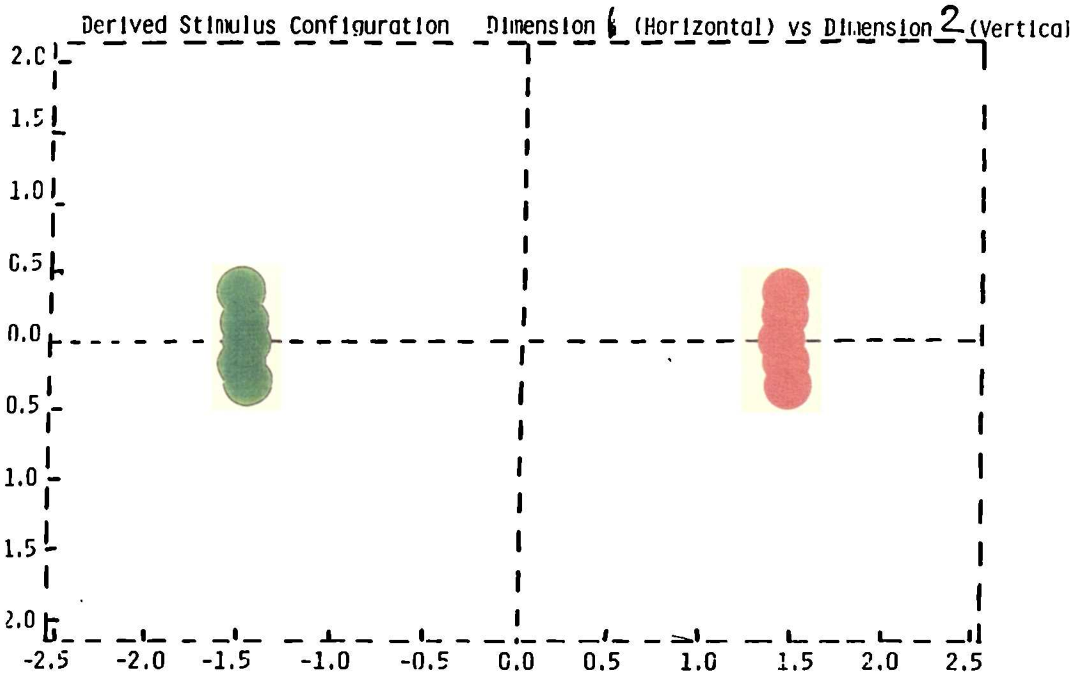

Figure 7.10 Plots of sorting KC in control schools on two dimensions.

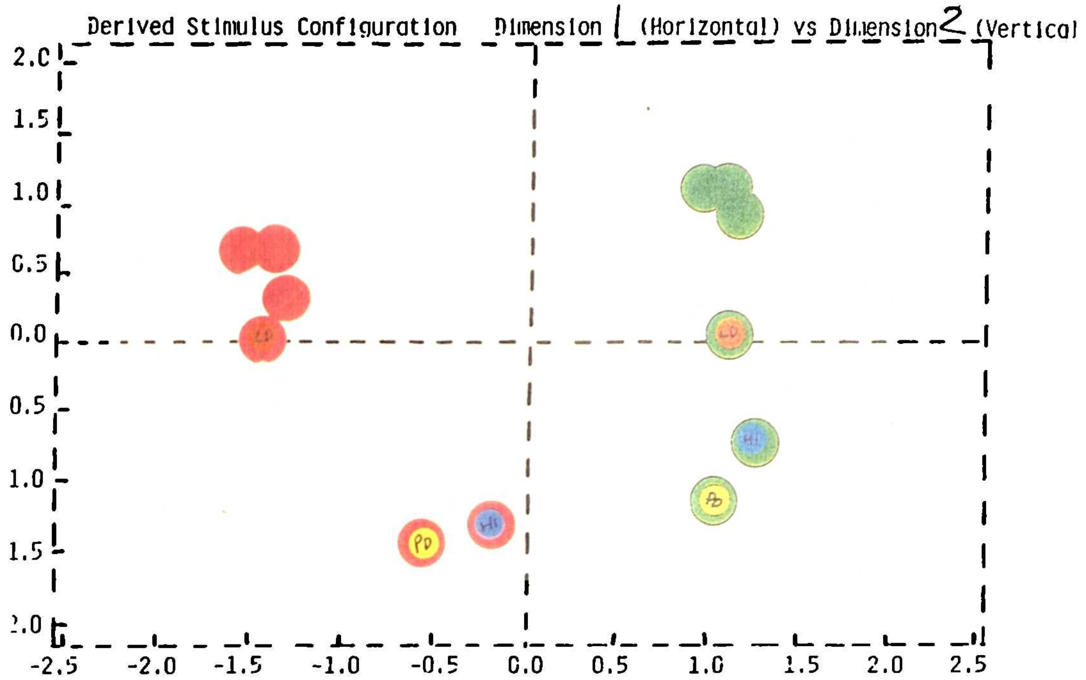

Figure 7.11 Plots of sorting SS in control schools on two dimensions.

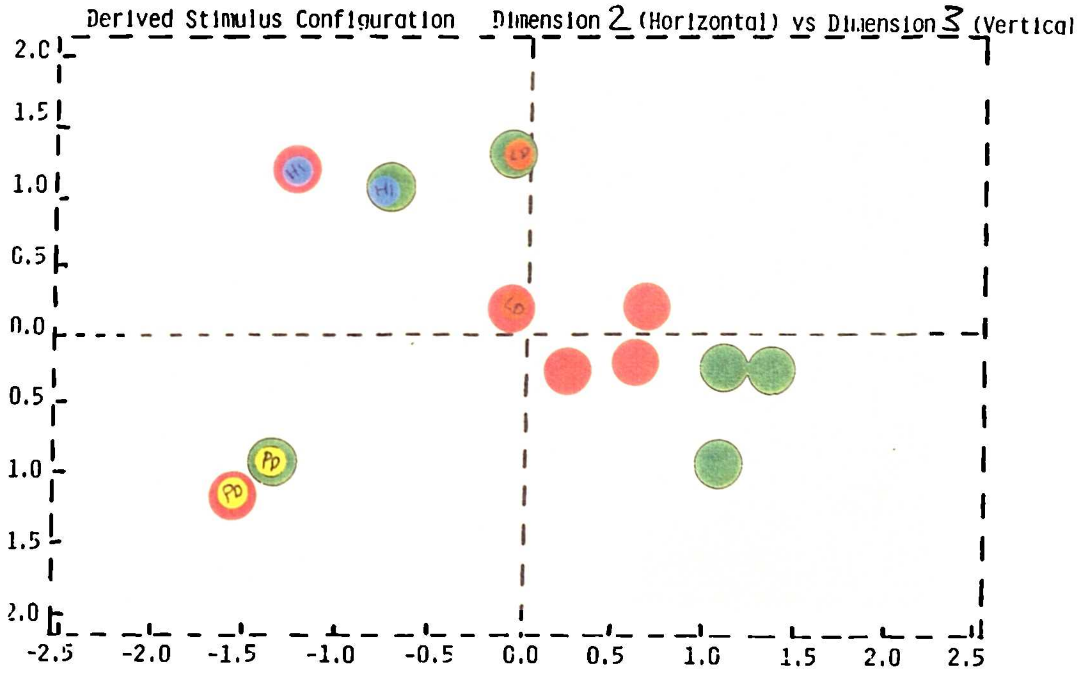

Figure 7.12 Plots of sorting SS in control schools showing third dimension.

A MORE DETAILED PICTURE OF THE CHILDRENS' SORTING STRATEGIES

The rationale for this more detailed analysis was that it would allow us to compare statistically 'distances' between certain stimuli photographs in the different contact situations. Proportional data used in the MDS analyses were re-coded in group form. It will be recalled that data were collected from eight schools. Within each school there were four classes of children - two infant and two junior. In the analyses which follow the unit of analysis is the same sex subgroup matrix within each class. This yielded an N = 64 (8 schools x 4 classes x 2 sexes). Thus eight observations were obtained from each school. The data points consisted of the proportion of times pre-determined boy and girl pairs of SS and KC co-occurred. The SS pairs consisted of boy and girl with the same disability (HI, LD, PD), and the ND were paired according to the criteria they had been selected for: (ie. 1 pair had been matched with HI boy and girl; 1 with LD boy and girl; and 1 the PD boy and girl). Similarly, the KC data were recoded in terms of the co-occurrence of disabled pairs and random ND pairs. This resulted in a mixed experimental design which was analyzed using the MANOVA procedure on SPSS. Preliminary analysis indicated no effects of gender. Therefore, data were initially analyzed by one 'within subjects' factor (Stimuli: DIS *vs* ND; for the DIS scores mean distances across the three types of disability were calculated) and two 'between subjects' factors (School and Age). This yielded a 8 x 2 x (2) factorial design. As with data previously described these analyses resulted in a vast amount of output, the resulting tables from which would be too many to reproduce in this thesis. In order to simplify matters only the main findings are reported in this section.

Organization of results

In this section findings are presented in their simplest form first by school and then age. Summary tables of mean scores utilize the same format as previously used, which, in its most complete form, includes Contact, School (type of disability integrated) and then Age. First, decategorized contact is presented and then categorized, followed by control (no contact) schools where appropriate. *Post hoc* tests have been carried out on mean scores and differences are indicated using the usual convention of subscripts[10].

Analysis of variance sorting known children - by school

When all the ND children were combined and a mean score computed, School was found to have a significant effect [$F(5,42)=3.45; p < .01$], as was disability of the stimuli [$F(1,42)=53.65; p < .000$). The effect of stimuli can be seen in the general sorting of DIS together more frequently than ND this is particularly so in respect of the HI and Pd stimuli. The main effect for school can be seen in HI schools (both categorized and decategorized) where the children sort the known children with disabilities together more frequently than in the other schools (*0.50 & 0.63* respectively; of all others < .50) - particularly in the decategorized HI school - a surprising finding given that the decategorized model of contact would predict

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[10] The *post hoc* test used throughout this thesis is Tukey's Honestly Significant Difference. Differences should be viewed across rows - different subscripts indicate significant difference $p < .05$.

findings in the opposite direction. Indeed it is in this school that the children categorize the non disabled peers the most. A slightly different pattern emerges in the LD and PD schools. In the LD schools the children in the categorized school put the disabled children together more often whilst in the PD school there is no difference between the mean co-occurrence of the disabled children.

Contact	School	$\bar{x}$ proportion co-occur		
		Disabled	Non disabled	Marginals
Decategorized	HI	$.63_b$	$.32_a$	.37
	LD	.19	.13	.14
	PD	$.47_b$	$.14_a$	.19
Categorized	HI	$.50_b$	$.23_a$	.27
	LD	$.28_b$	$.07_a$	.10
	PD	$.47_b$	$.24_a$	.28
Marginals		.35	.29	

Table 7.9 Mean co-occurrence of specifically disabled and non disabled stimuli in schools with contact.

Analysis of variance sorting known children - by age

No main effect for age was found. An effect of stimuli (DIS *vs* ND) was found ($F(1,62)=32.69; p < .000$), but no interaction of age by stimuli. If we look at the mean scores for DIS and ND, infant children put the disabled stimuli together more frequently than do junior children. Paradoxically, although not significant, this finding is contrary to the reasons the children gave for sorting, where disability was most frequently cited as a reason for sorting by <u>older</u> junior children.

Age (n)	$\bar{x}$ co-occurrence of stimuli (KC)	
	Disabled	Non disabled
Infant (32)	$.40_b$	$.19_a$
Junior (32)	$.30_b$	$.16_a$

Table 7.10 Mean co-occurrence of specifically DIS & ND known children by age.

Analysis of variance sorting standard stimuli - by school

In line with the analysis of the KC the SS were first examined by one between subjects factor - school and one within subject factor stimuli (disabled *vs* non-disabled[11]). No main effect was found for school but a within subjects effect of stimuli was found ($F(1,56)=62.25; p < .000$) with DIS stimuli being placed together more than ND. An effect of stimuli was also found when the same analysis was run with all four stimuli (HI, LD, PD & ND) ($F(3,126))=23.57; p < .000$), here again the three DIS pairs were put together more often than the ND pairs, with PD being co-occurring most often followed by HI and then LD. Mean scores derived from this analysis revealed that in the HI and PD schools the children in the DECAT schools put the disabled pair relevant to their contact situation together more frequently than in the categorized schools. Whilst in the case in schools where LD children were integrated there is no difference (table 7.11).

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[11] In these analyses, as with the KC, ND stimuli were combined and a new variable computed from the mean score of the three ND pairs. In addition a disabled score was computed from the mean score of the three disabled groups (HI, LD & PD).

Contact	School	$\bar{x}$ proportion disabled children relevant to specific contact situations co-occur	$\bar{x}$ proportion ND children co-occur
DECAT	HI	$.56_b$	$.24_a$
	LD	.25	.19
	PD	$.50_b$	$.20_a$
CAT	HI	$.45_b$	$.16_a$
	LD	.25	.18
	PD	$.41_b$	$.22_a$
Marginals		.40	.20

Table 7.11 Mean co-occurrence of specifically DIS in schools with contact.

Analysis of variance sorting standard stimuli - by age

Analysis was then conducted with age as between subjects factor. First with the computed variables disabled and non-disabled. A main effect for age was found [*F*(1,62)=6.69; *p* < .01] along with a within subjects effect for stimuli [*F*(1,62)=66.76; *p* < .000] and an interaction age by stimuli [*F*(1,62)=5.64; *p* < .05]. These effects can be seen if we look at the mean scores for the DIS and ND (table 7.12). Overall, junior children put the disabled stimuli together more frequently than do infant children (.25 *vs* .35) this finding is in the opposite direction to findings from known children (see table 7.10). As in previous analyses, DIS stimuli are put together more frequently than ND (.40 *vs* .20). This finding supports the preliminary findings of the frequency counts of the childrens reasons for sorting in which older (junior) children gave disability as a reason for sorting almost twice as many times as did younger (infant) children (table 7.12).

Age (n)	$\bar{x}$ co-occurrence of stimuli standard stimuli	
	Disabled	Non disabled
Infant	$.32_b$	$.18_a$
Junior	$.47_b$	$.22_a$

Table 7.12 Mean co-occurrence of disabled & non-disabled SS by age.

Analysis of variance sorting standard stimuli - by contact

As with the unknown children no main effect was found when contact was included in analysis, nor were any interactions found. If however, we look at the mean scores for the co-occurrence of the disabled standard stimuli (HI, LD and PD), an interesting trend emerges. In the case of both the HI and PD stimuli co-occurrence is highest in the control schools, followed by the decategorized and then the categorized schools (table 7.13). This trend, though not significant, does pose an interesting problem for the two theories of contact which would predict a trend in the opposite direction.

Type of contact	Standard stimuli			
	HI	LD	PD	ND
Categorized	$.34_{abc}$	$.26_c$	$.45_b$	$.21_a$
Decategorized	$.44_b$	$.20_a$	$.53_b$	$.19_a$
None	$.53_b$	$.30_a$	$.63_b$	$.21_a$

Table 7.13 Mean co-occurrence of HI, LD and PD SS in the 3 types of contact.

Having found evidence for effects of school and age in these more structured analyses, what of the generalization issue that is fundamental to the two contact theories? In other words, is there evidence in the way the children sorted the known and unknown stimuli, that they generalized their sorting strategies from the children they knew to those that they did not?

THE GENERALIZATION ISSUE

One obvious way to look at generalization in more detail is to carry out product moment correlations on the sort data of known and unknown children. Using the same data as in section two described above, product moment correlations were calculated between co-occurrence of known children with disabilities and unknown children with the same disability in the schools with contact. In other words, data were examined to see if there was any correlation between the proportion of times the children put together the disabled children they knew and the children with the same disabilities they did not know. As can be seen in the table below (table 7.14), none of the correlations between co-occurrence of known and unknown stimuli were significant, (due, presumably to the low n's in each case). Indeed, in three of the schools (PD DECAT, LD CAT & PD CAT), correlations were in a negative direction. Although not positive, the correlation in the LD decategorized school was in the 'right' direction. However, we should be cautious about interpretation of these findings as, due to the small n's, analyses lacked sufficient statistical power to make results conclusive (table 7.14).

Contact	School	Correlation
Decategorized	HI	.000
	LD	.5120
	PD	-.3217
Categorized	HI	.000
	LD	-.500
	PD	-.5156

Table 7.14 Correlations between co-occurrence in sort task of known and unknown children with disabilities specific to schools with contact.

CONCLUSIONS

Contact and categorization

Regardless of the type of contact they had, the children sorted the photographs of the known children on one main dimension gender and the standard stimuli on two main dimensions gender (boys/girls) and disability (disabled *vs* non-disabled). This suggests that regardless of whether contact is DECATEGORIZED (interpersonal) or CATEGORIZED (intergroup) all of the children saw the disabled children as different from the non-disabled. On the third dimension, subtyping of specific disabilities within the main disability dimension, was evident in all the schools. And, although the MDS plots pointed to this being most obvious in the categorized school, where the stimuli were most tightly clustered, this finding was not supported statistically by subsequent ANOVAs.

However, the findings reported in this chapter have interesting implications for the two contact theories, particularly the decategorized model, which suggests that de-emphasising the group will reduce categorization. Here, even in the decategorized schools where group differences were de-emphasized, the children still categorized the known and unknown stimuli on the basis of the de-emphasized group affiliation - disability. In terms of generalization, an important aspect of contact theory, no evidence was found for generalization between sorting strategies of known (KC) and unknown (SS)stimuli. However, it should be noted that the measure of generalization used in analysis reported in this chapter were rather crude. The issue of generalization is explored in more depth in chapter nine.

Age and categorizing ability

It does seem from the simple frequency data of the childrens' reasons for sorting that there is evidence of developmental differences in the childrens' sorting strategies. Past research has suggested that there are developmental differences in the way children sort non-social stimuli (eg. Denney, 1972; Yee & Brown, 1988), with children using more complex strategies to sort as they get older. For example, Yee and Brown (1988) found that younger children (3 year olds) performed less well on object sorting tasks than did older nine year olds, and that the complexity of strategies used to sort objects increased with age.

In the data reported here, no significant difference was found in the number of piles the children made although there was a pattern which showed that older children tended to use more complicated strategies when sorting the SS. There was also evidence that the criteria the children used differed in the two age groups. With younger children focusing on concrete features such as hair, whilst disability was the main reason given by older (junior) children, followed by affect. Of particular interest in terms of age effects, was the significant age by stimuli interaction found for the sorting of SS (table 7.12). This shows greater categorical differentiation between DIS and ND in the older, junior, children along with greater use of the ND category.

These points relate to the two threads of the thesis which recur throughout the empirical chapters. The subtyping of specific disabilities found in the categorized schools on the sorting tasks is reflected in the differentiation between disabled groups on evaluative measures subsequently administered. The evaluative measures are discussed in the next chapter which considers the children's attitudes towards unknown children with and without disabilities.

CHAPTER 8

CHILDREN'S ATTITUDES TOWARD DISABLED PEERS

Int: "Can you point to the balloon that tells me how well you think these children (in wheelchairs) can hear?"

Child: "I don't know if children in wheelchairs can hear".

(J. Infant girl in LD categorized school)

OVERVIEW

In this chapter the children's attitudes toward unknown children with and without disabilities are considered. Data in the last chapter on the children's sorting strategies utilized individual known (KC), and unknown (SS), stimuli photographs. In order to pursue children's more general intergroup attitudes, data reported in this chapter concentrates specifically on evaluations of pairs[1] of children with specific disabilities (HI, LD & PD) and pairs of (matched) children without disabilities. Two research questions are asked in relation to these data:

1. What attitudes do the children hold towards the specific category of disability with whom they have contact (ie. HI, LD or PD), and how do these vary as a function of amount and kind of contact?

2. What attitudes do the children hold towards the more general category of disability from which the children with specific disabilities with whom they have contact come, again as a function of contact?

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[1] As described earlier, to elicit these responses the stimuli photographs were used and modified to show the children in pairs.

In chapter four two models of contact were discussed, one intergroup (CATEGORIZED) and a second interpersonal (DECATEGORIZED). In chapter six how these models were reflected in integrated programmes in 'The LEA' were described. The attitude data allowed me to compare the two models of contact within schools in 'The LEA'. It will be recalled that I hypothesize that:

1. CATEGORIZED contact will be the most conducive to generalised attitude change. However, it should be noted that I do not preclude the notion that in 'categorized' contact situations where the additional features of institutional support and valued differences are <u>not</u> evident then resulting attitudes may well still be generalized but may not be positive.
2. Generalization of attitudes from known peers with specific disabilities towards other disabled groups and the category of disability generally, will be most evident where contact is CATEGORIZED.

The importance of the data in showing cross-generalization of attitude/judgement from one type of disability to another is introduced, along with the relationship between attitudes/judgements and type of contact.

METHOD

The data reported in this chapter were obtained by administering a questionnaire within the interviews sessions described in chapter six. The questionnaire was designed to measure the children's affect towards and evaluation of, unknown children with and without disabilities. Because of the age range of the children (5 - 10 years), the researcher read each question and recorded responses for each child.

The children used the specially designed scales ('smiley' face, affect = likert type 1 - 5, and 'balloon', how much of 1 - 5) described in chapter six, to respond to items on a questionnaire. The first question measured liking (affect), the remainder measured psychological and physical attributes of unknown disabled (DIS) and non-disabled (ND) children. The task was the last one the children carried out, it was conducted after the semi-structured interview[2]. It was preceded by the researcher saying:

> "Well done. That (the previous task) was really good. Lets go back to the photos of the children you don't know. I would like to ask you some questions about them. This time can you use the smiley faces and balloons that we used before to show me what you think. Lets take the pictures in sets."

For each of the questions in the questionnaire the stimuli photographs were shown in prepared matched pairs (ie. HI, LD, PD), and the three pairs of non-disabled children. The stimuli were shown in this way for each question but the order in which the sets of photos were shown was systematically controlled[3]. This procedure, resulted in a score (between one and five) for each of three pairs of disabled children

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[2] Obviously, there are potential problems of demand characteristics, particularly in research with children, when administering a number of different procedures in a study of this kind. However, piloting determined the best order to minimise effects of 'demand' on the children's responses.

[3] This was done in the following way - Odd subject numbers = disabled first, even numbers = non-disabled first (subject numbers being randomly assigned at the start of the study). Order was recorded and no effect of order was found in subsequent analysis.

and a score for each of three matched pairs of ND children. The researcher introduced the task by saying:

> "Do you remember the faces and balloons we used in the game we played earlier? I have them here. I also have the pictures of the children you don't know. This time they are in sets. I would like to ask you questions about each of them. Can you use the faces or and the balloons to give your answer, just as you did with the people of the TV?"

At this point, if necessary, time was spent to recap with the child what each of the measures was for. The following questions were then asked and the responses recorded as described above.

General measure of affect

1. Now can you show me how much you like the children in each of these sets of photos using the smiley faces that we used before? (lik[4])

Evaluation of Psychological and Physical attributes

2. This time using the balloons can you show me how good at school work you think the children in each set of photos are? (schw)
3. Again with the balloons can you show me how good at P.E. and things like gym and swimming you think the children in each set of photos are? (PE)
4. Which balloon shows me how easily you think the children in each set of photos make friends? (frien)
5. Which balloon shows me how hard you think the children in each set of photos work at school? (wkhar)

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[4] The abbreviation in brackets after each measure is the one used in tables of results below to identify measures.

6. Which balloon shows me how well you think the children in each set of photos can run? (run)

7. Which balloon shows me how well you think the children in each set of photos can hear? (hear)

8. Which balloon shows me how well you think the children in each set of photos can think? (think)

In addition two further questions were asked. These served as a measure of the extent to which respondents viewed different categories of children as homogeneous and as similar (or not) to self. Both of these issues have been the subject of research in intergroup relations literature over recent years (eg. Park *et al*, *in press*; Wilder, 1986).

Intragroup similarity

9. Right, this time lets look at the children in each of the sets. Using the balloons can you point to the balloon that shows me how like each other, similar to each other, you think the children in each set of photos are? (intra)

Person to group similarity

10. Last of all can you point to the balloon that tells me how much like you, similar to you, you think the children in each set of photos are? (person)

Its worth noting that this last question could be interpreted in a number of ways. As interpersonal, intergroup or, as described, person to group. Data will be used to clarify interpretation and show that because the preceding question makes salient to the child the intergroup nature of the judgement, the most likely basis of their judgement is in fact intergroup. However, because of the ambiguity, findings should be regarded as circumspect. This being the final task in the study each child was debriefed, questions answered, given a badge, thanked and returned to the classroom.

ORGANIZATION OF RESULTS

As in previous chapters, this chapter is organized in sections - in this case four. In section one, an overview of the main findings are presented. Section two looks in more detail at the most interesting findings at the simplest level of analysis by school. Then in section three, the different types of contact (categorized, decategorized and none), in relation to the specific disabilities integrated (HI, LD and PD), are compared on particular dimensions. Finally, in section four, the main conclusions from the data are presented. The format of tables and abbreviations are consistent with those previously used.

SUMMARY OF MAIN FINDINGS

A series of 8 (School) x 4 (Stimuli), anovas were run on the eight main measures. Summary tables of means of these are given below[5]. In the tables, the scores for the control schools are derived from the mean scores of both control schools. A mean score was also computed for the three non-disabled pairs. Prior analysis revealed that this strategy was appropriate, as there was little difference between the children's evaluations of the ND pairs when they were included in the analysis separately.

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[5] In fact the manova procedure on spss was used to run the anovas. Due to the mixed design of the study this being the simplest technique for this analysis.

Table 8.1 below summarizes the main findings of the children's attitudes towards pairs of unknown children when the additional factors Age and Sex were included in the analyses. The most obvious finding, and one that is consistent throughout this thesis, is that, without exception, a main 'within subjects' effect for Stimuli was found on all of the measures. The primary cause of this effect is that the three disabled groups are consistently evaluated as less able than the ND children on all of the main measures. As can be seen from the table, a number of 'between subjects' main effects were also found. These imply a tendency by one school (or age or sex group) to rate all stimuli higher or lower, and hence they tell us little about differential attitudes. Of much more interest are the interactions, particularly those highlighted below.

Results from anovas

The anovas from which findings given in table 8.1 were derived, employed three between subjects factors, school (8); and age [2 (infant junior)] and sex (2) of participating children; and one within subjects factor, type of stimuli [4 (HI, LD, PD & ND)]. This chapter looks explicitly at the contact strand of the thesis. Nevertheless, findings relating to the second strand - social development, were found in these analyses. These are referred to in passing in Table 8.1, but I will not be focusing on them in depth in this chapter. A number of research questions and predictions have been highlighted in this thesis, and these have implications in terms of interactions that might be expected in the anova described above.

Effect			Expectations of anova in support of predictions
(i)	Developmental	will be returned to in chapters nine and ten.	age x stimuli (or lower order thereof)
(ii)	Gender		sex x stimuli
(iii)	Contact	TO BE COVERED IN THIS CHAPTER	school x stimuli

Measures	Principal main effects				
	Main effects (F, p <)				Interactions (F,df, p <)
	School F (7,220)	Age F (1,220)	Sex F (1,223)	Stimuli F (3,669)	
like			7.22*	28.17***	sch x sex x stim; 162(21,669)*
schwk		4.68*		65.29***	
PE				184.06***	sch x stim; 1.78(21,666)* age x stim; 7.88(3,666)***
frien				36.53***	
wkhar				33.99***	
run				324.14***	sch x age; 2.28(7,221) * sch x stim; 3.10(21,669)*** age x stim; 4.66(3,663)**
hear	3.47**			167.95***	sch x stim; 3.95(21,657)*** age x stim; 17.04(3,657)***
think		4.92*		92.04***	sch x sex; 2.06(7,220)* sch x stim; 5.51(3,660)***
intra	2.16*			4.25**	sch x stim; 2.43(21,654)***
person	2.71			183.54***	sch x stim; 1.89(21,663) ** age x stim; 3.63(3,663)* sex x stim; 3.96(3,663)**

note. $*p < .05$; $**p < .01$; $***p < .001$

Table 8.1 Summary of main findings of evaluation attitude measures.

Interactions in line with the developmental thread were found for the measures: PE, run, hear and person/group similarity. These were all caused by younger children rating the stimuli higher than the older children and are therefore not explored in any more depth in this chapter, as I am interested in differences between rating of stimuli[6] Interactions involving gender were found on the measures: like, schwk and think. As will be shown in chapter nine, own gender preference was a very salient feature for the children. The data described in this chapter are evaluations of mixed sex pairs this precluded further examination of the children's preference for own gender in this chapter. Interactions involving school were found on the measures: like, schwk, PE, run, hear, think, intra and person. In order to unravel analyses, the school x stimuli interactions are looked at in more detail.

ANALYSIS AT THE LEVEL OF SCHOOL

The following tables show the mean scores for each of the evaluative and attitude measures by school (type of disability integrated) and stimuli (HI, LD, PD, ND). Findings from three of the evaluative measures, (run, hear & think), are discussed in more detail in the next section of this chapter. Mean scores for the remaining evaluative measures relevant interactions (or absence of expected interactions) are noted. Information on the type of contact is included in the tables only as an aid to comprehension.

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[6] Developmental differences are returned to in the data on sociometric preference discussed in the next chapter, and the nature of the children's responses to questions in the semi-structured interviews are introduced in chapter ten.

Contact	School(n[7])	How much do you like these children? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.28_b	3.34_{ab}	3.47_{ab}	3.88_a	3.62
	LD (32)	3.38_b	3.41_b	3.63_{ab}	4.02_a	3.75
	PD (31)	3.61	3.48	3.61	4.03	3.80
Cat.	HI (32)	3.44_{ab}	3.66_{ab}	3.19_b	4.03_a	3.72
	LD (31)	3.41_{ac}	3.34_c	2.69_b	3.94_a	3.52
	PD (32)	3.41_{ab}	3.03_b	3.13_b	3.98_a	3.58
None (63)		3.44_{ab}	3.41_{ab}	3.00_b	3.85_a	3.57
Marginals		3.41	3.37	3.20	3.96	

Table 8.2 Mean ratings for measure - like.

Liking

No effect was found for school on the affective dimension liking. Neither was a school x stimuli interaction found. Consistent with findings throughout this thesis, a main effect for stimuli was found and this can be seen by the generally lower ratings of the DIS groups as opposed to the ND children (see bottom row of table 8.2). On this straightforward measure of liking, neither school (disability integrated) nor type of contact had much effect on the children's responses.

Schoolwork

Although not significant, an interaction in the right direction was found for school by

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[7] n of children in each school.

stimuli on the schoolwork measure ($p < .062$). Here, once again there is a trend to downgrade the DIS groups although the difference between ND and HI is not significant in the no contact schools. In the CAT school the differences start to sharpen up and there is more differentiation between the DIS stimuli and this is most evident in the HI CAT school.

Contact	School(n)	How good at schoolwork are these children? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.59_{ab}	3.38_{b}	3.5_{b}	4.27_{ab}	3.89
	LD (32)	3.56_{ab}	3.41_{b}	2.89_{b}	4.22_{a}	4.02
	PD (31)	3.84_{ab}	3.36_{b}	3.07_{b}	4.46_{a}	4.03
Cat.	HI (32)	3.10_{ab}	3.68_{a}	2.74_{b}	4.37_{a}	4.00
	LD (31)	3.66_{ab}	3.03_{b}	2.61_{b}	4.14_{a}	3.94
	PD (32)	3.29_{b}	3.39_{b}	3.19_{b}	4.36_{a}	4.01
None (63)		3.68_{ab}	3.25_{b}	2.87_{b}	4.10_{a}	3.58
Marginals		3.56	3.35	2.96	4.27	

Table 8.3 Mean ratings for measure - schoolwork.

PE

A main effect for stimuli caused by downgrading of all of the DIS children in contrast to the ND was found (again, see bottom row of table 8.4). This was particularly evident in both the categorized (CAT) and decategorized (DECAT) PD schools. Though perhaps it could be said to be a realistic evaluation as a large proportion of the integrated PD children were unable to move unaided. The downgrading of PD children is a pervasive feature of all the data reported in this thesis. A school x stimuli interaction for the measure PE was found, and differences in the pattern of rating can be seen in the schools. There are some differences in the schools with the same type of disability integrated. In the LD and HI schools this involves lower ratings of relevant disabled groups (ie. LD & HI) in the CAT schools than the DECAT SCHOOLS. In the PD schools this pattern reverses. Subsequently the downgrading of disabled groups relevant to the type of disability integrated were found in the HI and LD categorized schools.

Contact	School (n)	How good at PE are these children? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.53_c	3.84_{ac}	2.69_b	4.35_a	3.85
	LD (32)	3.06_c	3.44_c	2.00_b	4.46_a	3.65
	PD (31)	3.45_c	3.36_c	1.90_b	4.56_a	3.73
Cat.	HI (32)	2.90_b	3.71_c	2.26_b	4.66_a	3.81
	LD (31)	3.16_c	3.16_c	2.22_b	4.20_a	3.52
	PD (32)	3.16_c	3.53_c	2.06_b	4.51_a	3.71
None (63)		3.39_c	3.34_c	2.02_b	4.35_a	3.60
Marginals		3.26	3.49	2.21	4.41	

Table 8.4 Mean ratings for measure - PE .

Friends

Again, the three disabled groups were rated as significantly less good at making friends than the ND children. Surprisingly, no other main effects or interactions were found for this measure.

Contact	School (n)	How good at making friends are these children? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.68_{ab}	3.52_{b}	3.29_{b}	4.26_{a}	3.88
	LD (32)	3.69_{ab}	3.47_{b}	3.38_{b}	4.20_{a}	3.85
	PD (31)	3.26_{b}	3.58_{ab}	3.32_{b}	4.22_{a}	3.80
Cat.	HI (32)	3.77_{ab}	3.48_{ab}	3.48_{b}	4.18_{a}	3.88
	LD (31)	3.74_{ab}	3.42_{ab}	3.10_{b}	3.91_{a}	3.59
	PD (32)	3.81	3.50	3.34	4.03	3.83
None (63)		3.28_{b}	3.18_{b}	2.71_{b}	4.17_{a}	3.60
Marginals		3.55	3.40	3.15	4.12	

Table 8.5 Mean ratings for measure - making friends.

Work hard

Similarly, an effect for stimuli was found when the children rated how hard the SS worked, caused once again by the downgrading of the three disabled groups, particularly the PD group - a trend consistently found. No effects or interactions for school or other factors were found.

Run, think and hear

Mean scores for the measures, run, think and hear are given in the following three tables but findings are discussed in more detail later in this chapter.

Contact	School (n)	How hard do these children work? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.74	3.74	3.48	4.08	3.87
	LD (32)	3.71_b	3.58_b	2.94_b	4.53_a	3.91
	PD (31)	3.74_a	3.77_a	3.00_b	4.17_a	3.84
Cat.	HI (32)	3.40_b	3.80_{ab}	3.13_b	4.46_a	3.95
	LD (31)	3.94_a	3.59_{ab}	3.19_b	4.03_a	3.96
	PD (32)	3.73_{ab}	4.07_{ab}	3.43_b	4.28_a	4.01
None (63)		3.71_{ab}	3.69_{ab}	3.42_b	4.13_a	3.86
Marginals		3.72	3.76	3.26	4.23	

Table 8.6 Mean ratings for measure - work hard.

Run

Contact	School(n)	How well can these children run? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.75_{ac}	3.44_c	2.31_b	4.30_a	3.73
	LD (32)	3.63_c	3.63_c	1.53_b	4.50_a	3.71
	PD (31)	3.71_c	3.74_c	1.26_b	4.61_a	3.76
Cat.	HI (32)	2.84_c	3.66_b	1.16_d	4.63_a	3.59
	LD (31)	3.73_{ac}	3.27_c	2.03_b	4.40_a	3.62
	PD (32)	3.25_c	3.22_c	1.25_b	4.75_a	3.67
None 63		3.55_c	3.52_c	1.90_b	4.34_a	3.66
Marginals		3.52	3.51	1.67	4.49	

Table 8.7 Mean ratings for measure - run.

Hear

Contact	School(n)	How well can these children hear? ($\bar{x}$)				
		HI	LD	PD	ND	ND
Decat.	HI (31)	2.36_c	3.32_b	2.94_{bc}	4.51_a	3.86
	LD (32)	2.19_c	3.39_b	3.26_b	4.53_a	3.74
	PD (31)	2.42_c	3.39_b	2.81_{bc}	4.62_a	3.75
Cat.	HI (32)	1.28_d	3.97_c	2.38_b	4.78_a	3.66
	LD (31)	3.45_b	2.61_b	3.39_b	4.38_a	3.93
	PD (32)	1.84_d	3.59_c	2.69_b	4.59_a	3.65
None (63)		2.46_c	3.71_b	3.19_{bc}	4.57_a	3.79
Marginals		2.29	3.66	3.08	4.54	

Table 8.8 Mean ratings for measure - hear.

Think

Contact	School(n)	How well can these children think? ($\bar{x}$)				
		HI	LD	PD	ND	Marginals
Decat.	HI (31)	3.71_b	3.52_b	3.36_b	4.33_a	3.98
	LD (32)	2.97_b	2.97_b	2.66_b	4.41_a	3.63
	PD (31)	3.42_c	2.19_b	2.39_b	4.66_a	3.67
Cat.	HI (32)	2.50_b	4.03_a	2.22_b	4.59_a	3.74
	LD (31)	3.97_c	3.45_{bc}	2.97_b	4.33_{ac}	3.89
	PD (32)	3.38_{bc}	3.69_c	2.63_b	4.60_a	3.93
None (63)		3.89_c	$3.35b_c$	3.17_b	4.17_{ac}	3.82
Marginals		3.46	3.30	2.86	4.4	

Table 8.9 Mean ratings for measure - think.

DIFFERENCES AS AN EFFECT OF CONTACT

The analysis reported so far were at the level of school with sex and age being included in the main summary table (Table 8.1) but left out of the subsequent analyses. Anovas were also run with type of contact (CAT, DECAT, NONE), as a between subjects factor for each of the 10 measures. A main effect was found for stimuli on all measures ($p < .05$), and this can be seen in the consistently lower scores given to the DIS stimuli. Interactions involving contact (contact x stimuli), were found for two of the measures, like ($p < .05$); and think ($p < .000$). The interaction for like is caused by the lower rating of PD stimuli in the CAT and CONTROL schools as opposed to the DECAT school (3.0 *vs* 3.6), whilst there is little difference in how much the children in contact situations like the other stimuli (HI, LD, ND). The interaction for the measure think can be located in ratings of LD and LD and PD. LD is rated lower by DECAT than CAT or CONTROL schools [2.9 *vs* 3.8 (CAT), 3.4(CONT)]. PD is rated higher in control schools as opposed to the schools with contact [3.2 *vs* 2.8 (DECAT), 2.6 (CAT)]. ND schools also rated HI higher than contact schools (3.9 *vs* 3.3(CAT), 3.4(DECAT)]. These effects seem to be caused by contact *per se* vs no contact, with contact making disability more salient and sharpening up differences between evaluations of children with and without disabilities.

Nevertheless, there were differences between schools with the same type of disability integrated but with different types of contact. These were particularly evident on the measures run, hear, and think, which incidentally are relevant to the three types of disability integrated (HI, LD, PD). These differences and the number of main effects and highly significant interactions (all $p < .001$), involving school and stimuli, found in the preliminary analysis, lent support to comparison of the effects in relation to the integration of specific disabilities. It also supported the utilization of *post hoc* tests [Tukey's Honestly Significant Difference (HSD) test], to compare within subjects differences in evaluations in specific schools.

As can be imagined, this type of analysis produces a mass of data. In order to simplify things, the focus in this section is on schools where children with specific disabilities are integrated and on evaluative measures that illustrate the more general picture coming out of the data. To further aid comprehension findings are presented in the form of simple barcharts. I should note at this point that these are not new analyses, but more detailed examinations of specific components of the school x stimulus interactions reported in the earlier tables.

Data are from all three types of school - HI, LD and PD. They are of the children's evaluations on a relatively simple measure: running; and two more complex ones to rate hearing and thinking. It can be seen that these measures are relevant to the specific contact situations[8], running (PD), hearing (HI) and thinking (LD). All of the barcharts in this section follow the same format. So, for example if we look at figure 8.1 in which HI and control schools rate the SS on the simple to rate measure

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[8] These characteristics, relevant to particular contact situations, also serve to provide a check of the comprehension of the measures, since presumably particular measures should be especially responsive to specific target stimuli (eg. HI, LD, PD).

running. There are the two types of school in which HI children are integrated CATEGORIZED and DECATEGORIZED, and as a base line, schools in which no children with disabilities are integrated NO CONTACT. Each bar in the three types of contact, represents children with particular disabilities; HI, LD, PD, and ND. It should be noted that the NOCONTACT school data is constant in each set of evaluations of each measure (eg. as seen in figures, 8.1, 8.2, & 8.3). NOCONTACT data have been repeated in each set of evaluations, in order to aid comprehension.

RUNNING

Base-line: NO CONTACT control schools - 'running rated'

In the schools with no contact (NON) the non disabled (ND) children are rated significantly higher than the three disabled groups particularly the PD group which is rated lower than the HI and LD groups between which there is no differentiation.

HI schools - 'running' rated

The pattern in the decategorized (DECAT), school is almost identical to that in the control schools. In the categorized (CAT) school there is a different picture. Here, as in the NON and DECAT schools the ND children are rated significantly more able to run than the three DIS groups, and the ratings of the three DIS groups are clearly differentiated.

LD schools - 'running' rated

On the simple to rate characteristic running, the pattern in the LD schools is almost identical to the HI schools. In both the CAT and DECAT schools, again, the non disabled children are rated significantly higher than the three disabled groups, particularly the PD group. In the DECAT school the pattern is the same as for the HI DECAT school. The pattern in the CAT school is similar to the DECAT, although differences are more marked.

PD schools - 'running rated'

Here we have much the same pattern as in the LD school. PD children are pushed down lower than in the HI and LD schools, although this could be said to be a more realistic perception.

Contact in the LD and PD schools seems to have made little difference apart from accentuating differences in all three types of school with all three attributing a degree of physical disability to the two groups to which it is not relevant eg. HI and LD. This is an example of inappropriate cross generalization.

In the HI schools, a different pattern emerges. In the HI DECAT school the pattern is similar to that found in the LD and PD schools. The pattern in the control schools also reflects the same picture. However, in the HI CAT school, there are significant differences between the rating of all three disabled groups and the pattern of rating takes on a rather negative note. This is particularly so when we consider that differentiation is manifested in a downgrading of the HI (a group they have contact with) on an irrelevant dimension - running.

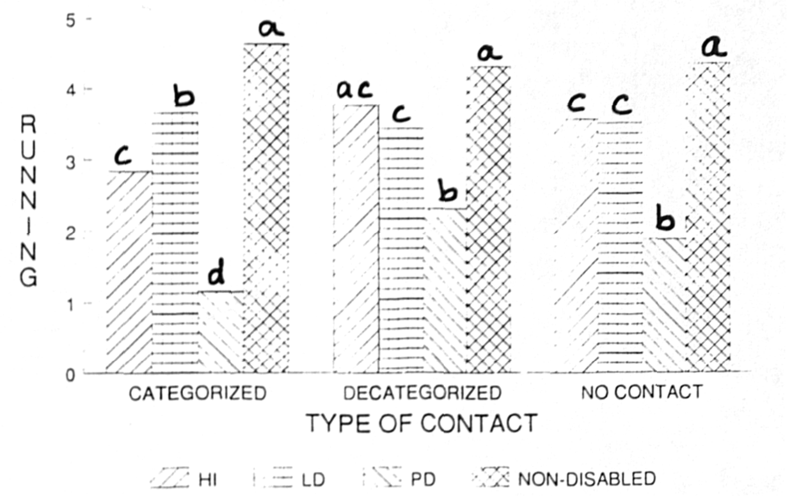

Figure 8.1 Schools where HI children are integrated - 'running' rated

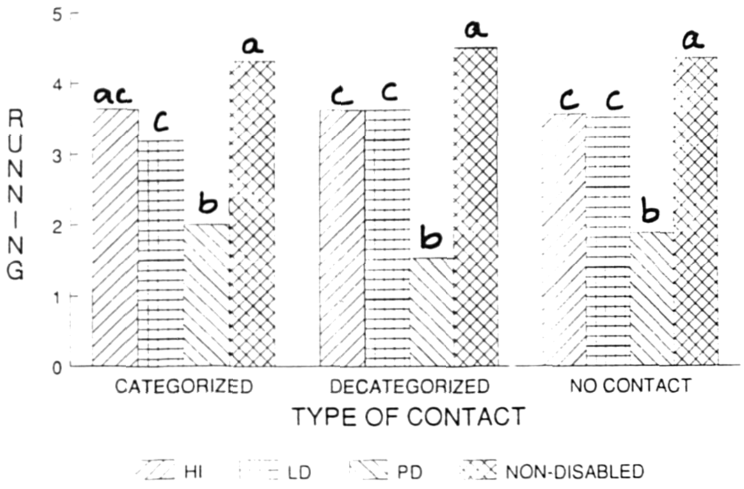

Figure 8.2 Schools where LD children are integrated 'running' rated

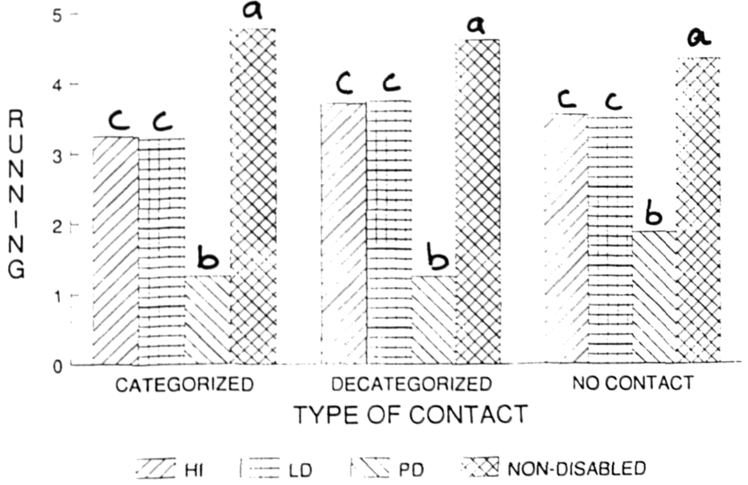

Figure 8.3 Schools where PD children are integrated 'running' rated

HEARING

Int "What kind of children are they?" (HI)

Child "They're just the same as us but they can't hear so you have to say it very loud otherwise they won't be able to hear you."

(R. junior girl HI categorized school)

Baseline: NOCONTACT control schools - 'hearing' rated

In the baseline NON schools, again, ND children are rated more able to hear than any of the DIS children. There is no significant difference between the ratings of LD and PD children, although HI children are rated significantly lower.

HI schools - 'hearing' rated

When asked how well unknown children can hear (a dimension relevant to the contact situation) all of the children say the HI children can hear significantly less well than the other disabled groups (LD & PD). The children in the CAT school rated the HI children lower than the children in the DECAT and NON schools - perhaps indicating that, in the CAT school, a first effect of contact could well be making the children more aware of the particular disability. Although the pattern is much the same in the CAT and DECAT schools, the differences are much more differentiated in the CAT school. As before, both the CAT and DECAT children attribute a degree of HI to the groups to which it is not relevant (LD & PD), especially the PD children.

LD schools - 'hearing' rated

In the LD DECAT school, the ratings of the four stimulus groups are much the same as in the NON school. An entirely different picture emerges in the CAT school. Here there is no differentiation between disabled groups on the rating - ability to hear. In other words the LD categorized contact children do not see any differences in the disabled stimuli on an ability to hear dimension.

Schools where PD integrated - 'hearing' rated

The pattern in the PD CAT school is similar to that found in the HI CAT school, although the differences between stimuli in the latter are sharper. In the DECAT school the pattern is like that found in the LD and HI DECAT schools, with one exception, there is no significant difference between the rating of the LD and ND stimuli.

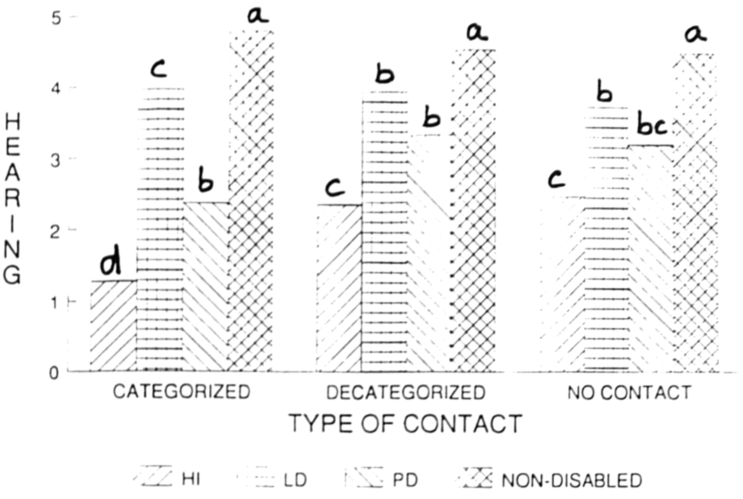

Figure 8.4 Schools where HI children are integrated 'hearing' rated

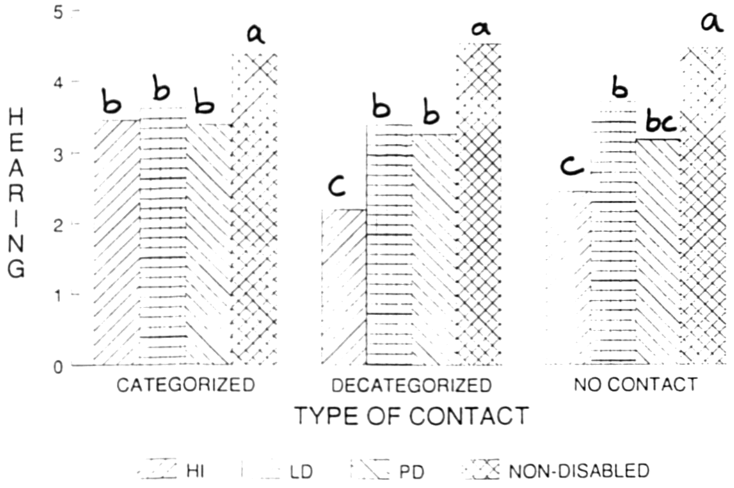

Figure 8.5 Schools where LD children are integrated 'hearing' rated

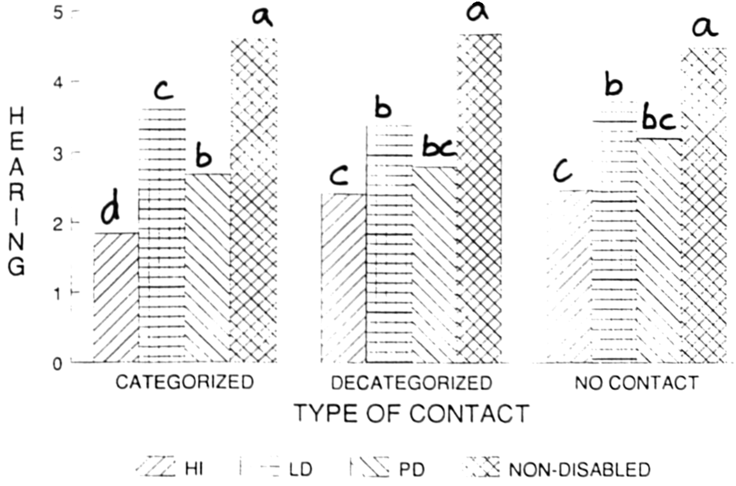

Figure 8.6 Schools where PD children are integrated 'hearing' rated

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THINKING

Int "What do you think about children who say can't think things out... what kind of children are they?"

Child "Deaf.....they've got things wrong with them and the doctors can't fix them."

(K. Junior girl in HI decategorized school)

Base-line: NOCONTACT - 'thinking' rated

In the control schools, ND children are rated higher than the LD and PD, although there is no significant difference between HI and ND. There is also no significant difference between the ratings of the three DIS groups on this rather abstract measure.

Schools where HI are integrated - 'thinking' rated

In the HI DECAT school there is a similar picture, although here, the ND children are rated significantly higher than all three DIS groups. Still, as in the control schools, there is no significant difference between the ratings of HI, LD and PD. In the CAT school an entirely different pattern can be seen. Here, PD children and more importantly, HI children (a disabled group with whom they have contact) are rated significantly less able to think than LD children - to whom the dimension is relevant. The sharper differentiation in the HI CAT school is similar to that found in other CAT schools and on other dimensions.

Schools where LD are integrated - 'thinking' rated

Once again, all three DIS groups are rated significantly lower than the ND children in both the CAT and DECAT schools. In the DECAT school there is no difference in the ratings of the three DIS groups, as was seen in the HI DECAT school. In the CAT school, once again differences start to sharpen up and there is more differentiation between the three DIS groups.

Schools where PD are integrated - 'thinking' rated

In the PD schools, there is a slightly different picture on this dimension that is <u>not</u> relevant to the contact situation. In the DECAT school, HI children are rated significantly more able to think than the LD and PD children. Here, as in the HI CAT schools the children downgrade the group that they know (PD), on an irrelevant dimension - thinking. In the PD CAT school the picture is even more like that found in the HI CAT school, as not only do they downgrade the group they know on this irrelevant dimension, they rate the PD as less able to think than the LD children to whom the dimension thinking is more relevant.

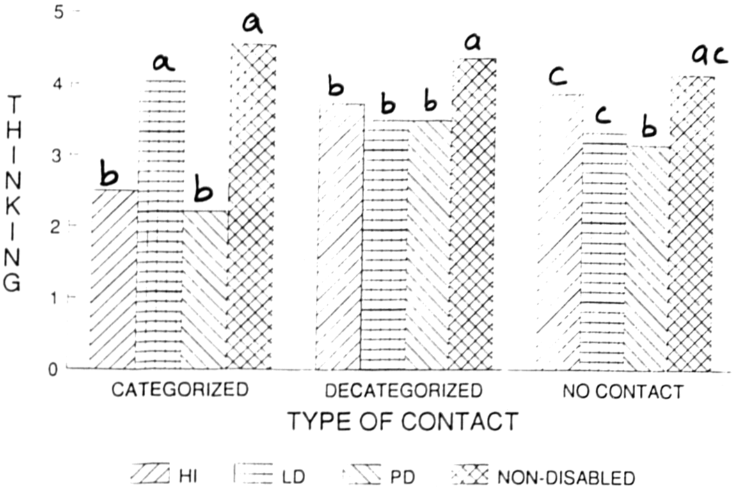

Figure 8.7 Schools where HI children are integrated 'thinking' rated

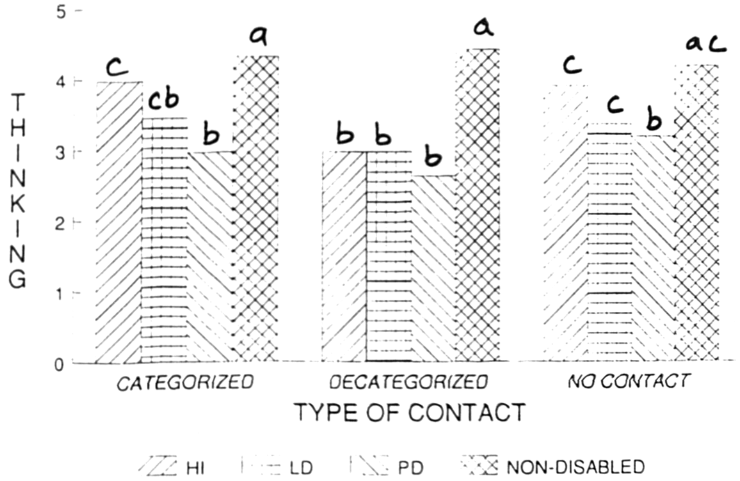

Figure 8.8 Schools where LD children are integrated 'thinking' rated

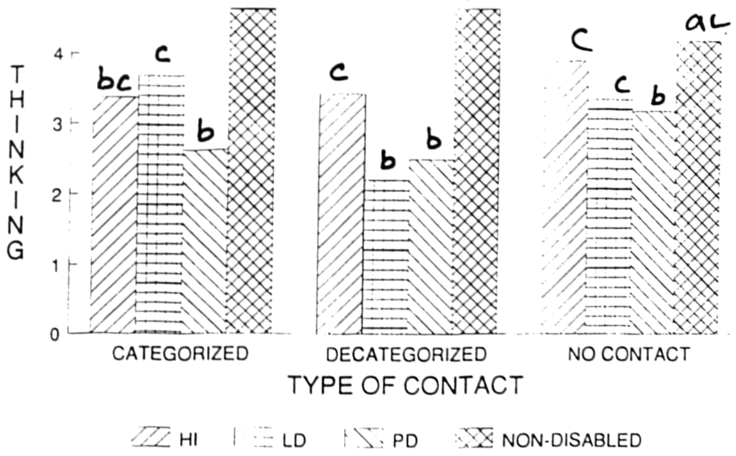

Figure 8.9 Schools where PD children are integrated 'thinking' rated

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Intra group and person group similarity

It will be recalled that two additional measures were also administered. Intra group similarity,

> 'how similar to each other are these (SS children in each pair) children'

and person group similarity,

> 'how similar to you are these (pairs of SS) children'

Main effects for school and school by stimuli interactions were found for both these measures (see table 8.1). To recap, these were:

> intragroup similarity: School ($p < .05$); Stimuli ($p < .000$); School x Stimuli ($p < .000$).
>
> person group similarity: School ($p < .05$); Stimuli ($p < .000$); School x Stimuli ($p < .01$).

In addition two further interactions were found on the person group similarity measure: Age x Stimuli ($p < .05$); Sex x Stimuli ($p < .01$).

As I am focusing on school and the different kinds of contact in this chapter, mean scores for the two measures by school are presented and discussed (tables 8.10 & 8.11).

Intragroup similarity

Contact	School	How similar to each other are these children? $(\bar{x})$					
		HI	LD	PD	ND	Marginals	Relative outgroup homogeneity
Decat.	HI	3.72_b	3.78_b	3.44_b	3.95_a	3.80	- .3
	LD	3.00_a	2.94_{ab}	3.91_b	3.16_a	3.22	+ .12
	PD	4.58_{bc}	3.52_c	4.36_b	3.19_a	3.67	+ .94
Cat.	HI	4.03	3.94	4.19	3.99	4.02	+ .06
	LD	3.77	3.68	3.71	3.6	3.66	+ .12
	PD	3.48	3.26	3.83	3.22	3.37	+ .20
None (63)		4.34	3.83	3.69	3.71	3.76	+ .22
Marginals		3.80	3.57	3.84	3.59		

Table 8.10 Summary table of means for measure - intragroup similarity.

Findings from the intragroup similarity measure are presented in terms of the amount of outgroup homogeneity shown in the different schools. This was calculated by comparing the mean outgroup homogeneity (ie. $\bar{x}_{HI + LD + PD}$) with the mean ingroup homogeneity (ie. $\bar{x}_{ND}$) so that a positive score indicates that the outgroups are seen as more homogeneous than the ingroup. Scores are given in the end column of table 8.10. The most outgroup homogeneity was found in PD schools (and with PD stimuli), and much less in control schools (for PD). HI seems to elicit the least outgroup homogeneity in the schools with contact and the most in control schools.

Person - group similarity

Contact	School	How similar to you are these children? ($\bar{x}$)					
		HI	LD	PD	ND	Marginals	Relative self differentiation
Decat.	HI	2.59_{bc}	3.03_{c}	2.19_{b}	4.10_{a}	3.35	+ 1.2
	LD	1.75_{c}	1.97_{c}	1.28_{b}	3.52_{a}	2.59	+ 2.1
	PD	2.16_{c}	2.45_{c}	1.61_{b}	4.14_{a}	3.10	- .69
Cat.	HI	1.78_{b}	2.19_{b}	1.56_{b}	4.06_{a}	2.95	+ 1.96
	LD	2.61_{b}	2.64_{b}	2.03_{b}	3.79_{a}	3.11	+ 1.37
	PD	2.19_{b}	2.28_{b}	1.66_{b}	3.16_{a}	2.59	+ 1.79
None (63)		2.60_{b}	2.55_{b}	2.13_{b}	3.78_{a}	3.09	1.39
Marginals		2.28	2.48	1.83	3.81		

Table 8.11 Summary table of means for measure - person group similarityy.

Self group measures

Similar calculations were made to obtain scores for self differentiation relative to the DIS stimuli. This provided a useful check on the validity and comprehensibility of the measures. ND were rated significantly more like self than the DIS in all the schools. The most differentiation was found in the LD DECAT school and the least in the PD DECAT school. In control schools differentiation was around the middle of the sample. In all PD CAT school the children clearly differentiated between the ND and the DIS stimuli and this simple calculation provided some validation for the measures.

The mean scores shown in Table 8.11 also provide information on a general 'social distance' measure for different types of disability. Stimuli is the strongest effect here ($p < .000$) and this can be attributed to the overall pattern of DIS being seen as less similar to children than ND. There is a school x stimuli interaction ($p < .01$). This can seen in the lower ratings of DIS in the LD DECAT school than in other schools. In addition, in all the schools with the exception of the LD schools, children see the disabled group that they know as <u>less</u> similar to themselves than at least one of the other disabled groups. Especially noteworthy in these tables are the low ratings of the PD children which are consistent with findings from the other evaluative data.

CONCLUSIONS

The data presented and discussed in this chapter develop and expand on findings presented in chapter seven and introduce a new perspective - evaluation of groups rather than individuals. These data present a rather gloomy picture, particularly in relation to categorized contact which, it was hypothesized, would be the most conducive to positive generalized attitude change. For example, in the HI categorized school, the children differentiated between the disabled groups more than in the decategorized and control schools, and downgraded the disabled group they know (HI) even on dimensions that are not relevant (schoolwork and thinking). In the categorized HI school, the sharper differences spill over onto another disability PD. Furthermore, children in all of the contact situations clearly differentiate between disabled children generally and non-disabled children. On the surface, contact seems to be having a negative effect and, in terms of the attitudes generated, the most negative responses were in a categorized school. It will be recalled however, that the notion that in "categorised" contact situations, where the additional features of institutional support and valued differences may not be evident, then resulting attitudes may well still be generalized but may not be positive. In the case of the data introduced so far this seems to be the case. Possible reasons for this are discussed in chapter twelve. In the meantime, though, it is worth holding in mind that, although contact in the categorized schools was clearly categorized, it was not optimal. Anecdotal evidence and qualitative data from interviews both with the children and with staff, indicate that the children were not given enough information about disability - this was particularly the case in the HI schools. In addition, many children felt uncomfortable about meeting a new child with disabilities. Classes were large, there were many demands on teachers time, and teaching was often (of necessity) individualised. Qualitative data that explores this aspect of the study is introduced in chapter ten.

It does seem that we can speculate that out of the very complex picture that is emerging, it seems likely that the pattern of ratings are an interaction between the type attitude/characteristic judgement, the disability of the stimuli group, and the kind of contact. Another aspect that needs bearing in mind are possible effects of social desirability. For example, when a child in the PD DECAT school was asked to indicate how well she thought children in wheelchairs could run, she responded:

> 'I want to say this (pointing to smallest balloon), but I think I should say this (pointing to largest balloon)'

This quote was like several others from the same school, and hints at social desirability being a factor in determining the children's responses. The girl in question, an infant, really did think it was 'wrong' to say children in wheelchairs couldn't run despite being quite certain that they could not. The statement at the start of this chapter:

> 'I don't know if children in wheelchairs can hear'

is also like a number of similar ones noted. In this case it was said by a child from the school where learning disabled children are integrated, and in which the contact was categorized. As can be seen in Figure 8.5 above, in the LD CAT school there is no significant difference between mean rating of hearing of HI, LD or PD children. A possible reason for this is the nature of the disability integrated. Here we have LD children integrated, category membership LD is salient and contact is intergroup. The children seem to be generalising their judgement from the category they know (LD) to other disabilities they don't know.

The subtyping of specific disabilities found in the categorized schools on the sorting tasks is reflected in the differentiation between disabled groups on the evaluative measures in most of the categorized schools. Finally, I would like to return to the generalization issue which is central to the theoretical base of contact. Data reported in this chapter show trends towards generalization being a feature of categorized contact but the evidence is equivocal. In some cases generalization resulted in a downgrading of other groups whilst in others it had the opposite effect - the very aspect of contact theory that has dogged research in the area for many years. There is however, a difference between research reported in this thesis and past research. In this research differences are in schools with <u>one type</u> of contact - categorized rather than between types of contact - categorized or decategorized, as has generally been the case in the past. This is evidence of inappropriate cross-generalization. Perhaps, one way to explore these trends in more depth is to consider the issue of generalization at its most basic level - from an individual one knows to someone one does not. Data on how much the children would like to play with known and unknown individual children affords the ideal opportunity to investigate the issue of generalization in this most fundamental interpretation. In the next chapter the 'play with' data are introduced and discussed, and the issue of generalization is returned to.

CHAPTER 9

SOCIOMETRIC CHOICE & PREFERENCE

THE 'PLAY WITH' DATA

Int "Do you play with them?" (HI children)

Child "em...not a lot but sometimes if they are wandering round the playground they'll come and play with us and we'll just let them."

(D. junior boy HI decategorized school)

OVERVIEW

This chapter looks at the children's sociometric choice and preference for known and unknown children. The issue of generalization in relation to contact between groups is then returned to. Data described in previous chapters have provided a somewhat negative picture of contact. Indeed, the most negative findings appear to be in categorized schools. For example, in the school where children who are HI are integrated and contact is categorized, children were found to differentiate between the disabled groups more than in the decategorized and control schools, and downgrade the disabled group they know (HI) on dimensions that are not relevant (schoolwork and thinking). Furthermore, in the categorized school, the sharper differences spill over onto another disability PD. A similar instance was seen in the school where children with LD were integrated and contact was categorized. In this school, rather than differentiate between the different disabled groups, when asked to evaluate how well HI children could hear, the children did not differentiate between how well they thought either, HI, LD or PD children could hear. In other words, because they had no other information or knowledge to go on, they seemed to generalize from the group they knew - LD (who could hear), to the groups they did not - PD (who could also hear) and HI (who could not hear).

Generalization is an enduring theme of this thesis. Although generalization of types of attitudes and evaluations from one type of disability to another has been shown in the last chapter, these need teasing out and exploring in more depth. The 'play with' data affords the opportunity to do just this. We have direct measures of how much children play with known and would like to play unknown individual children with and without disabilities. In addition, questions asked in the evaluation and attitude questionnaire were comparatively sophisticated - it is quite difficult to judge how well children you have never met can run, think or hear, indeed it is quite difficult to make these kinds of judgements about children you do know. It is much simpler to say how much you would like to play with another child - playing is a much more salient activity to children than thinking or even working hard.

Organization of chapter

This chapter is in two main sections. The first section begins by asking why the children said they would or would not play with the children in the stimuli photographs? The effects of school, age and sex on the children's responses are then considered. The second section explores the question of generalization in its simplest form - from a known to an unknown individual - by looking at product moment correlations between how much children in each school wanted to play with known and unknown children with specific disabilities relevant to their integrated contact experience.

Findings are presented in the format outlined in chapter seven and the standard abbreviations also outlined are adhered to. Any additional abbreviations are given in footnote[1] below.

METHOD & PROCEDURE

Data described here utilized the individual stimuli photographs and 'play with' postbox measure already described in previous chapters. The children indicated by posting the individual stimuli photographs how much they played with or would like to play with each of the children (known/unknown disabled/non-disabled) on the five point (post boxes) scale - always, a lot, sometimes, not much, never.

The 'play with' task was conducted after the unstructured sorting task described in chapter seven. Sociometric choice measures of known and then preference for unknown children were obtained. Children were introduced to the 'play with' task by the interviewer saying:

> 'Now we'll do something a bit different with the photos. I would like to see how much you play with the rest of the children in your class'

The following verbatim instructions were then followed[2]:

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[1] ws factors: STIM = stimuli (SS or KC); GEN = gender of stimuli. bs factors: SCH = school; AGE = age of respondents; SEX = sex of respondents.

[2] A full transcript of the verbatim instructions can be found in the appendices.

> 'I have 5 post boxes here. I would like you to use them to show me how much you play with the children in the photos. Each box has something different written on it and underneath is a balloon like the ones we used before to tell how much of something we had'.

(Point to each box and say clearly:)

> 'This box says ALWAYS on it. It has the biggest balloon on it. This box is for the children you play with all the time. This box says A LOT on it. It has the next biggest balloon on it. This box is for the children you play with a lot. This box says SOMETIMES. It has the next biggest balloon on it. This box is for the children you play with sometimes. This box says NOT MUCH. It has the next biggest balloon on it. This box is for the children you don't play with very much. This box says NEVER. It has the smallest balloon on it. This box is for the children you never play with'

(If child is unable to read just use the balloons to show 'how much of', and say:)

> 'Can you see how the balloons are like the ones we used the other day?. They start with a big one and get smaller. This box has the biggest balloon on it. This box is for the children you play with all the time. This box has the next biggest balloon on it. This box is for the children you play with a lot. This has the next biggest balloon on it. This box is for the children you play with sometimes. This box has the next biggest balloon on it. This box is for the children you don't play with very much. This box has the smallest balloon on it. This box is for the children you never play with'.

(Get child to repeat after you what each box is for and then say:)

> 'Will you put the photos in the boxes that tell me how much you play with the children in each of the photos'.

The procedure was then repeated with the standard stimuli (SS) photographs.

Design

The children's responses were recorded and scores for each individual photograph [12 known (KC) and 12 unknown (SS)]. Mean scores were computed for the non-disabled and disabled KC and SS by sex. The design in its most complete form consisted of two within subjects factors (Stimuli - disabled *vs* non-disabled, Gender of stimuli - girls *vs* boys) and three between subjects factors [School (8 in SS analyses, 6 in KC analyses[3]), Age of participating children (infant *vs* junior), Sex of participating children (girls *vs* boys)]. Data were analyzed first using the MANOVA procedure on SPSS in order to ascertain overall main effects and interactions. Further analysis were then conducted to look at specific effects identified in the preliminary analysis and to elaborate in relation to stimuli with specific disabilities. Finally, product moment correlations were calculated between the children's sociometric choice of known and preference for unknown children with specific disabilities by school.

WHO DID THE CHILDREN WANT TO PLAY WITH & WHY?

The first question begged by the 'play data' is 'who did the children want to play with?' Consideration of this very simple question will allow us to get a sense of the children's sociometric choice and preference for known and unknown children with and without disabilities. However, a subsidiary question also arises - 'what reasons did they give for their choice of playmates?'

In answer to this question, the reasons the children gave overridingly relate to the gender of the stimuli child - 67% of children gave gender as a reason for playing or not playing with both the KC and SS a finding illustrated by the following two quotes:

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[3] Only six schools were included in analysis of KC as control schools had no contact with disabled children.

Int "Why did you want to play with these children all the time?"
Child "I only play with girls".
(S. junior girl LD categorized school)

Int "Why do you never want to play with these children?"
Child "They're girls, girls, they're girls, I NEVER play with girls".

(R. junior boy PD decategorized school)

This own gender preference or choice often expressed, as can be seen in the above quotes, in vehement terms is a consistent finding throughout this thesis. It is reflected in the children's use of gender as a main dimension on which to sort the stimulus photographs in chapter seven, and came out very strongly in the quantitative analyses reported later in this chapter and will qualify most of the effects involving disability.

The remainder of reasons given ranged from answers such as: 'because I would' to 'don't know' and a number of children - particularly infants - were unable to give reasons at all. It should be noted however, that piloting determined that the children were able to do and understood the task and comprehension was confirmed by getting each child to say who their friends were and asking them which box they would post named friends into. Moving to the question 'who did the children want to play with?' In order to get an overall picture of findings in relation to this question two ANOVAs[4] were run, first on the KC and then the SS data. These analyses incorporated all the WS and BS factors outlined above. Summary tables of the main findings and relevant mean scores of these analyses are given and discussed below, first for known children - KC (Tables 9.1 & 9.2) and then for unknown children - SS

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[4] Because of the mixed design of the study, as in previous analyses, the MANOVA procedure on SPSS was utilized to run these analysis.

(Tables 9.5 & 9.6[5]).

Sociometric choice for known children (KC)

As can be seen in the summary table below (Table 9.1), analysis of the KC revealed two main 'between subjects' effects for School and Age of participating children, and one 'within subjects' effect for Stimuli. Although main effects were not found for sex of participating children or gender of stimuli there were a number of highly and very significant interactions involving all the between and within subjects factors, culminating in a five way interaction. In order to unpack these findings, a summary table of mean scores relating to the principal effects shown in Table 9.1 are given in Table 9.2.

The main effects and interactions are then discussed with particular attention to developmental effects and effects of school and contact that might be located in the five way interaction - School x Age x Sex x Stimuli x Gender.

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[5] The format of table follows that of tables in chapter eight.

'Play with' Known Children (KC) Effects	
BS Factors (df) SCH(5,168); AGE(1,168); SEX(1,168)	*F*
SCH	6.22***
AGE	17.02***
SCH x AGE	3.66*
SCH x AGE x SEX	3.71**
WS Factors	
STIMULI(3,168)	
STIMULI	70.43***
SCH x AGE x SEX x STIM	2.37*
GENDER(1,168)	
SCH x GEN	2.45*
SEX x GEN	235.54***
SCH x AGE x GEN	3.23**
SCH x SEX x GEN	3.70**
AGE x SEX x GEN	5.62**
SCH x AGE x SEX x GEN	3.52**
STIMULI x GENDER(3,168))	
SCHOOL x STIM x GEN	2.54*
SEX x STIM x GEN	20.35***
SCH x AGE x STIM x GEN	2.81**
SCH x SEX x STIM x GEN	2.92**
AGE x SEX x STIM x GEN	9.65**
SCHOOL x AGE x SEX x STIM x GEN	3.66**

note: *$p < .05$; **$p < .01$; ***$p < .001$

Table 9.1 Summary of principal significant effects of children's sociometric choice for known classmates.

Contact	Type of School	'Play with KC' ($\bar{x}$) by school					
		Age	Sex	Stimuli			
				Non-disabled		Disabled	
				girls	boys	girls	boys
Decat.	HI	Inf	girls	3.88	3.08	3.00	2.42
			boys	2.79	3.38	2.71	3.50
		Jun	girls	3.75	1.92	2.63	2.08
			boys	2.13	3.88	2.17	2.65
	LD	Inf	girls	4.00	2.46	3.13	1.67
			boys	2.21	3.38	1.71	2.33
		Jun	girls	3.75	2.75	2.77	2.54
			boys	2.08	3.75	1.71	2.75
	PD	Inf	girls	3.92	3.33	2.75	2.38
			boys	3.04	3.50	2.92	2.79
		Jun	girls	3.83	2.13	3.42	2.21
			boys	2.00	3.71	1.63	2.83
Cat.	HI	Inf	girls	3.50	3.25	3.08	2.76
			boys	2.88	3.58	3.04	2.92
		Jun	girls	3.83	2.00	3.17	1.92
			boys	1.75	3.83	1.75	2.21
	LD	Inf	girls	3.62	1.57	2.71	1.52
			boys	1.96	4.25	1.83	2.50
		Jun	girls	3.59	2.44	3.04	1.96
			boys	2.42	3.92	1.96	2.71
	PD	Inf	girls	3.54	2.79	2.92	2.54
			boys	2.75	4.25	2.54	2.71
		Jun	girls	3.42	2.38	3.25	2.46
			boys	2.17	3.96	2.08	3.38

Table 9.2 Summary table of means for sociometric choice for known children

A main effect for school can be seen in the higher ratings of both DIS and ND in the schools where PD children are integrated. Although there was a huge effect for stimuli (a finding consistent throughout the thesis), no significant interaction School x Stimuli was found. Here, at this first level of analysis - school - both categorized and decategorized contact with PD children seems to having a positive effect in terms of how much the children would like to play with both ND and PD peers. Thus, when ND and disabled stimuli are combined, liking for peers is greatest in PD schools, then HI schools, and then LD schools. Furthermore, this between subjects effect of school on liking both DIS and ND, (PD > HI > LD) peers is found in both junior and infant children. The overall main effect for age can be seen in the higher ratings that younger (infant) children in all the schools gave to both DIS and ND ($\bar{x}$ 3.2) *vs* older (junior) children's ratings which were significantly lower ($p <$ .000).

The main effect for stimuli found in analysis of these 'play with' data is caused by the children consistently - regardless of school, age or gender - rating the disabled children lower than ND children (2.9 *vs* 2.2). This finding is consistent with findings already reported in chapters seven and eight. Although differences between their ratings of sociometric choice are not quite so explicit as in the categorization and evaluation tasks, this can be explained, as has already been noted, by overall differences between schools in how the children rate both ND and DIS stimuli. Differences between children's ratings of DIS and ND children are better understood if considered in relation to lower order interactions and are returned to later in this section. First, though, it is useful to consider the relationship between sex of participating children and their expressed sociometric choice.

Although there was no main effect for sex of participating children, as one would expect in light of the past research on children's own gender preference (eg. Maccoby & Jacklin, 1987), there was a significant interaction between sex of participating child and gender of stimuli, and this interaction can be seen in the massive F value of the sex x gender interaction [$F(1,168)=235.54$; $p < .000$] reported in Table 9.1. Of more interest theoretically are the lower order interactions.

Sex of participating children	Stimuli (KC) ($\bar{x}$)			
	ND		DIS	
	Girls	Boys	Girls	Boys
Girls	3.45_d	2.22_c	2.67_b	1.90_a
Boys	2.25_{ad}	3.46_c	1.81_b	2.42_a

Table 9.3 Summary of mean sociometric choice for KC by sex of participating children, and gender of stimuli, and disability.

Closer examination of the mean scores by school reveals a number of instances where the difference between girls and boys ratings of male and female stimuli by age are not so discernable as is the case when data are combined across schools and age - particularly in the case of infant children's ratings of disabled children. As can be seen in Table 9.3 above, differences between girls' and boys' ratings of female and male disabled children are less than between their ratings of female and male non-disabled children, suggesting that what we have here *is a kind of outgroup* homogeneity effect. When analysis is conducted by school, age and sex (Table 9.1), differences of less than .5 (on five point scale) were found between ten boy/girl infant pairs and five junior girl/boy junior pairs. Of these non-significant differences, ten were between infant pairs and five junior pairs and only three of the infant pairs were for ratings of ND children, the remainder of the ns differences being between ratings of disabled female and male children. This finding, though speculative, is in line with findings reported in the categorization (sort data) chapter. It will be recalled that in a number of instances the children sorted photographs on disability and gender dimensions, and responses such as, 'boys, girls and handicaps' were recorded as reasons for sorting in a number of instances. It may also go some way to explaining the main effects and 2-way interactions. The following two figures help to unpack the five way interaction School x Age x Sex x Stimuli x Gender and add to the interpretations already provided by looking at the lower order school and age interactions. In these analyses we were interested in two aspects of the children's choice and preference: the way they rated the disabled (DIS) children and differences between these ratings and ratings of ND children. Thus both DIS and ND are represented in the figures. In addition, data for girls and boys are shown separately - a strategy justified by the massive main effects and interactions already discussed and caused by own gender choice. When mean scores for own gender choice for infant and junior boys and girls are compared, the higher ratings of infant as opposed to junior children (discussed earlier in this chapter), is evident in the girls' evaluations but not in the boys - .6 *vs* .1 differences (Figure 9.1).

Similar anomalies can be found when girls and boys preferences for own gender are compared in the six schools with contact (figure 9.2). The main effect of stimuli being consistently downgraded (already reported), is evident in all of the schools, with the exception of girls in the PD categorized school, whose preference for ND and PD are virtually the same (3.7 *vs* 3.5). In addition, differences of over 1 point were found between mean ratings of ND and DIS in girls ratings in the HI decategorized, and LD categorized schools, and boys ratings in the HI categorized, LD categorized, and PD decategorized schools. As noted already the main effect of school can be seen in the cumulative differences in schools of choice for both ND and DIS stimuli. It can be seen here, though, that the pattern of rating DIS and ND is not the same in schools when they are considered in relation to type of school (disability integrated), and by children's own gender choices. For example, in the HI schools, girls' preferences are higher for ND and lower for DIS in the decategorized school than the categorized school, whilst findings for boys are in the opposite direction. In contrast, in the LD schools, the decategorized school girls preference is higher for ND and lower for DIS than in the categorized school. The pattern for boys in LD schools is again in the opposite direction.

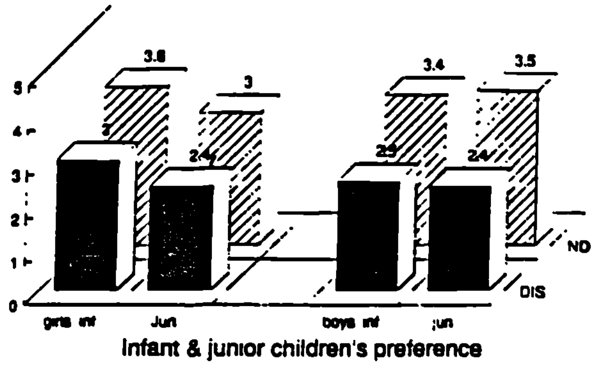

Figure 9.1 Infant and junior girls and boys preference for same sex KC.

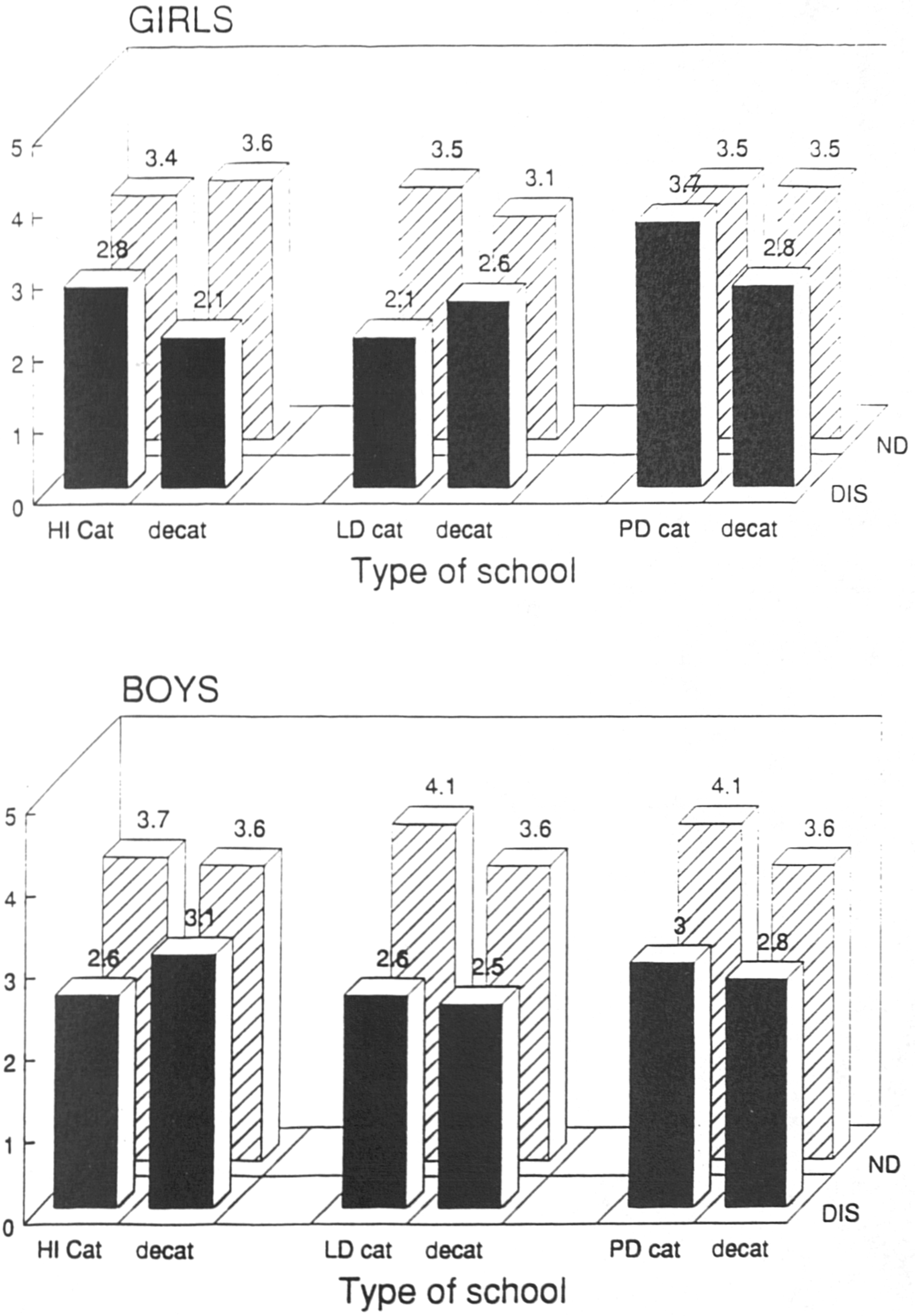

Figure 9.2 Girls & boys choice for same sex KC in integrated schools

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Sociometric preference for Standard Stimuli (SS)

The following table (Table 9.4) summarizes the principal findings of analysis of variance of the children's sociometric preference for the unknown children (SS). The findings of this analysis are presented in the same format as for the KC. Table 9.5 gives the mean scores for the principal findings.

'Play with' Standard Stimuli (SS) Effects	
BS Factors (df) SCH(7,221); AGE(1,221); SEX(1,221)	*F*
WS Factors	
STIMULI (3,663)	
STIM	44.568***
GENDER(1,221)	
AGE x GEN	3.91*
SEX x GEN	278.88***
AGE x SEX x GEN	6.92**
SCH x AGE x SEX x GEN	3.41***
STIMULI x GENDER(3,663)	
SEX x STIM x GENDER	23.24***

note: *$p < .05$; **$p < .01$; ***$p < .001$

Table 9.4 Summary of principal significant effects of children's sociometric preference for standard stimuli.

Contact	Type of School	age	sex	'Play with SS' ($\bar{x}$) by school							
				Stimuli							
				ND		HI		LD		PD	
				girls	boys	girl	boy	girl	boy	girl	boy
Decat	HI	Inf	girls	3.9	3.1	2.9	2.1	3.1	2.6	3.0	2.5
			boys	2.8	3.4	2.4	2.9	2.6	3.9	3.1	3.8
		Jun	girls	3.8	1.9	2.8	2.3	2.9	2.0	2.3	2.0
			boys	2.2	3.8	2.1	3.0	2.1	2.4	2.3	2.6
	LD	Inf	girls	4.0	2.5	2.9	1.5	3.3	1.7	3.3	1.8
			boys	2.2	3.4	1.9	2.8	1.5	2.2	1.8	2.1
		Jun	girls	3.9	2.4	2.6	2.4	3.1	2.4	2.7	2.3
			boys	2.0	4.0	1.4	3.1	1.9	3.0	1.7	2.4
	PD	Inf	girls	3.9	3.3	2.3	2.3	3.1	2.4	2.9	2.5
			boys	3.0	3.5	2.4	2.9	3.5	3.1	2.9	2.4
		Jun	girls	3.8	2.1	3.6	2.3	3.8	1.4	2.9	3.0
			boys	2.0	3.7	1.5	2.9	1.6	3.3	1.8	2.4
Cat.	HI	Inf	girls	3.5	3.2	3.5	3.3	3.1	2.8	2.6	2.3
			boys	2.9	3.5	3.4	2.8	3.3	3.0	2.5	3.0
		Jun	girls	3.8	2.0	2.9	1.9	3.8	1.9	2.9	2.0
			boys	1.8	3.8	1.5	2.3	2.0	2.3	1.9	2.3
	LD	Inf	girls	3.6	1.6	2.9	1.6	3.6	1.7	1.7	1.3
			boys	2.0	4.3	2.3	2.8	1.9	2.4	1.4	2.4
		Jun	girls	3.6	2.4	3.1	2.2	3.2	1.8	2.8	1.9
			boys	2.4	3.9	2.1	2.9	2.1	3.0	1.6	2.3
	PD	Inf	girls	3.5	2.8	2.6	2.8	3.5	2.9	2.6	2.0
			boys	2.8	4.3	3.1	3.5	2.1	2.9	2.4	1.8
		Jun	girls	3.4	2.4	3.0	2.3	3.4	2.3	3.4	2.9
			boys	2.2	4.0	2.8	3.4	1.8	3.4	1.8	3.4

Table 9.5 Summary table of means for sociometric preference for male and female SS with and without disabilities.

Unlike data from the children's sociometric choice for their classmates (KC), there was no main effect for school in their preference for the unknown children (SS). A main effect for stimuli was found, but, again contrary to findings from the KC, there were no main effects for age or sex of participating children or gender of stimuli. Despite this dearth of main effects there were a number of highly significant interactions involving the same variables as the analysis of the KC. A summary table of means is given above (Table 9.5) and principal effects are discussed in turn and considered in relation to findings from the KC data. Consistent with the picture presented throughout this thesis, disabled children received lower ratings in all of the schools and this can be seen clearly in the bar chart below (Figure 9.3[6]). However it should be noted that there were no significant school differences in DIS and ND.

Downgrading of the SS disabled children was consistent with the findings from sociometric choice for KC. However, the only significant effects in the SS of note concern the gender interactions (ie. sex x stim x gen) as shown in Table 9.5.

Turning to the three contact situation - categorized, decategorized and none. When analyzed at the level of school the different types of contact have had little effect on the sociometric dimension - playing. When we introduce age into the analysis the picture alters slightly. Although no main effect for age was identified there was a significant interaction between school and age of participating children. Analysis of

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[6] Mean scores for disabled children are for the disabled group relevant to the contact situation, eg. HI in HI schools, LD in LD schools, PD in PD schools.

the children's sociometric choice for KC children found that infant children expressed significantly higher preference for playing than did the older junior children, but this differentiation was less evident in the younger children's ratings of disabled children. In contrast, when rating the SS children there was no overall difference between infant and junior children's preference for playing with either disabled or non-disabled unknown children. Again, as in the rating of KC there was a significant interaction between sex of participating children and gender of stimuli - a finding one would expect in light of past research.

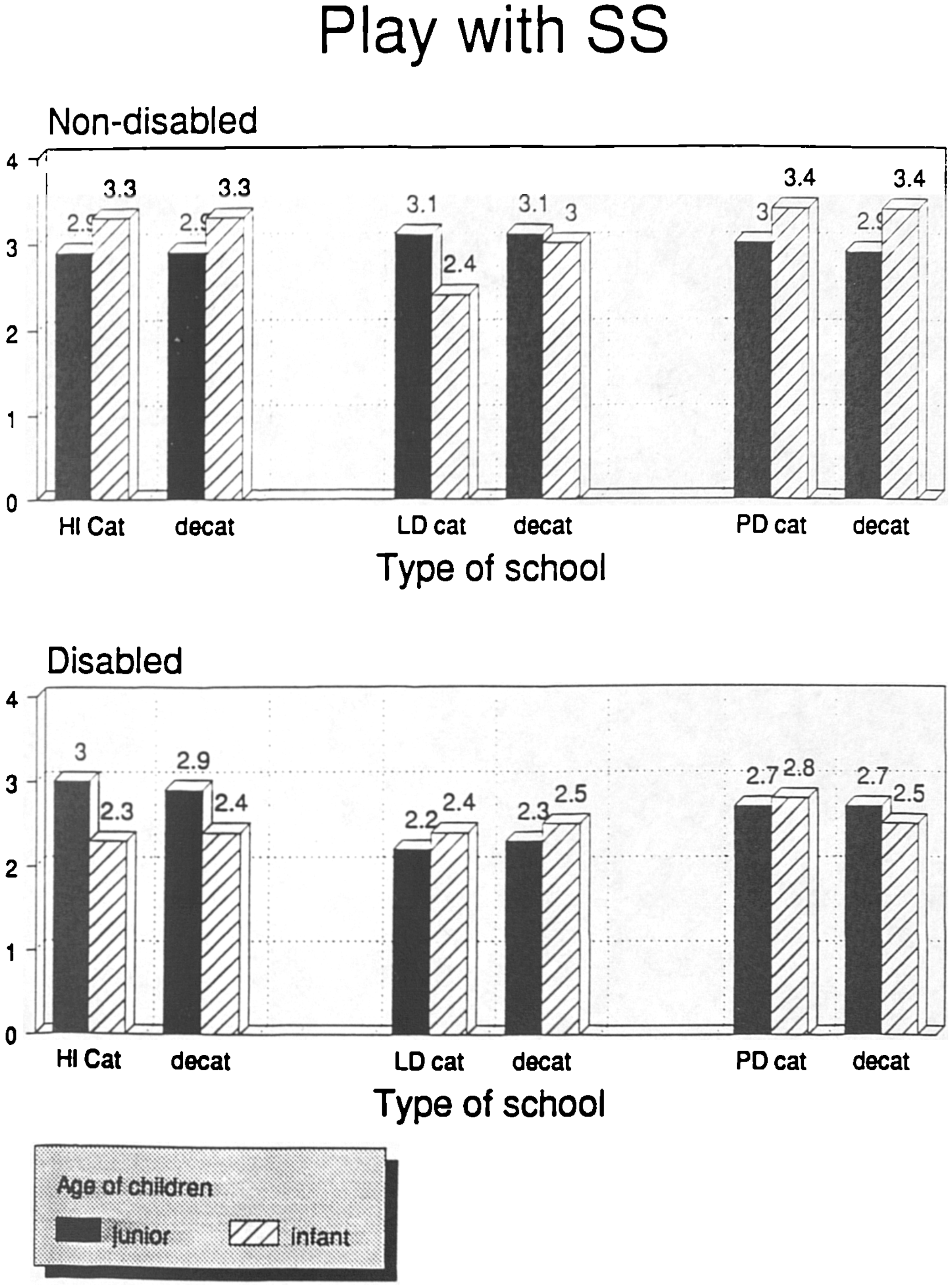

Figure 9.3 **Mean sociometric preference for non-disabled and disabled (with disabilities specific to contact situation) unknown children by school.**

Sex of participating children	Stimuli (SS[7])			
	ND		DIS	
	Girls	Boys	Girls	Boys
Girls	3.8_d	2.5_c	3.0_b	2.2_a
Boys	2.4_d	3.8_c	2.2_b	2.7_a

Table 9.6 Summary of mean sociometric preference for SS by sex of participating children, gender of stimuli, and disability.

As was the case in the KC ratings, differentiation between girls and boys rating of opposite and same gender stimuli is most evident in their ratings of the non-disabled SS and least evident in ratings of disabled boys. This finding in conjunction with the interaction between school, and age of participating children, and main effect for stimuli, goes some way to explaining the diverse nature of findings. To summarize, children in all of the schools want to play with disabled children less than children with no disabilities. In addition, in all schools there is strong evidence for own sex preference in how much the children want to play with the SS - particularly in the case of ND children. Own gender preference, in line with the main effect for stimuli is also mediated by type of disability integrated and disability of child being rated.

A RETURN TO THE GENERALIZATION ISSUE

Contact in the data presented so far in this and previous chapters seems to be producing a rather negative picture. In line with findings reported in chapter eight

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[7] Mean scores were computed for the SS ND and DIS from the relevant individual stimuli.

almost all of the children wanted to play with the known and unknown children with disabilities less than their ND peers. If we look at the 'play with' data the picture takes on a slightly more positive note especially in the HI categorized school where there was least differentiation between how much the children wanted to play with known and unknown disabled peers, although, it is clear that overall the children preferred the ND to the disabled children. What these data do not address is the issue fundamental to the theoretical models of contact - generalization of attitudes.

In the analyses reported so far in this chapter, there were main effects for school, age and stimuli in relation to KC, and a main effect for stimuli in evaluations of SS. There were also a number of significant interactions which have been elaborated on above. Stimuli then, were clearly an important feature in respect of the childrens sociometric choice and preference[8]. In order to get a sense of how generalized the children's sociometric choices and preferences were, Pearson's correlations were carried out between the children's ratings of how much they would like to play with the known and unknown children with disabilities specific to their school contact situations by gender[9]. The correlations are summarized below (Tables 9.7, 9.8, 9.9). These simple analyses would give a sense of generalization at the most basic level discussed earlier, from a known to an unknown individual. Analyses were carried out by school, and are presented by type of disability integrated, and type of

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[8] As they were in terms of their evaluative judgements as described in chapter eight

[9] Gender of stimuli was kept in the analysis in order to ameliorate the effects of own gender (preference already discussed).

contact - categorized (intergroup) and decategorized (interpersonal). In accordance with the theoretical models of contact being examined in this thesis, it was predicted that correlations between how much the children wanted to play with known and unknown individual children with specific disabilities would be highest in the categorized school contexts.

This prediction was supported by findings from the HI schools (Table 9.7). There was a significant correlation ($p < .01$) between ratings of known and unknown girls in the categorized HI school, and the ratings of the children who had categorized contact were more highly correlated than the children with decategorized contact. *Z* tests[10] on the correlations revealed highly significant differences between the categorized and decategorized schools for girls. In the LD schools the pattern is in the opposite direction (Table 9.8), with significant correlations ($p < = .01$) in the decategorized school. *Z* tests confirmed that correlations in the categorized and decategorized correlations were significantly different. The findings in the LD schools were reflected in the correlations in the PD schools.

As a control measure, correlations were also carried out on the children's mean ratings of the known and unknown non-disabled children by school. All but one (decategorized HI girls) of the ratings were significantly correlated at the .01 level and *Z* tests revealed no significant differences between any of the correlations.

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[10] 1 tail.

Contact with HI	Corr. KC & SS HI stimuli	
	girls	boys
Categorized School	.56**	.32**
Decategorized School	.00	- .06
Diff. between schools (Z score) N=64	2.41**	1.52

Table 9.7 Correlations between children's ratings of "play with" known and unknown hearing impaired children in HI schools.

Contact with LD	Corr. KC & SS LD stimuli	
	girls	boys
Categorized School	- .12	.26
Decategorized School	.34	-.38
Diff. between schools (Z score) N=64	-1.83*	2.53**

Table 9.8 Correlations between children's ratings of "play with" known and unknown children with learning disabilities in LD schools

Contact with PD	Corr. KC & SS PD stimuli	
	girls	boys
Categorized School	.21	.15
Decategorized School	.45**	.46**
Diff. between schools (Z score) N = 64	- 1.04	- 1.31

Table 9.9 Correlations between children's ratings of "play with" known and unknown children with physical disabilities in PD schools

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note: ** = significant to $p < .01$; * = significant to $p < .05$.

Conclusions

Findings from the 'play with data' have presented a rather complicated picture. The clearest and most consistent finding being the children's rating of both KC and SS DIS lower than ND. When the data were analyzed by school, children who had contact with PD children rated their PD known peers higher than children who had contact with HI or LD. However, when rating unknown children with specific disabilities no difference was found between ratings of children from HI, LD or PD schools. Differentiation between known disabled and non-disabled peers was highest in HI schools. This finding reflects findings from the evaluation and sort data and suggest that HI is more salient to the children in the HI schools than PD and LD is in the PD and LD schools. One possible reason for this could be to do with problems ND children have communicating with their HI peers. In support of this view, headteachers, classteachers and SENs teachers in the HI schools reported that communicating with ND children was often difficult for HI children. This view was reflected in comments by children in the HI schools, a number of whom suggested that because 'deaf children only understood each other' they always played with each other rather than with their hearing peers. Similarly, the director of an organization for 'deaf' children suggested the same thing. Although obvious, this fundamental difficulty may well often be overlooked.

When ratings of unknown children were examined the most differentiation was found in the PD schools and the least in the HI schools - particularly the HI categorized school, a finding contrary to that in the evaluation data. In line with past research (eg. Maccoby & Jacklin, 1987), children were found to prefer own gender peers when rating both known and unknown children, but this was less evident when they rated the disabled children. Younger children were found to have higher sociometric choice ratings for known children than older children but this was not the case with the ratings of the SS. One possible reason for this may be developmental, as rating known children is a far more concrete task than rating unknown children.

In chapter seven, no evidence was found of generalization from known to unknown children. In chapter eight, cross generalization of evaluations/attitudes from one type of disability was identified. The 'play with' data, introduced in this chapter, afforded the opportunity to simplify matters and consider generalization in its most simplest form - from an individual you know to one you don't know. In order to assess how generalized the children's sociometric choices and preferences were an analysis was conducted that looked at the relationship between the children's ratings of how much they would like to play with the known and unknown children with disabilities specific to their school contact situations. In accordance with the theoretical models of contact it was predicted that correlations between how much the children wanted to play with known and unknown individual children with specific disabilities would be highest in the categorized school contexts. This prediction was supported by findings from the HI schools. However, in the LD and PD schools the pattern is in the opposite direction. In line with findings reported for other measures, almost all of the children wanted to play with the known and unknown children with disabilities less than their non-disabled peers. The extent of the generalization from known to unknown choices and preferences varied widely between the different schools with no single pattern emerging. These, often paradoxical findings are discussed in more detail in chapter twelve. In the next chapter the qualitative data are considered in terms of developmental patterns in the type and quality of responses the children made to questions about disability.

CHAPTER 10

WHAT THE CHILDREN HAD TO SAY ABOUT DISABILITY

THE QUALITATIVE DATA:

Int "Who do you know?" (who's HI)

Child "I know Michael and Martin. They come from the unit that are deaf. And sometimes I feel sorry for them".

Int "Why's that?"

Child "Cos I wouldn't like it to be deaf, and I'm sure they don't like being deaf."

Int "What do you think about children like that?"

Child "I think that they should just act normal and people should just be like they are normal people.

(M. junior boy HI categorized school)

OVERVIEW

In this chapter qualitative data from the semi-structured interviews is introduced. The nature and content of children's knowledge about, and attitudes towards, disability is explored and related to findings of quantitative data presented in previous chapters. Of particular interest here in these data are the potential developmental differences between the infant and junior children, in respect of the type of statements they made about disability generally and HI, LD and PD in particular. In the interviews four questions were being addressed.

1. Do the children report knowing anyone who is disabled?
2. What do the children think about peers who are disabled?
3. What do the children think about adults who are disabled?
4. Do the children report having contact in the classroom, at playtime and out of school with peers who are disabled?

A coding framework was devised that allowed responses to be analyzed on four attitudinal dimensions: descriptive, effects, affective and empathic.

ORGANISATION OF CHAPTER

This chapter is organized into four sections. The first focuses on the development and coding of the attitude dimensions and reliability of coding. In the second section, children's responses to questions about disability generally, and HI, LD and PD particularly, are presented. The third section looks at responses about adults, family members and friends. Finally, in the fourth section, the amount of contact, in class, at playtimes and out of school that the children said they had with peers with SENs is discussed. Abbreviations used and format of tables is consistent with previous chapters, any additional abbreviations are given in footnote[1] below. Data are presented in three ways - tables as in previous chapters, figures showing raw data and χ^2 statistic, and a barchart. Extracts from the interviews are given throughout the chapter. Some are usefully employed for illustrative purposes, others are included because they made me laugh, whilst some did both.

THE FOUR ATTITUDE DIMENSIONS

The framework was developed out of the exploratory work already described in chapter six (Maras, 1988b). In this, children's responses to questions about peers with SLD were coded on four dimensions - descriptive, effects, empathic and causation. The four dimensions used in this previous study were embedded in the

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[1] Des = descriptive; eff = effects; aff = affective; emp = empathic.

questions asked and were therefore exclusive to particular questions. Coders coded responses to the identified questions on a five point scale (1 negative to 5 positive). Results of that study suggested:

> that there were developmental differences in the degree to which the children used the various dimensions;
>
> that this was affected by the type of school contact they had with disabled peers.

These findings were in line with findings previously reported by Lewis and Lewis (1988) and Katz (1982), among others. Research reported in this thesis builds on these exploratory findings. Four dimensions are utilized to explore children's responses in a semi-structured interview. However, a different approach was taken to the use of the dimensions. Analyses in the exploratory work relied heavily on agreement between coders on how positive or negative responses were in relation to the dimensions asked about. This paradigm reflected that used by Lewis and Lewis (1988) which also relied on the questions ability to elicit certain types of response (eg. about causes of disability etc.), rather than the responses themselves. This form of analysis has a number of shortcomings, particularly:

> intercoder reliability;
>
> the very arbitrary nature of the assignment of dimensions;
>
> the need for the underlying assumption that the child will recognise the type of response required and respond accordingly.

In order to address these problems, the coding framework used in the research reported in this thesis imposed no expectations or constraints on the questions asked. Rather, responses were analyzed *posthoc* in terms of the dimensions the children used when responding to open ended questions. The four dimensions and the criteria for coding them were:

> Descriptive Responses that describe the target or an aspect of disability. eg. 'he's in a wheelchair'.
>
> Effect This was a subsidiary code for the descriptive code. It was used if, in addition to or as part of, the description, the child said something about the effects of the disability or of the target being disabled. eg. 'he can't walk'.
>
> Affective[2] Responses that indicated affect such as like or dislike of target. eg. 'I like him'.
>
> Empathic This dimension was coded if the child showed evidence of perspective taking in respect of the target. eg: 'It must be awful not to be able to walk'

All effect scores were descriptive and effect was used if additionally the child indicated some effect of the description. So, for example, both of the following the sentences: 'he's in a wheelchair, he can't walk' and 'he can't walk' would result in a descriptive and effects coding. However, if the child just said: 'he's in a wheelchair' then this would be descriptive and NOT effects. In addition to the questions coded using this framework, a number of questions that required simple yes/no responses were also asked, eg. 'Do you know any one like that?' (who's disabled). A simple frequency count of the number of affirmative responses was used to code these questions.

Method

Semi-structured interviews were carried out with each child. The aim being to elicit responses to questions about disability. First about disability generally, then

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[2] Affective scores were originally scored as positive, negative or neutral. However, because agreement between coders was hard to get for neutral negative, or, neutral positive scores, affective codes were all combined.

specifically about HI, LD and PD. Interviews were conducted after the sorting and posting tasks and before the evaluations were obtained. The order of the various tasks was discussed in chapter five. Although there are obvious dangers of demand effecting the children's responses in interviews, on balance, this was outweighed by possible contamination to the unstructured sorting tasks, and the sociometric choice and preference measure if the interviews preceded them. The positioning of the interviews after the 'sorting' and 'play with' tasks, also meant that the prior use of the stimuli photographs served as an introduction to the interviews. Interviews were audio-taped and childrens', parent's, teacher's and headteacher's permission for doing this was obtained prior to the procedure[3].

Int: "What are they like?" (HI)

Child: "They can't hear themselves think."

(D infant boy LD decategorized school)

Procedure

Interviewers introduced the topic by saying:

> "Before we go on I would like to ask you a few questions about children. Children that are like some of the children in the photos we have just looked at - the children you don't know. You have probably noticed some children have things wrong with them. Maybe they can't hear, or can't walk or run very easily or maybe have trouble thinking as easily as other children do".

The following verbatim instructions were then followed. Although language used was adjusted where appropriate because of the importance of keeping the interviews 'flowing' easily and eliciting and elaborating on the children's comments.

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[3] A small number of sessions were also video-taped and permission was also obtained for this.

"Did you notice that?"

"Do you know any children like that?"

"Tell me about them?"

Then continue with the following questions[4] allowing child to freely talk around the points and prompting as non directively as possible. Using expressions like "Anything else?" between questions.

"What do you think about children like that?"

"What do you think they are like?"

"What kind of children are they?"

"Do you know any children who can't hear very well?"

"What do you think about children say: who can't hear?"

"What do you think they are like, these children say: who can't hear?"

"What kind of children are they?"

"Why are they like that?"

The same questions were asked in relation to children with learning disabilities - introduced as:

> "children who can't think things out very easily - who have problems thinking things out".

and children with physical disabilities:

> "children who can't run or walk very easily".

---

[4] A number of additional questions were also asked but are not included for two reasons. One, preliminary analysis of responses to these indicated insufficient responses rates for inclusion in final content analysis, and two, only questions that focused on the research questions of interest were included. A copy of the complete questionnaire can be found in the appendices.

Questions were then asked about disabled adults, any disabled family members or friends, and amount of contact with disabled peers:

> "What about grown ups who have those types of problems? What do you think about them?"
>
> "Do you have anyone in your family who is like that?"
>
> "Do you have any friends or know anyone else who is like that?"
>
> "How much time do you spend in class with children like that?"
>
> "How much time do you spend at playtimes with children like that?"
>
> "How much time out of school do you spend with children like that?"

The interview was concluded and additional comments invited:

> "Would you like to say anything else about what we have been talking about?"

All of the tape recorded interviews were transcribed.

Coding

Four coders were employed to code the transcribed data and each received at least four hours training prior to coding. Reliability tests were conducted on random pairs of coders using data subsequently coded by members of the alternate pair. Intercoder reliability for questions utilizing the four attitudinal dimensions was assessed using Scott's (1955) agreement coefficient (see Hollenbeck, 1978). This approach allows for observers coding multiple categories, and makes a correction for chance agreement for all categories, including those infrequently used. Intercoder reliability for the questions requiring a simple yes/no answer was calculated using a simple percentage agreement method.

Reliability was calculated for each question for each pair of coders[5]. For pair one, reliability was 100% for 13 questions and 93%, 89%, 86%, 80% and 75% for the remaining five questions. Pair two's reliability was 100% for 13 questions, 70%, 85%; 77% for three questions, and two low instances of reliability 44% and 37% for the remaining two questions. Further training was therefore conducted with pair two, and the reliability test was re-run using different coding material. On the second test, reliability of 100% on 15 questions and 82%, 75% and 72% on three questions was found. This level of agreement was thought to be very satisfactory and the four coders coded the transcribed material independently over a four week period[6]. They

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[5] Full reliability analyses can be found in the appendices.

[6] Periodically over the period of coding transcripts were randomly checked for reliability of coding.

were given minimal background information about the study, this included written instructions about the task which began by saying:

> The qualitative data we would like you to code are from semi-structured interviews that were designed to ascertain the childrens' initial ideas on disability generally and three specific disabilities (HI, LD & PD).

They were then given the list of the questions to be coded, and using the coding scheme outlined above, coded the data by recording frequencies of codes by school, age and sex of participating children. No information about the type of schools they were coding was given.

General disability

1. Do you know any children like that?
2. What do you think about children like that?
3. What do you think they are like?

Specific Disabilities

Hearing impaired

4. Do you know any children who can't hear?
5. What do you think about children who can't hear?
6. What do you think children who can't hear are like?

Learning disabled

7. Do you know any children who can't think very easily?
8. What do you think about children who can't think very easily?
9. What do you think children who can't think very easily are like?

Physically disabled

10. Do you know any children who can't walk or run very easily?
11. What do you think about children who can't walk or run very easily?
12. What do you think children who can't walk or run very easily are like?

Disabled adults

13. What about grownups with those types of problems. What do you think about them?

Disabled friends or family members

14. Do you have anyone in your family like that?
15. Do you have any friends or know anyone else like that?

Contact

16. How much time do you spend in class with children like that?
17. How much time do you spend at playtimes with children like that?
18. How much time do you spend out of school with children like that?

Table 10.1 Summary of questions coded in semi-structured interviews.

RESPONSES ABOUT DISABILITY GENERALLY & HI, LD & PD

Tables 10.2 and 10.3, summarize the frequency children said they knew DIS, HI, LD and PD, children, and the frequency with which they used the four dimensions in response to questions about them.

Contact	School	Age	Sex (n)	Dis known	Attitude dimensions			
					Des	Eff	Aff	Emp
Decat	HI	Inf	girls (7)	3	21	6	7	0
			boys (8)	4	17	10	7	0
		Jun	girls (8)	6	0	10	11	0
			boys (8)	8	26	16	12	0
	LD	Inf	girls (8)	2	16	2	4	7
			boys (8)	2	16	4	4	6
		Jun	girls (6)	2	12	0	15	6
			boys (7)	2	24	3	11	3
	PD	Inf	girls (7)	4	20	7	8	3
			boys (8)	3	23	4	6	1
		Jun	girls (7)	3	8	6	7	1
			boys (8)	6	22	22	8	0
Cat.	HI	Inf	girls (8)	5	17	5	2	7
			boys (7)	7	5	3	3	0
		Jun	girls (8)	4	27	16	11	2
			boys (7)	5	14	5	16	0
	LD	Inf	girls (8)	2	28	4	10	4
			boys (8)	2	23	9	7	11
		Jun	girls (8)	2	19	10	19	0
			boys (7)	1	14	8	11	2
	PD	Inf	girls (7)	0	26	13	3	0
			boys (7)	1	22	11	0	0
		Jun	girls (8)	7	30	16	7	7
			boys (8)	7	25	8	2	9

Table 10.2 N known, & attitude responses about disabled peers - contact schools.

Contact	School	Age	Sex (n)	Dis known	Attitude dimensions			
					Des	Eff	Aff	Emp
None	control	Inf	girls (14)	0	38	26	1	2
			boys (16)	1	48	12	8	2
		Jun	girls (15)	4	34	3	42	24
			boys (15)	10	59	3	32	15

Table 10.3 N known, & attitude responses about disabled peers - control schools.

I am primarily interested in developmental features in the way the children responded generally. So, in order to make the above summary table more manageable, raw data are combined across questions in the above tables. That is, responses to different disabled groups are collapsed down into single counts of the occurrence of a response on each of the four dimensions. In order to get a picture of age and gender, data were further combined for each dimension across schools with contact, and four chi-square statistics were calculated to see if, at this very basic level, there were any general trends. Tables, statistics and relevant sums are given and commented on below (Figure 10.2).

First, though, it is worth briefly noting that there was virtually no overall difference between the categorized and decategorized schools in the number of peers with SENs that children in each of the schools reported knowing. What was interesting was that there was a clear pattern in the number reported in particular types of school (eg. type of disability integrated). As can be seen in figure 10.1, the highest reported number was in the HI schools, followed by the PD and then the LD schools. Again, as with the categorization data, this finding has implications for the decategorized model of contact. One would have expected, that the number of reported known children would be lower in decategorized as opposed to categorized schools as, in line with Brewer and Millers model, their group membership has been de-emphasized. It is also interesting to note that it is in the HI schools that the most children are reported known, as it is in the HI schools that the strongest effects of contact were found.

> Int: "Do you know anyone like that?" (HI)
>
> Child: I know Naomi she's deaf and this boy called David he was deaf and he was dumb as well cos he used to jump up and down and chase the girls".
>
> (N junior girl categorized HI school)

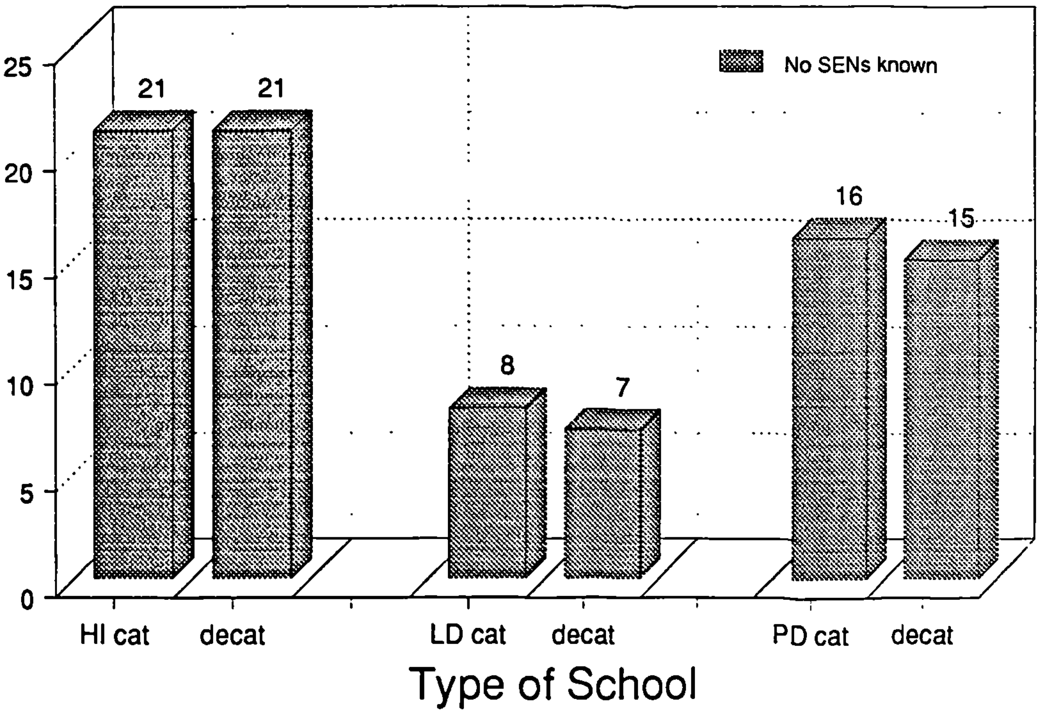

Figure 10.1 Showing number of reported known peers with SENs in schools with contact.

Int: Do you know any children like that?" (HI)

Child: Yeh the deaf units".

Int: "Can you tell me about them?"

Child: "em...when people are shouting it hurts their ears so they have to have them things round their ears".

(A junior boy HI decategorized school)

Returning to the children's use of the four dimensions in responses about peers. As can be seen, the only significant χ^2 statistic was obtained for the descriptive dimension, where there is an age/gender interaction. Infant girls use the descriptive dimension more than infant boys, whilst for older, junior children, the pattern reversed, and junior boys use the dimension more than junior girls. The overall lack of an age difference, is in line with the reasons the children gave for categorizing in chapter seven. On the effects dimension, although no significant χ^2, junior children use the dimension more than infant children (120 *vs* 198), and there is virtually no difference between girls and boys. On the affect dimension, similar findings to the sort data are again seen. The older children use affect nearly twice as many times as the infant children (130 *vs* 64). Finally, the number of empathic responses. The number of responses on this dimension was low. More infant than junior children gave empathic responses (39 *vs* 30), this difference is unlikely to be significant, but it is contrary to what one would have expected. In line with the sort data, one might have predicted that older children would use this complex dimension rather more than younger infant children.

	Descriptive		Effects	
	Girls	Boys	Girls	Boys
Infant	128	106	57	41
Junior	96	125 $\chi^2 10.7$ $p < .005$	58	62 $\chi^2 1.5$ ns.

	Affect		Empathy	
	Girls	Boys	Girls	Boys
Infant	34	27	21	18
Junior	70	60 $\chi^2 .06$ ns.	16	14 $\chi^2 1.7$ ns.

Figure 10.2 Number of responses on the four dimensions in contact schools.

Child: "..... they are different" (two PD children she is talking about)

Int: "In what way are they different?"

Child: Oh, 'cos Alan is handicapped and Jon is half-handicapped".

Int: "So, what's the difference between half-handicapped and whole handicapped?"

Child: "Whole handicapped means they can't walk and half-handicapped means they can't walk properly".
(AM infant girl in decategorized PD school).

RESPONSES ABOUT DISABLED ADULTS, FAMILY MEMBERS & FRIENDS

Int: "What about grownups like that (DIS), what do you think about them?"

Child: "Well I would say just keep in bed and don't go out too much"

Int: .... "What do you think about them?" (PD children)

Child: They have'nt got enough exercise". (T. junior boy in control school)

Tables 10.4 and 10.5, summarize the attitude responses about adults in contact and control schools on four dimensions.

Contact	School	Age	Sex (n)	Attitude dimensions			
				Des	Eff	Aff	Emp
None	control	Inf	girls (45)	14	5	3	2
			boys (46)	12	9	1	3
		Jun	girls (45)	17	10	13	6
			boys (45)	15	10	9	4

Table 10.4 Attitude responses about adults in schools with contact.

Int: "What about grownups?" (who are DIS)

Child: "They can't hear very well and wont be able to sort of like, if there's a fire in the house they won't be able to smell or hear it".

((N junior boy PD decategorized school)

Contact	School	Age	Sex (n)	Attitude dimensions			
				Des	Eff	Aff	Emp
None	control	Inf	girls (14)	8	4	0	0
			boys (16)	6	4	1	0
		Jun	girls (15)	5	2	6	1
			boys (15)	7	0	6	0

Table 10.5 Attitude responses about adults in control schools.

The cell sizes of raw data were too small to use a χ^2 statistic to look at gender and age patterns by school or type of school (ie. disability integrated). Combining all the cells and looking at the pattern overall allowed χ^2 to be calculated for the descriptive and effects dimensions. However, resulting statistics were not significant. Simple percentages were calculated for the affect and empathic dimensions and a pattern similar to that found in the reasons for sorting was found. More older than younger children utilized these more complex dimensions (figure 10.3). On the empathic dimension this finding is contrary to that found for DIS peers, where younger children were found to use the empathic dimension more than older junior children (see table 10.2).

	Affect %		Empathy %	
	Girls	Boys	Girls	Boys
Infant	8	5	9	14
Junior	48	40	48	29

Figure 10.3 Percentage of use of affect and empathic dimensions in relation to disabled adults.

Family or friends who are disabled

Two questions asked if the children knew any other adults or had any friends who were disabled. Raw data for these were combined across schools. More girls than boys (22 *vs* 15), and more juniors than infants (18 *vs* 20) said they had friends who had SENs. The pattern was similar for family members, more girls than boys (30 *vs* 26), but the pattern reversed in respect of age with more infants than juniors (40 *vs* 16). There was little difference between the schools with contact. Although only two children in the control schools said they had a friend who was disabled.

Int	"Do you have anyone in your family like that?". (DIS)
Child	"no.. Apart from my brother Dean he got bit by a Rottweiler...... Well he was at work with his dad up in Surrey and who my dad works for has got a Rottweiler called Bone - and he's got two girls Gail and Chris - Gail pushed Dean over and Bone the dog went for Gail over it, came over and bit him - right there" (pointing to leg)

(S. junior boy HI categorized school)

REPORTED CONTACT

The children were asked if they spent time with disabled peers, in class, at playtimes, and when not at school. The number of times children in schools with contact said they spent time with disabled peers in these three contexts were recorded. I will present data in respect of each in turn.

Int:	"Do you spend any time with her (HI classmate), at playtimes?"
Child:	"No cos she's always playing with Ann (another HI girl)".

(S junior girl HI categorized school)

Contact in the classroom

	Girls	Boys
Infant	5	7
Junior	9	11
		$\chi^2$3.39 ns

Figure 10.4 Contact in class - HI schools

	Girls	Boys
Infant	7	7
Junior	12	14 χ^2 9.91 $p < .005$

Figure 10.5 Contact in class - HI, LD & PD schools

Few children reported having classroom contact with DIS peers in LD and PD schools - two in LD six in PD. In HI schools 32 children reported contact. However, as can be seen in Figure 10.4 above, a chi-square test revealed no significant age or gender difference. More junior than infant children reported contact in class in the HI schools, and this trend was reflected in the LD and PD school. In order to increase the statistical power, raw data from the three schools was combined. As can be seen (figure 10.5), junior children reported contact in class almost twice as many times as infant children. This finding is interesting when considered in the light of the children's sociometric preference, where, it will be recalled older children gave disability as a reason for sorting significantly more often than younger infant children

Contact at playtime

	Girls	Boys
Infant	7	11
Junior	7	10

Figure 10.6 Contact at playtimes - HI, LD & PD schools

Again the number of children who reported contact with DIS peers at playtimes was insufficient for statistical analysis by school. When the frequencies were combined across schools with contact, no effect of age was found (figure 10.6). However, boys reported playing with DIS significantly more often than girls. The lack of an age finding is contrary to the children's sociometric choice and preference, where infant children wanted to play with both DIS and ND significantly more often than older junior children.

Contact out of school

Few children reported having contact out of school, and even when data were combined across schools, numbers were too small to carry out a chi-square test. However, of the small number of incidences of reported contact out of school, infant girls said they had most contact [5 (42%)], followed by junior girls [3 (25%)], and then infant and junior boys [2 (17%) each]. Suggesting, very tentatively, that girls had more contact than boys.

> Int: "Do you ever see any of them (PD) after school?"
>
> Child: "I see them going off in the taxi".
> (M infant boy PD decategorized school)

As can be seen then, few of the children reported contact either in or out of school. Given that all of the children had at least two children who had particular disabilities in their classes (HI, LD or PD), this finding is surprising. One explanation could be that they don't notice their disabled peers. However, this explanation is unlikely when considered in relation to the sort data, in which all the children clearly categorized disabled children. It also poses somewhat of a conundrum for this research, as it is based on the assumption that contact is occurring in the schools in a number of ways. Yet, here we can see that few of the children recognise its occurrence. Nonetheless, data presented in previous chapters has suggested that contact is having an effect on attitudes and evaluations, particularly in categorized schools where the most generalization was found. In the next chapter, a follow up quasi-experimental study is introduced. The study took place in a school where children with severe learning disabilities (SLD) are integrated and contact is categorized, the data will allow us to get a more precise picture of contact.

Int: "What do you think about children like that?" (DIS)

Child: "I feel sorry for them because they can't do things".

Int: "What do you think about children, say, who can't run?"

Child: "I feel sad cos they would'nt be able to play with their things, or run to the park or run to the shops or to their house".

(R junior girl PD decategorized school)

CHAPTER 11

TEMPORAL EFFECTS OF CONTACT ON CHILDREN'S ATTITUDES TO DISABILITY :

A QUASI-EXPERIMENTAL STUDY

Int: "Can you tell me what you think about that?" (a child with SLD being integrated into class)

Child: "Permanently, like school?"....... "They'll have to be looked after properly cos they might you know not understand as much as the rest and it would have to be explained more than the others".

Int: "How do you think you would get on with them?"

Child: "em... I don't know really I've never experienced like being friends with one".

(A. junior boy in class with integrated structured contact)

OVERVIEW

In this chapter a quasi-experimental case study is introduced. Findings from the main study of this thesis, reported in chapters seven, eight nine and ten, are from a cross sectional field study in which 256 children participated. In contrast, research reported in this chapter allows us to take a more longitudinal approach and consider what happens to mainstream children's attitudes over a period of time when children with SLD are integrated in a structured way into their mainstream school.

Context & rationale for design

In the course of the main study a school was identified from which, as part of the curriculum, a number of children are randomly selected each year to participate in an integrated programme with children from a 'special school' for children with SLD at regular weekly intervals. This integrated programme offered a unique research opportunity to conduct an experimental study within a naturalistic context. Access to the mainstream and special schools was negotiated and a longitudinal study was carried out in the two schools over a period of one school term - the random selection procedure providing a "natural" experimental context, control children being those randomly selected not to take part in the integrated sessions.

The quasi-experiment allowed for issues identified in the main study to be explored in more depth. For example, in the main study the effects of contact were not entirely clear. Although there were trends towards categorized contact producing generalised attitude change these findings were equivocal and often where generalization was identified it was in a negative direction. Within the case study reported in this chapter it will be possible to explore the effects of controlled contact situations over time on the children's attitudes. The study also provided a unique opportunity to evaluate policy implications of structured integrated sessions. Finally, within the study there was an opportunity to conduct a further small experiment investigating the effects of varying the amount and type of information the children believed they had, thus enabling The Social Judgeability model of stereotype change to be tested within an applied context.

Aims

The natural experiment had three main aims:

1. The measurement of the development/changes in children's attitudes towards learning disability over time (with different types of contact).
2. A quasi-evaluation of an exchange programme.

3. To test the Social Judgeability model in young children in a field setting.

Data to be presented

The main body of data from the study take a similar form as those in the main study. Data are presented that explore the criteria the children use to categorize their judgements about and their sociometric preference for unknown peers with and without disabilities. As already stated, in addition, new literature on social judgements is considered and integrated into the theoretical framework. The Social Judgeability model (Leyens *et al*, 1992) was developed from work on the fundamental attribution bias. Extending this past work by suggesting that when people feel they have enough information (even when in fact they have none or when the information is of a non-diagnostic nature) then they are more likely to resort to the use of stereotypic trait judgements. It is this 'feeling able to judge' that is Social Judgeability (SJ). SJ has hitherto not been considered in relation to children or naturalistic contexts. Furthermore, the possibility that different kinds of contact situations might be an additional mediating factor on social judgeability can be examined.

THE INTEGRATION PROGRAMME

The integration programme between the special school and the mainstream primary school had been in operation for a number of years. The two schools are within the same catchment area of a London Borough separated by a busy main road. Instigation of the programme is by the special school and the deputy headteacher has responsibility for its management. Children on roll in the special school are all classified SLD although as already discussed this classification encompasses children with a wide range of physical and cognitive impairments. Integrating children are selected from a number of classes and selection is based on recommendations of and discussions between the head, deputy and class teachers in the special school. Twenty children with SLD were selected to integrate in the period reported in this chapter[1]. Historically, the programme has always been conducted with year four mainstream children, possibly because of the interest of a particular year four teacher. In line with past experience year four was selected in the year this study was conducted although the class teacher for the class involved in the programme was a new teacher in his first year of practice; the teacher normally involved in the scheme being the class teacher of the other year four class that served as a control in the study.

Practise for integrating children took three forms. 10 mainstream children went to the special school and had structured sessions with particular SLD children with whom they remained paired for the whole term. Ten SLD children came to the mainstream primary school accompanied by two teachers from the special school. Of these, five spent the session in the staffroom of the mainstream primary paired with five mainstream children with whom they remained paired for the remainder of the term. This staffroom session was conducted by a teacher from the special school. The remaining five children spent the session in the mainstream classroom with the

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[1] One of the children with SLD who was involved in the programme sadly died during the term the programme was studied.

remaining mainstream children and the mainstream teacher and the second SENs teacher. Integration sessions took place on the same afternoon each week, the form of involvement being determined by random selection. Parental permission to participate in the study was obtained prior to random selection and we were able to assist in the random selection of children into the three types of integration in the year when data were collected.

PROCEDURE

The procedure for the study took a similar form to that employed in the main study. Initial interviews with staff at the school were carried out to ascertain normative behavioral prescriptions for working with disabled people. 50 Children from two National Curriculum year four classes participated in the study[2] - 28 girls and 22 boys. The mean age of the children was 8.8 years (range 8 to 10 years, mode 9 years). 26 children from one of the classes participated in the integrated programme[3]. 24 children from the second class served as a control group. Prior to participation in the programme children were pretested utilising an adapted version of the protocol of the main study[4] and the same three measures as employed in the main study were used: 'smiley face' affect measure, balloon measure of amount and postbox measure of sociometric choice and preference. Photographs were taken of all the disabled children involved in the integrated sessions and these were utilised to

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[2] 10 children moved or were absent for at least one of the three sessions.

[3] Referred to as the experimental group from this point.

[4] A copy of protocol can be found in the appendices.

determine attitudinal changes and the development of behavioral norms over time. Homogeneity was measured by asking the children to rate similarity to self and of the unknown children with and without disabilities at repeated intervals.

Social Judgeability experiment

A mini-experiment designed to test the Social Judgeability model was incorporated at the end of the final session. This entailed all of the children being shown a picture of a PD boy in a wheelchair and told his name (John) and that he is 'handicapped', whilst half of the children were given additional information of a non-diagnostic nature. All the children were asked to rate John on a stereotypic trait - how easily does he make friends. This was chosen after piloting in another mainstream primary school revealed it was a commonly expressed stereotype about PD children as well as HI and LD. It also meant we were able to use the existing 'balloon' scale. The children then had to indicate on a five point scale how confident they felt about this judgement. This confidence measure would be a simple measure of social judgeability (SJ).

DESIGN

The design in its most complete form had three within subjects factors: Time (time 1, time 2, time 3), with children being seen at intervals throughout the term; Stimuli (HI, LD, PD, ND); and Gender of stimuli (m & f). There were two between subjects factors: Contact (yes/no); and Sex of participating child (m & f).

WS Factors		BS Factors			
Time	Stimuli[5]	Contact (n)		No contact (n)	
		Girls (8)	Boys (12)	Girls (7)	Boys (12)
Time 1	HI				
	LD				
	PD				
	ND				
Time 2	HI				
	LD				
	PD				
	ND				
Time 3	HI				
	LD				
	PD				
	ND				

Table 11.1 Design of quasi-experiment.

ORGANIZATION OF DATA

Data in this chapter are organized into four sections. In the first the children's sorting of the unknown stimuli are presented in diagrammatic form showing the way the children sorted the photographs as analyzed by multi-dimensional scaling

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[5] Stimuli were analyzed by gender and combined across disability in data on sociometric preference.

techniques (MDS). MDS of plots at time one and time three are presented in order to consider temporal effects in the children's sorting strategies. Section two deals with the evaluations the children make of pairs of unknown children with and without disabilities, and again considers them over time - in this instance including time two. Data on the childrens sociometric preference are considered at two points in time (t2 & t3), in section three, their expressions of sociometric choice and preference for known and unknown girls and boys are correlated (as in chapter nine) to see if the contact situations result in any generalised expressions of preference. Finally in section four the data from the SJ manipulation are discussed and the effects of contact on the childrens feeling of being in a position to judge considered.

CATEGORIZATION

It will be recalled that data from the main study revealed that contact seemed to make little difference in the strategies the children used to categorize either known or unknown children. All the children tended to sort the stimuli, particularly the SS, on two main dimensions gender and disability with some evidence of subtyping of particular disabilities being evident within the disability dimension. Although no differences in the strategies for sorting, children in the categorized contact situations did seem to be sorting the disabled stimuli into tighter clusters when the data were analyzed using the descriptive MDS analysis. Children in both the control and experimental groups sorted the SS three times and, for simplicity, data from time one (pre-test) and time three (post-test) are presented below (figures 11.1 to 11.8). They are presented in the same format as the plots in chapter seven. Green spots represent boys red spots girls. Disabled children are represented by a smaller different coloured spot within the gender spot (HI blue, LD orange, PD yellow).

🔴 Girls 🟢 Boys 🔵 HI 🟠 LD 🟡 PD

Experimental group at t1 and t3

As can be seen in Figure 11.1 at t1 the children in the experimental group are sorting the photographs on the same two *main dimensions used in the main study - gender* and disability. When a third dimension was run it can be seen in Figure 11.2 that within the disability dimension the children are subtyping specific disabilities by placing them relatively close together - particularly LD and PD children though not so much HI children. At time three the picture changes somewhat. There seems to be so little evidence of sorting on the usual two dimensions (Figure 11.3). Rather the disabled PD and HI children seem to be subtyped, while the LD boy is placed amongst the other disabled stimuli and the LD girl is placed nearer to the ND children. As can be seen then, the picture here is quite different from t1 (figure 11.1) at best one could say that disability was salient but gender is not at all evident. When a third dimension is run (Figure 11.4) ND girls and boys are placed slightly closer together but there is no clear pattern with the HI and PD boys and girls other than the subtyping already noted and the placing of the LD girl some distance from the other children with disabilities.

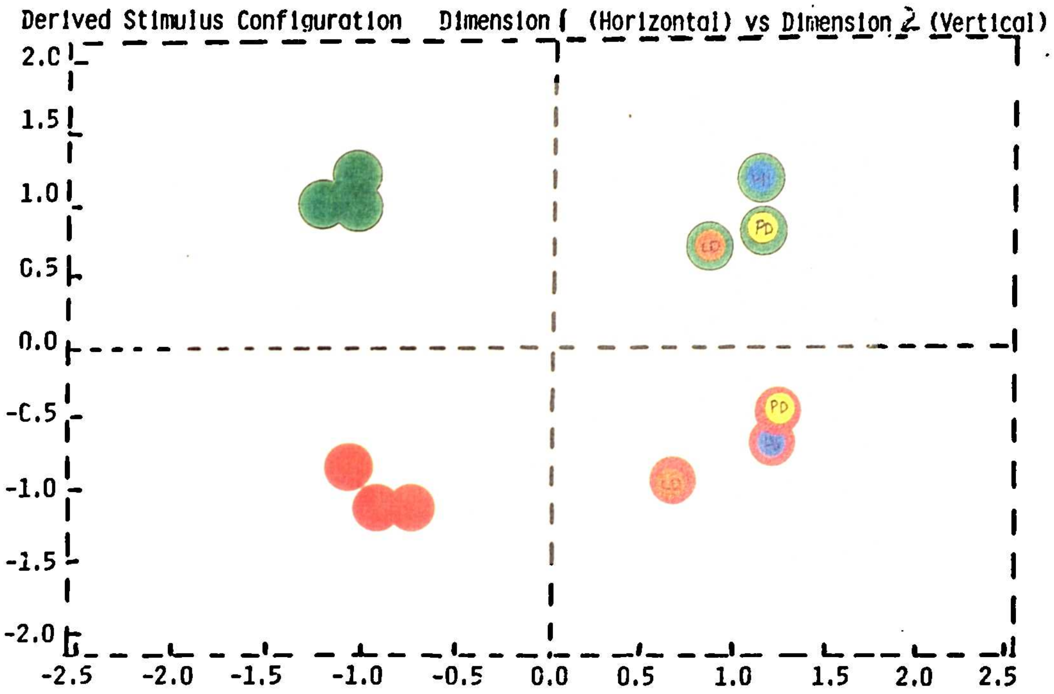

Figure 11.1 MDS plots of sorting SS in experimental group at time one on two dimensions.

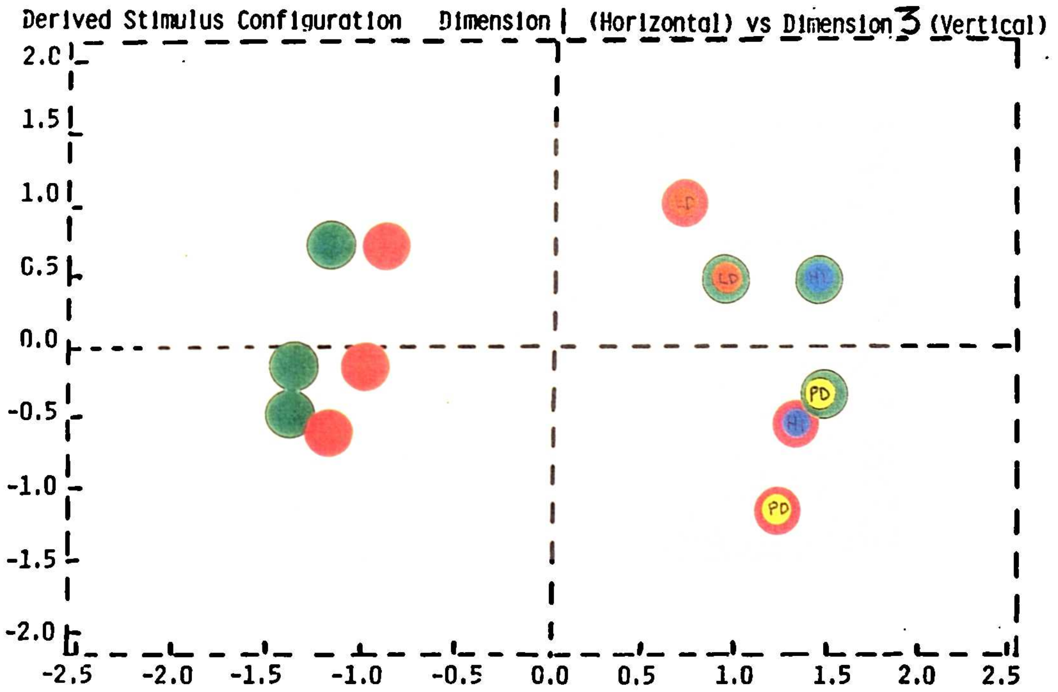

Figure 11.2 MDS plots of sorting SS in experimental group at time one on third dimension.

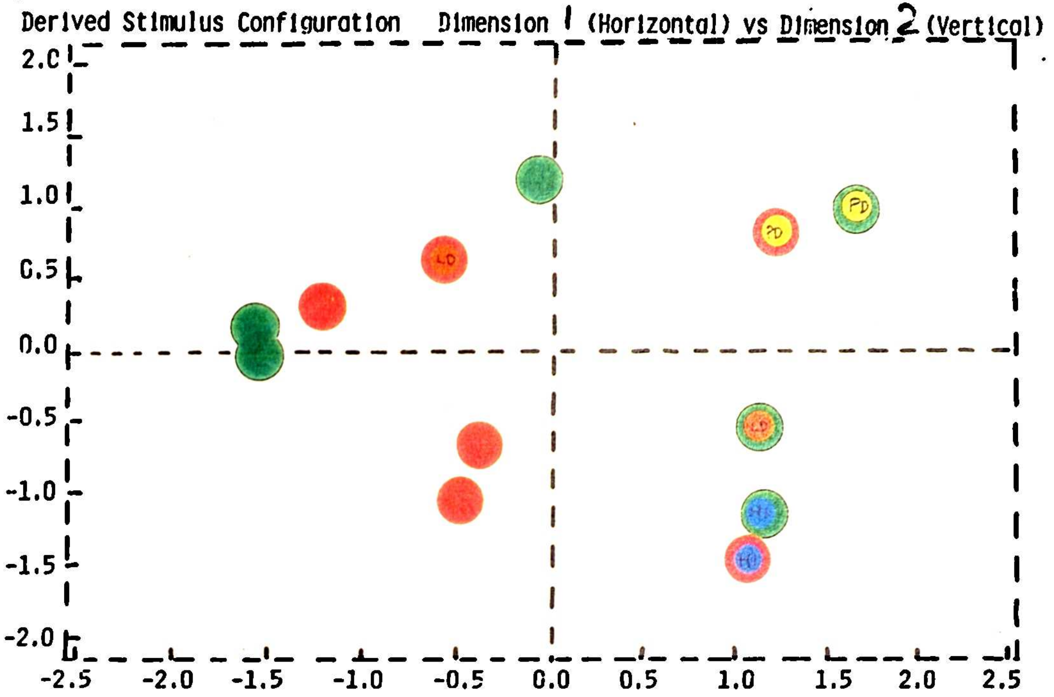

Figure 11.3 MDS plots of sorting SS in experimental group at time three on two dimensions.

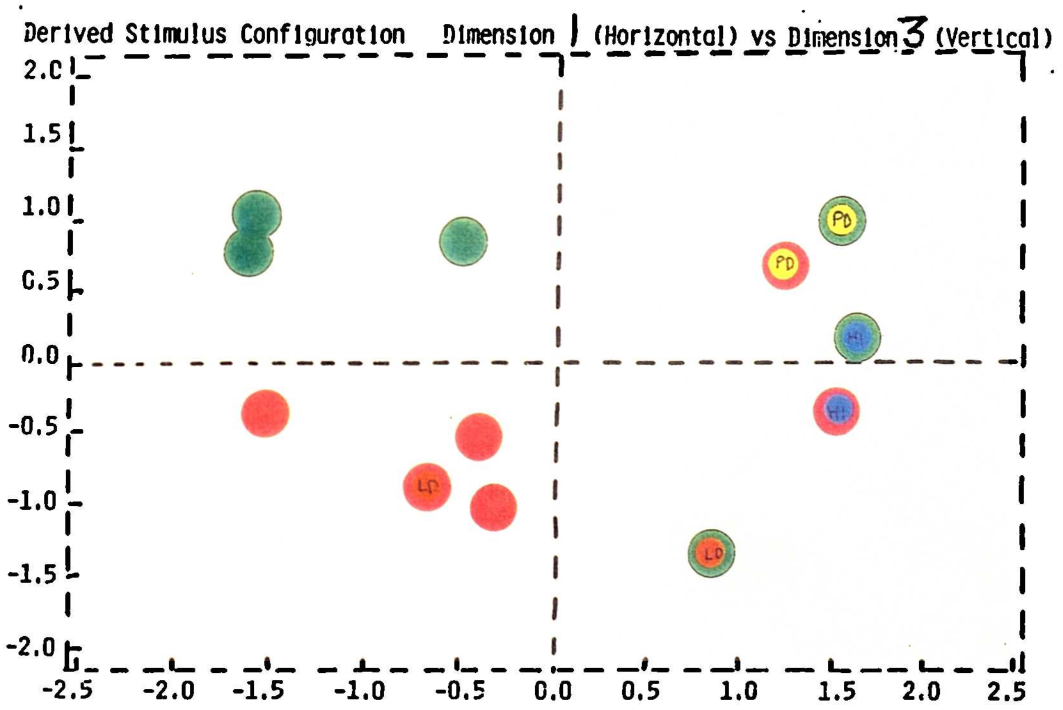

Figure 11.4 MDS plots of sorting SS in experimental group at time three on third dimension.

Control group at t1 and t3

Moving to the control group. Children not involved in the integrated programme also sorted the photographs at the same times as the children in the experimental group. As can be seen in Figure 11.5 at t1 the children's categorization, or sorting strategies, of the standard stimuli are consistent with the pattern already seen - the children are sorting on the two main dimensions gender and disability with the disabled children clustered more tightly than the ND children. Analysis of a third dimension, again is in line with the findings reported so far (Figure 11.6) and there is clear evidence of subtyping of the specific disabilities within the disability dimension. At t3 the picture is almost identical to that at t1 (Figure 11.7) once again the children are employing the two main dimensions - gender and disability and the pattern is continued when we look at the third dimension (Figure 11.8) where there is subtyping of the children with specific disabilities by placing them in close proximity to each other. This finding was very clear and is in complete contrast to the picture in the experimental group.

At this very simple illustrative level contact seems to be affecting the way the children sort the photographs over time. The children in the control group sorted the photographs in a way consistent with findings from the main study and continued to do so over a period of time. In complete contrast, those in the experimental group changed markedly between t1 and t3: at first they were indistinguishable from the usual pattern but by t3 they are showing a quite different sorting strategy.

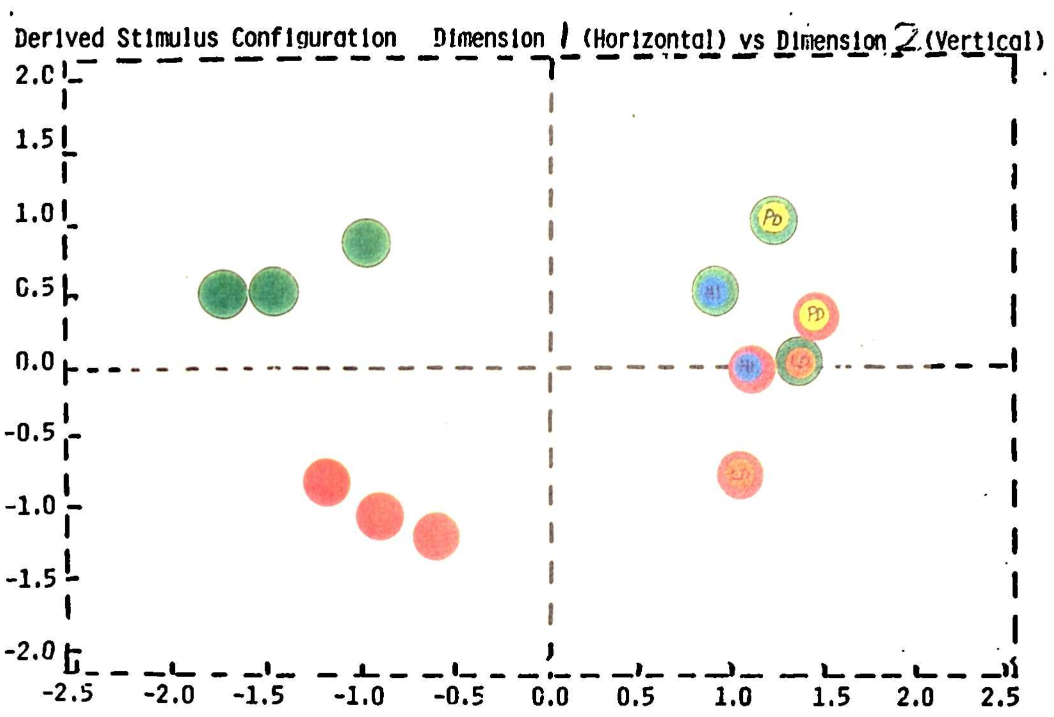

Figure 11.5 MDS plots of sorting SS in control group at time one on two dimensions.

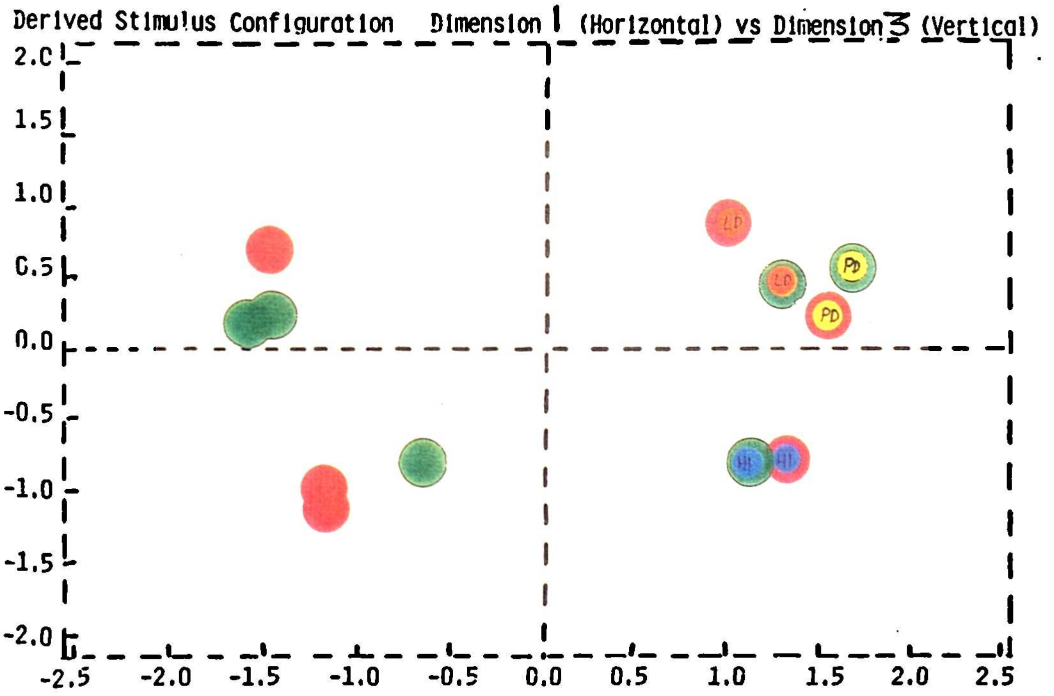

Figure 11.6 MDS plots of sorting SS in control group at time one on third dimension.

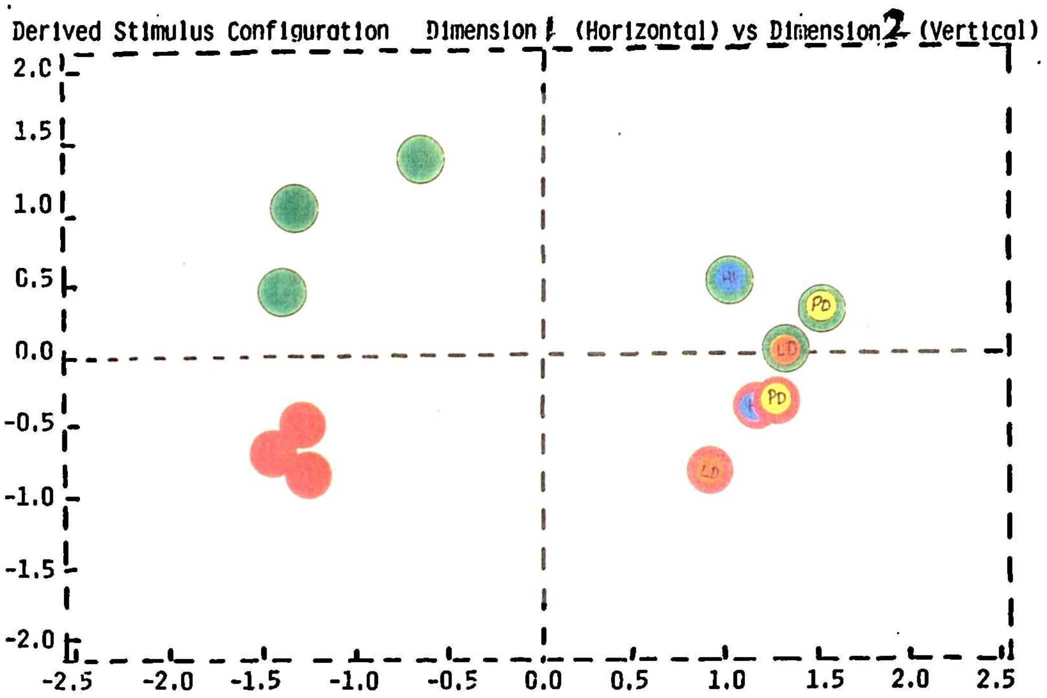

Figure 11.7 MDS plots of sorting SS in control group at time three on two dimensions.

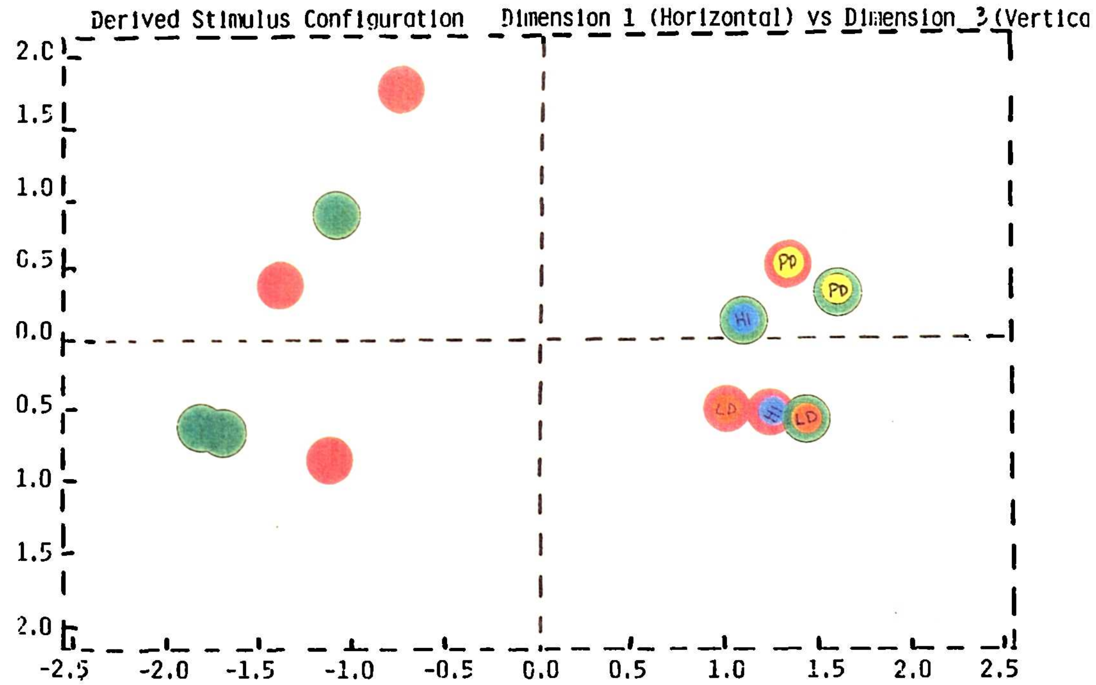

Figure 11.8 MDS plots of sorting SS in control group at time three on third dimension.

THE EVALUATIVE MEASURES

The sorting tasks seem to be pointing to a difference between the two groups of children - with and without integrated contact. One way to explore possible differences further is to look at the findings from the evaluation measures. These were administered at three times as with the sorting task. The questionnaire described in chapter eight was used to obtain data and all the children were given training using the TV characters already described. Analysis of Variance using the MANOVA procedure on SPSS was employed to analyze the evaluation data. The principal significant effects identified in the analysis are summarized below Table 11.2. Only effects involving interactions are explored in detail. Mean scores for measures that produce interactions are given in table form and discussed in turn. As with data reported in previous chapters *post hoc* tests (Tukey HSD) were used to look at differences within subjects ratings of stimuli and these are again indicated by subscript lower case letters. Children in the experimental group had three different kinds of integrated experience - either at the special school, in the mainstream staffroom or in the mainstream classroom. Where appropriate, further analysis was carried out to explore effects of the different types of integrated experience.

measure	Principal significant effects								
	Between subjects		Within subjects				Interactions		
	Contact		Stimuli		Time		S x T	C x S	C x S x T
	F (1,43)	MSe 4.92	*F* (3,129)	MSe .88	*F* (2,86)	MSe 1.27	*F* (6,258)	*F* (3,129)	*F* (6,222)
like	5.18*	25.47	16.5***	14.56	4.21*	5.37	2.47*		
schwk			69.94***	40.36	6.03**	11.03			
PE			93.48***	75.36	7.32***	13.67	2.64*	2.05	
friends	7.0**	26.6	21.82***	11.84					
wkhard	4.77*	18.83	19.30***	14.47	3.22*	11.77			
run			210.75***	166.15	7.55***	12.79	4.88***	3.24*	3.8***
hear			77.16***	95.82	4.20*	9.05	3.50**	2.76*	2.89*
think			82.44***	67.3	9.58***	30.54	3.97***		6.56**
intra			5.12**	6.55					
person			49.56***	40.22					

Note: *$p < .05$; **$p < .01$; ***$p < .001$.

Table 11.2 Summary of principal significant effects of children's evaluative judgements of standard stimuli by contact (yes/no).

Time	How much do you like these children?				
	HI	LD	PD	ND	Marginals
1	4.0	3.8	3.6	4.2	3.9
2	3.7	3.5	3.6	4.2	3.9
3	3.3_b	3.3_b	3.4_b	4.3_a	3.7
Marginals	3.6	3.5	3.5	4.2	

Table 11.3 Summary table of means for measure - 'How much do you like unknown children with HI, LD, PD and ND in experimental and control classes.

LIKE

ND children are generally rated higher than DIS children and there is little difference in their ratings as an effect contact. There is however a main effect of Time and a Stimuli x Time interaction. As can be seen, there is little difference at t1 between ratings of HI children, though children with contact like the LD and PD children more at t1. At t3 there is no increase in like for the children with contact, however the children without contact like the HI, LD and PD children less at t3 than they do at t1. The interaction between stimuli and time seems to be a result of children in both experimental and control groups like the HI, LD and PD children less at t3 than at t1 (Table 11.3).

Time	How good at schoolwork are these children?				
	HI	LD	PD	ND	Marginals
1	3.0_b	2.7_b	3.0_b	4.1_a	3.5
2	3.7_c	3.5_{cb}	3.0_b	4.4_a	3.9
3	3.3_b	3.0_b	2.8_b	4.0_a	3.7
Marginals	3.4	3.1	2.9	4.1	

Table 11.4 Summary table of means for measure - 'How good at schoolwork are unknown children with HI, LD, PD and ND in experimental and control classes.

SCHOOLWORK

Once again ND children are rated most able at schoolwork than the three disabled groups. The main effect for Time can be seen in the increased ratings at t2 which drop down again at t3.

Time	How good at PE are these children?				
	HI	LD	PD	ND	Marginals
1	2.9_b	2.6_b	2.1_b	4.4_a	3.4
2	3.7_c	3.4_c	2.7_a	4.4_b	3.8
3	3.3_c	3.5_c	2.5_b	4.4_a	3.6
Marginals	3.4	3.2	2.4	4.3	

Table 11.5 Summary table of means for measure - 'How good at PE are unknown children with HI, LD, PD and ND in experimental and control classes.

PE

Again ND children are rated higher than the three disabled groups, there being virtually no difference in mean ratings of ND children as an effect of contact. The interaction between stimuli and time found with this measure - PE - results in an opposing pattern to that found with like. The mean ratings of HI, LD and PD by the experimental group are greater at t3 than at t1. Whilst in the control group they remain almost the same for HI and PD stimuli and become higher for the LD children over time (Table 11.5). On this dimension time seems to be improving things for all the children.

Time	How easily do these children make friends?				
	HI	LD	PD	ND	Marginals
1	3.4_b	3.3_b	3.3_b	4.2_a	3.7
2	3.8_{ab}	3.6_b	3.5_b	4.4_a	4.1
3	3.7	3.7	3.7	4.3	3.7
Marginals	3.7	3.4	3.5	4.2	

Table 11.6 Summary table of means for measure - 'How easily do unknown children with HI, LD, PD and ND make friends?' in experimental and control classes.

MAKING FRIENDS

When rating how well the children in the stimuli pictures make friends again there is an interaction between Time and Stimuli. Although not significant, the contact group's mean scores for HI, LD and PD at t3 are all higher than at t1. Whilst the pattern in the control group remains the same across time (Table 11.6).

Integrated Contact	Time	How well can these children run?				
		HI	LD	PD	ND	Marginals
Yes	1	3.4_{b}	3.4_{b}	3.3_{b}	4.1_{a}	3.4
	2	4.4	4.3	3.8	4.6	3.8
	3	4.0_{ab}	4.0_{ab}	3.7_{b}	4.4_{a}	3.7
No	1	3.2	3.3	3.2	3.8	3.4
	2	3.8	3.5	3.4	3.3	3.7
	3	3.3_{b}	3.2_{b}	3.1_{b}	4.4_{a}	3.3
Marginals		3.4	3.2	1.6	4.4	

Table 11.7 Summary table of means for measure - '*How well can unknown children* with HI, LD, PD and ND run?' in experimental and control classes.

RUNNING

The trends seen in the children's rating of making friends are reflected in their ratings of running (Table 11.7). There is virtually no difference at t1 in the ratings in the experimental and control groups. However, ratings in the experimental group show a marked rise at t2 and are significantly higher for LD and HI and higher for PD at t3. Whilst in the control group there is little difference as an effect of time. This finding is particularly relevant, as it is LD children with whom the children have contact. The interaction between Contact Time and Stimuli bodes well for contact theory. It is indicative of a reduction in stereotypes specifically in relation to the HI and LD children who at t3 three are not rated any less able to run than the ND children in the experimental group, as apposed to the control group in which little difference in mean scores is seen and differentiation between ND and DIS children remains constant over time.

Integrated Contact	Time	How well can these children hear?				
		HI	LD	PD	ND	Marginals
Yes	1	2.0_b	3.0_c	2.1_b	4.6_a	3.5
	2	2.5_c	4.0_{ab}	3.2_{bc}	4.5_a	3.9
	3	2.2_b	3.6_a	4.1_a	4.3_a	3.8
No	1	2.2_b	2.9_b	2.5_b	4.4_a	3.5
	2	2.2_b	3.4_c	2.4_b	4.5_a	3.6
	3	2.2_b	3.2_c	2.6_b	4.6_a	3.7
Marginals		2.4	3.3	2.8	4.5	

Table 11.8 Summary table of means for measure - 'How well can unknown children with HI, LD, PD and ND hear?' in experimental and control classes.

HEARING

An interaction between contact, stimuli and time was also identified in the analysis of the measure hearing. In this instance, as can be seen in Table 11.8, a similar pattern in the mean scores as was seen in the rating of running can be seen but with one principal difference. Here there is little difference between ratings of experimental or control groups at t1. However, ratings in the contact group become greater over time for LD and PD children whilst there is little difference in their ratings of HI children. This is particularly interesting given that LD children are integrated in this school and a number of them are in wheelchairs as are the PD stimuli children. In the no contact group there is little difference in the children's ratings of HI, LD or PD as an effect of time. In this instance contact seems to be reducing stereotypes of LD and PD children's ability to hear whilst retaining a realistic picture of the ability of HI children to hear.

Integrated Contact	Time	How well can these children think?				
		HI	LD	PD	ND	Marginals
Yes	1	2.0_c	1.8_{bc}	1.3_b	4.2_a	2.9
	2	3.8_b	3.5_b	3.3_b	4.8_a	4.2
	3	3.5_b	3.2_b	3.4_b	4.5_a	3.9
No	1	3.2_c	2.5_b	2.4_b	4.4_a	3.5
	2	3.0_b	2.7_b	2.5_b	4.1_a	3.4
	3	3.7_c	3.2_{cb}	2.8_b	4.4_a	3.8
Marginals		3.2	2.8	2.7	4.4	

Table 11.9 Summary table of means for measure - 'How well can these children think?' in experimental and control classes.

THINKING

The three way interaction, Contact by Stimuli by Time was not found in the much more abstract to rate concept - thinking. The interaction Stimuli by Time shown in all the tables above was found for this measure and examination of the mean scores reveals that in both experimental and control groups, ratings of the DIS stimuli change over time, though not of the ND children. An interaction contact by time was also identified. Children in the experimental group rate the HI, LD and PD stimuli lower than those in the control group at t1 and higher at t2 whilst at t3 there is little difference between experimental and control groups ratings of HI and LD, though children in the experimental group rate PD higher than in the control group (table 11.9). Findings on this measure are rather less clear than of the other measures reported, perhaps reflecting the abstract nature of the concept being rated. In addition, as is discussed at the end of this chapter, the children in the experimental group were aware that they would be involved in the programme and a number expressed uncertainty about participation in terms of their expectations and knowledge of the SLD children. This uncertainty may well be reflected in the low ratings of thinking given to the stimuli - particularly the PD children - at t1 of the study and the increase in ratings of the stimuli over time.

Time	How much like each other are these children?				
	HI	LD	PD	ND	Marginals
1	3.4	3.3	3.8	3.2	3.4
2	3.5	3.8	3.9	3.4	3.5
3	3.5	3.8	3.9	3.4	3.5
Marginals	3.4	3.6	3.8	3.3	

Table 11.10 Summary table of means for measure - 'How much like each other are these children?' in experimental and control classes.

INTRA GROUP SIMILARITY

As can be seen in table 11.10, PD stimuli are rated more similar to each other than HI, LD or ND and this remains the same over time. Ratings of intragroup similarity for HI and ND stimuli also remain the same over time. LD stimuli are rated more similar to each other at t2 and t3 than at t1, however no main effects or interactions involving time were found.

Time	How much like you are these children?				
	HI	LD	PD	ND	Marginals
1	2.1_b	1.9_b	2.1_b	3.3_a	2.6
2	2.7_b	2.6_b	2.4_b	3.6_a	3.2
3	2.4_b	2.5_b	2.1_b	3.7_a	3.0
Marginals	2.3	2.4	2.2	3.6	

Table 11.11 Summary table of means for measure - 'How much like you are these children?' in experimental and control classes.

PERSON GROUP SIMILARITY

When the children rated how similar to themselves the unknown children were (table 11.11), the children rated ND children as more similar to themselves than HI, LD or PD. Again there were no main effects or interactions involving time. Although as can be seen similarity with LD increases at t2 and t3.

A MORE SPECIFIC LOOK AT THE STRUCTURE OF CONTACT

The analysis reported so far have been between children in the experimental group and those in the control group. Analysis was also conducted on the three types of integrated situation described in the introductory pages of this chapter - in the special school, in the mainstream staffroom and in the mainstream classroom. Table 11.12 below summarizes principal significant findings of analysis of the evaluations by type of integrated situation. This more fine grained approach would allow us to see if there were any particular aspects of the contact situations that were conducive to positive attitude change and effects. These analyses are a subset of the previous ones and most of the effects duplicate those already discussed. What I am particularly interested in are effects of the contact variable (eg. special school, mainstream staffroom and mainstream classroom). The schoolwork measure is the only one where an interaction involving contact was found. Therefore a table of means for the measure schoolwork is given and briefly discussed (table 11.13).

measure	Principal significant effects							
	Between subjects		Within subjects				Interactions	
	Contact		Stimuli		Time		S x T	C x T
	F (2,20)	MSe 5.10	*F* (3,60)	MSe .72	*F* (2,40)	MSe 1.67	*F* (6,120)	*F* (4,40)
like			4.28***	3.07				
schwk			32.52***	18.70	6.60**	11.0		2.86*
PE			61.11***	39.65	7.64**	15.89		
friends			6.45***	4.78				
wkhard			5.82**	4.51				
run			119.3***	87.4	8.35***	13.53	5.93***	
hear			44.87***	45.59	5.78**	11.7	6.6***	
think			50.01***	35.43	17.94***	37.28	4.47***	
person	5.5*	24.75	14.82***	13.03				

Note:
*$p < .05$; **$p < .01$; ***$p < .001$.

Table 11.12 Summary of principal significant findings of children's evaluative judgements of standard stimuli by the type of contact integrated children have (classroom, staffroom, special school).

Integrated contact in	Time	How good at schoolwork are these children?				
		HI	LD	PD	ND	Marginals
Special School	1	2.5_{ab}	1.9_{c}	2.5_{ab}	3.8_{a}	3.0
	2	3.5	3.8	3.4	4.3	3.9
	3	3.5_{a}	3.0_{ab}	2.5_{b}	3.8_{a}	3.4
Mstream Staffroom	1	3.0_{ab}	2.6_{b}	2.2_{b}	3.7_{a}	3.2
	2	4.2_{ab}	3.6_{b}	3.8_{b}	4.8_{a}	4.3
	3	3.4_{ab}	3.2_{ab}	2.8_{b}	3.8_{a}	3.5
Mstream Classroom	1	3.7_{b}	3.5_{b}	3.1_{b}	4.8_{a}	4.1
	2	3.8_{ab}	3.4_{b}	2.9_{b}	4.4_{a}	3.9
	3	3.5_{ab}	3.3_{ab}	3.1_{b}	4.1_{a}	3.7
Marginals		3.5	3.1	2.9	4.2	

Table 11.13 Summary table of means for measure - 'How good at schoolwork are these children?' in three types of integrated context.

SCHOOLWORK

Ratings of ND children differ at t1 between mainstream and special school situation and special school and mainstream classroom situation, with ratings in the latter being higher than the former. In terms of ratings of HI, LD and PD, there is a different pattern in each of the situations - perhaps going some way towards explaining the interaction between Contact and Time. In the special school ratings of HI and LD are higher at t3 than at t1 whist ratings of PD remain the same although they go up by one whole point at t2 before returning to their original position. In the mainstream classroom situation ratings at t3 are higher for HI, LD and PD than at t1 although they are at their highest at t2. In the mainstream classroom situation ratings remain more or less the same across the three time periods (Table 11.13).

SOCIOMETRIC PREFERENCE

Measures of sociometric preference that utilized the postbox measure described in chapter nine were obtained. Principal significant effects are summarized in Table 11.13[6]. Mean scores are then discussed. As can be seen in Table 11.14 a number of significant interactions were identified when the 'play with' data were analyzed. In line with past research (Maccoby & Jacklin, 1976) and findings from the main study, there was a significant interaction between sex of participating child and gender of stimuli. In the main explained by girls preference for girls and boys for boys. More interesting are the interactions involving contact and stimuli/time. Table 11.15 below gives the mean ratings for these data. First, contact as a whole had an effect (3.2 *vs* 3.9), but especially over time as can be seen in the increased ratings of HI, LD and PD in the experimental group between t1 and t3. In the control group, ratings of ratings at t3 are the same or less than those at t1. To show the interaction Contact by Time more clearly table 11.16 gives the combined mean sociometric preference for girls and boys in the experimental group at all three time points.

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[6] The format of this table is the same as for sociometric preference data in the main study.

'Play with' Standard Stimuli (SS) Effects	
BS Factors (df) CONTACT (1,35); SEX (1,35)	*F*
CONTACT	10.18**
SEX	14.31***
WS Factors (df)	
STIM (2,35)	
STIM	32.13***
SEX x STIM	14.52***
GENDER (1,35)	
SEX x GEN	72.03***
TIME (2,70)	
TIM	9.17***
CON x TIM	9.11***
STIMULI x GENDER (2,70)	
STIM x GEN	5.72*
CON x STIM x GEN	5.26*
SEX x STIM x GEN	19.80***
STIMULI x TIME (4,70)	
SEX x STIM x TIM	*3.24**
GENDER x TIME (2,70)	
SEX x GEN x TIM	3.25*

Note: * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 11.14 Principal significant effects of children's sociometric preference for SS by contact (yes/no).

Integrated Contact	Time		Stimuli				
			Disabled		Non-disabled		Marginals
			Girls	Boys	Girls	Boys	
Yes	1	Girls	3.8_b	3.0_c	4.4_b	1.9_a	3.2
		Boys	2.3_b	2.6_b	2.5_b	3.9_a	2.8
	2	Girls	4.2_b	4.0_b	4.6_b	4.0_a	4.2
		Boys	2.9_b	3.3_b	3.2_b	4.4_a	3.5
	3	Girls	4.2_b	3.8_a	4.5_b	3.7_a	4.1
		Boys	3.2_b	3.4_b	3.2_b	4.2_a	3.5
No	1	Girls	3.7_b	2.9_a	3.5_{ab}	3.2_{ab}	3.3
		Boys	2.4_b	2.6_b	2.6_b	4.2_a	3.0
	2	Girls	3.9_b	3.1_b	3.8_a	3.9_a	3.7
		Boys	2.3_a	2.6_b	2.8_b	4.0_a	2.9
	3	Girls	2.9_b	2.8_b	3.5_a	2.9_{ab}	3.0
		Boys	2.4_{ab}	2.7_b	2.7_b	3.9_a	2.9
Marginals			3.1	3.0	3.3	3.7	

Table 11.15 Female and male children's mean sociometric preference for unknown disabled and non-disabled male and female peers in classes with and without integrated contact.

Time	Stimuli		
	Disabled	Non-disabled	Marginals
1	2.8	3.2	3.0
2	3.5	4.0	3.7
3	3.6	3.8	3.7
Marginals	3.2	3.6	

Table 11.16 Showing contact over time in the experimental groups rating of sociometric preference.

Sociometric preference and the structure of the contact situation

There were no significant effects of contact when analysis included the three contact situations and the children's ratings of sociometric preference for the standard stimuli.

A return to generalization

Data so far have looked at ratings of unknown children and have not really addressed the thread central to contact theory - the issue of generalization. In order to consider generalization the strategy employed in the main study was employed - a comparison between ratings of how much children played with known and would like to play with unknown individual children with disabilities. Mean scores were computed for the children's sociometric choice for the male and female known SLD children and these were correlated with mean scores for sociometric preference of unknown girls and boys at times two and three[7], first for contact *vs* no contact and then for the different contact situations - special school, mainstream staffroom and mainstream classroom. These correlations are given below (Tables 11.17 & 11.18). As can be seen, when contact was looked at t2 there was a significant correlation between how much the children played with known and would like to play with unknown DIS children in both the control and experimental groups, and sociometric choice and preference was significantly more correlated in the experimental than the control group ($p < .05$). At time three however there is no difference between the children with, and those without contact (table 11.17).

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[7] As noted earlier one child from the special school died during the period the study was conducted. Data for sociometric preference at t1 are not included in these analyses as they were collected at this time.

Integrated Contact	Corr. KC & SS DIS stimuli	
	Time 2	Time 3
Yes	.90**	.77**
No	.53**	.77**
Diff between contact (Z score[8])	2.57*	.000

note: significance of correlations * $p < .05$; ** $p < .01$.

Table 11.17 Correlations between children's ratings of "play with" known and unknown disabled children.

Moving to look at the structure of the contact situations. At t2 the correlation between how much the children wanted to play with known and unknown children was highest in the children who took part in integrated sessions in their mainstream classroom and the mainstream staffroom and the correlations from special school and staffroom were significantly different. At t3 the situation has changed somewhat and the highest correlation can be seen in the special school group. It seems from these data that initially generalization is greatest in the group with contact than the group without, but at t3 there is no difference. When the structure of contact is explored then the most generalization at t1 is in the groups that remain in the mainstream school whilst at t3 the greatest generalization is in the group who go to the special school. This finding is in line with anecdotal comments made by the children who went to the special school. Most of them were unsure about going and said they did not know what to expect. Of course these data should be treated with caution due to the low n's.

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[8] * significant to $p < .05$ 1 tail.

Integrated contact in		Corr. KC & SS DIS stimuli	
		Time 2	Time 3
Special school (1)		.61	.89**
Mstream staffroom (2)		.97**	.81
Mstream classroom (3)		.97**	.71*
Diff between contact (Z score[9])	1 *vs* 2	2.4*	.93
	1 *vs* 3	1.69	.27
	2 *vs* 3	000	.22

note: significance of correlations * $p < .05$; ** $p < .01$.

Table 11.18 Correlations between children's ratings of "play with" known and unknown disabled children.

SOCIAL JUDGEABILITY

Finally, what of the mini-experiment involving a social judgeability manipulation? Analysis of variance was carried out on the childrens ratings of the stereotypic trait of the unknown boy in the wheelchair (John) - 'How easily does John make friends?' and their confidence in their judgements by the SJ manipulation (information/no information) and contact (yes/no). Analysis revealed one main effect - for the Social Judgeability manipulation (information/no information) $F(1,40)=6.58$; $p < .05$. This effect can be seen in the higher ratings of John's ability to make friends in the group with contact and information *vs* the group with contact and no information (3.82 *vs* 3.27[10]). There was no difference between the ratings of children with and without information in the no

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[9] * significant to $p < .05$ 1 tail.

[10] Higher rating = less stereotype.

contact condition. It can also be seen in the higher levels of confidence in their judgements in both the contact and no contact conditions when additional information was given (contact, 4.27 *vs* 3.92; no contact, 3.46 *vs* 2.8). These findings partially support the SJ model (Leyens, *et al*, 1992) which would predict greater use of stereotype and greater confidence in the information condition - both children with and without contact felt most confident when given the additional non-diagnostic information about John, although in the case of the group with contact this also meant less use of the stereotype.

CONCLUSIONS

The main study reported in previous chapters pointed to categorized contact having an affect on children's attitudes towards disability. However, findings were not altogether clear and were often in a negative direction. As already noted, one reason for this could be that the contact situations were not optimal. The quasi-experiment allowed for a more controlled look at the contact situation, it also allowed me to look at categorized contact over time and indeed the picture does change from that presented by the data from the main study.

On the categorization tasks the children sorted the stimuli photographs on the same two dimensions - gender and disability, as the children in the main study at t1, but by t3 they had ceased to use gender and were using disability only, although even this was not so clear. This implies that after one term of structured and planned contact with the SLD children, disability generally had become much more salient to the mainstream children.

Similarly, the evaluative measures also pointed to contact over time having an effect on the children's attitudes on a number of measures, particularly running, hearing and thinking. It will be recalled that these three measures were also the ones that revealed the most differences in the evaluations made by children in the main study. Here though findings were much more positive with ratings of LD and PD children being significantly higher at times two and three. This is a particularly hopeful finding as the integrating children in the scheme all had SLD. In addition a number of them were in wheelchairs and had PD as well as LD so this might go some way toward explaining the similar rise in evaluations of the PD group.

When the structure of the contact situation was investigated in more detail, findings in the main were in line with those for contact generally. However one measure, schoolwork, did show that the highest ratings of the three disabled groups ability to do 'schoolwork' were in the group with contact in the mainstream classroom. Although an interesting finding, it should be remembered that in the classroom sessions, the work done resembled the usual work of the mainstream class more closely than did the work in the other two contact situations.

The increased ratings over time on some of the evaluative measures were reflected in how much the children in the experimental group wanted to play with the SS. Over time this increased significantly and this increased sociometric preference over time bodes well for integrated contact. On the central issue of generalization, preference for known and unknown disabled children was more highly correlated in the experimental group than the control group at time two but by at time three there is no difference between the correlations. However, the n's in these analyses were rather low and in addition it should be remembered that although the control class were not involved in the integration scheme they did see the SLD children at 'playtimes' and may well have played with them during these times. In terms of the structure of the contact situation in relation to generalization, again the n's are rather low, however correlations do point to generalization at t2 being greatest in the mainstream classroom and staffroom whilst at t3 this has reversed and generalization is highest in the group that go to the special school. The quasi-experiment lends support for integration when contact is organized in a planned and structured way. The implications of these and all the findings reported in this thesis are discussed in the concluding chapter.

CHAPTER 12

CONCLUDING CHAPTER:

IMPLICATIONS OF FINDINGS

> Integration... 'will not come spontaneously. Nor will it be achieved by legislation alone. It has to be contrived and patiently nurtured. It means greater discrimination in favour of those with special needs, in proportion to the severity of disabilities'. (Warnock, 1978)

OVERVIEW & ORGANIZATION OF CHAPTER

My overriding aim in this thesis was to relate theoretical models of contact between groups and children's social development to the applied context of integrated education for children with SENs. My objective was to consider children's attitudes towards disability within this framework. The empirical work of the thesis was conducted within an LEA in which different models of integration were identified, these were amalgamated into an intergroup framework. In order to consider developmental factors, children of two ages participated in the research. The thesis had two stated main aims:

1. To evaluate different methods of integration currently being employed in a Local Education Authority (LEA) in Southern England.
2. To examine the implications of the findings for current social psychological models of contact between groups, and children's social development, providing a framework within which children's attitudes towards people with disabilities generally can be viewed.

In this chapter I return to these aims, and consider issues and questions already raised in the earlier chapters in relation to the thesis as a whole. The chapter is organized into four sections. In the first the main findings of the two studies are summarized.

In the second section I discuss the theoretical implications of findings. In the third section the present position in integration is described. Finally, in section four I consider the implications of the research for policy and practice and suggest possible directions for future research.

SUMMARY OF FINDINGS

The principal study

1. Categorization

Nearly all of the children categorized the known and unknown children on two dimensions - gender and disability. This strategy was employed regardless of respondents' age or sex, or the type of contact or disability integrated. There were developmental differences in the types of reasons the children gave for their categorization. There was also some evidence, within the disability dimension, that subtyping of particular disabilities (eg. HI, LD and PD) was occurring - particularly in schools where children had categorized contact.

2. Evaluation

The three disabled groups (HI, LD and PD) were consistently evaluated as less able than the non-disabled children (ND) on all dimensions. There were no developmental effects on the evaluations. Contact *per se* was found to have an effect by making disability more salient and sharpening up differences between evaluations of children with and without disabilities. On some dimensions it was apparent that contact with a particular type of disability made little difference to the children's attitudes, whilst on less concrete characteristics such as 'hearing' differences between types of contact were noticeable. The strongest effects of contact were found in the HI schools, particularly the CATEGORIZED school. In the HI CATEGORIZED school there was also evidence of inappropriate cross generalization of evaluations from one type of disability to another. On the surface, contact seemed to be having a somewhat negative effect and, contrary to my predictions, the most negative responses were in a categorized school.

3. Generalization - sociometric choice and preference

Same-gender preference was evident in how much the children wanted to 'play with' peers. Infant children generally wanted to play more than older children. In line with findings reported for other measures, almost all of the children wanted to play with the known and unknown children with disabilities less than their non-disabled peers. The extent of the generalization from known to unknown preferences varied between the different schools with no single pattern emerging.

Findings of the quasi-experimental study

1. Categorization

A similar pattern to that in the main study was found in the initial categorizing strategies of both integrating[1] and control children. At the end of the programme, the pattern stayed the same for the children in the control class. However, in respect of the integrating children, there was less evidence of the

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[1] Experimental group.

two usual dimensions of gender and disability, with more idiosyncratic sorting strategies employed.

2. **Evaluations**

   On a number of evaluative dimensions there were some very clear differences between the 'experimental' and 'control' children. Although there was a general tendency to evaluate the ND 'stimuli' more favourably on all dimensions, the attitudes of the integrating children became more positive over time.

3. **Generalization and sociometric choice and preference**

   As usual the sociometric data showed a strong own-gender preference. Within this, the ND children were still preferred to the children with disabilities. This bias did lessen over time in the integrating children.

IMPLICATIONS FOR THEORY

The theoretical chapters of this thesis touch on a number of areas including: learning disabilities, educational policy, attitudes, contact theory and children's social development. The literature on integration[2] is in the main founded in the areas of learning disability, education and attitudes. Past research in these areas reflects a general consensus that contact is an important mediating factor in improving attitudes. However, this view was in the main based on intuitive guesswork rather than sound

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[2] In this chapter when referring to integration I am talking about the integration of children with disabilities. When other kinds of integration (eg. ethnic) is referred to, this is specified. Similarly when I refer to attitudes I mean attitudes towards disability unless otherwise stated.

empirical evidence. Similarly, little research has considered social developmental factors that might influence children's attitudes towards disability. An important feature of my research is that it utilizes the last two theoretical areas - contact theory and children's social development, and thus addresses this dearth in past literature. In this section findings are discussed in relation to the two threads of the thesis - contact theory and children's social development.

Contact theory

Overall, findings supported the use of an intergroup perspective. All the children categorized disabled peers in terms of their group membership, and they all differentiated between both disabled and ND and between HI, LD, and PD. Furthermore, these differences could also be seen in how children in the different types of contact situations evaluated groups of unknown children. It was predicted that: Contact would have an effect on attitudes and categorized contact would be the most conducive to generalised attitude change. However, there are a number of paradoxes in the findings. For example, if we take the data on generalization of sociometric choice and preference. In one type of school (HI), generalization is found in the categorized school, while on the other hand, it is also found in two of the decategorized schools (LD & PD). One explanation for these findings could be that the contact situations were not optimal. This point is discussed in more detail in the next section, however, it is worth considering the theoretical implications had the contact situation indeed been ideal. It is easy to see how this might affect how positive attitudes and evaluations are. It is not so clear how the central issue of generalization might be improved under 'ideal' contact conditions. An important point here concerns the definition of generalization. In this research we have two kinds of generalization: from one disability to another (cross generalization), and from a known to an unknown individual both with the same disability. I will refer to each in turn.

Whether cross generalization can be seen as positive even when the attitudes generalized are favourable is open to question. The main reason being that disability is a result of a <u>physical</u> impairment. Consider for example cross generalization based on other physical features eg. all people with brown hair are nice, most people would agree that this would be neither a positive or desirable generalization. A second point concerns the other sort of generalization from a known to an unknown person with the same disability. This is the form of generalization that both Hewstone and Brown and Brewer and Miller are striving for. A problem here rests in one of the differences between disability and ethnicity discussed earlier in this thesis, namely the stability of the category disability. For example, if a child has contact with a profoundly deaf peer there are obvious problems associated with generalizing this degree of hearing loss to all HI children and *vice versa.*

In chapter four I added two addenda to the use of an intergroup perspective, ie. that there should be a more stringent regard for:

1. the definition of terms used to describe contact situations.
2. the desired outcomes of contact.

I also asked,

3. how appropriate theory founded in ethnic relations is to other domains eg. disability?'

Having conducted this research I think another question should be added. Namely:

4. how applicable is contact theory, as it stands, to applied contexts?

I would like to make four points in relation to these addenda and questions. I will expand on each in turn.

As already noted, implicit in the use of the contact hypothesis as a framework is the notion that participants perceive both in and outgroup. At what level this recognition is necessary, and how it might be operationalized is a topic of debate. For example, for Tajfel (1978), recognition had to be explicit; for Abrams (*in press*), perceiving a(nother) (out)group is enough, as ingroup is then implicitly acknowledged and a situation defined as intergroup. As I suggested in chapter four, what these authors don't address is the possibility of person-group relations, where the participant is acting and operating as an individual when interacting or responding to a(nother) as a group member. This is rather different from acting as a group member <u>and</u> individual at the same time as proposed by Stephenson (1978), who suggests that both interpersonal and intergroup can be salient in the same encounter. Intuitively it makes sense to assume that by explicitly asking about the DIS children you are forcing an intergroup response. However, we do not know whether the children recognize their in group (ND) membership as well as the out(DIS) group. At no point in the paradigm do I refer to participating children as ND. In fact, questions are phrased in the person/group format:

> eg. do you play with them.

Anecdotally answers in the main reflected the pattern of the question and utilized 'I' in responses. Also, few children are recorded describing their ingroup (ND) membership in response to questions, though, as the quote at the start of chapter nine indicates, there were exceptions. Although this point does not have a direct effect on findings, it is important in terms of discussing them within a theoretical framework. I would like to suggest therefore, that care should be taken when imposing rigid criteria for defining group and intergroup relations.

Turning to assessing outcome. I have described findings from the field study as somewhat negative. However, I think it is important to be clear about just what constitutes a positive or negative attitude. On the one hand, the downgrading of a disabled group on an irrelevant dimension,

> eg. indicating HI children can't think as well as LD children - HI categorized school';

could clearly be defined as a negative attitude. But what about unrealistic evaluations such as,

> indicating HI children can hear as well as LD and PD children - LD categorized school'?

In the eyes of a number of disability action groups (eg. Integration Alliance), the second example would be seen as just as, if not more, negative than the first, mainly because it reflects the traditional charity based ethic in dealings with disabled groups. Indeed in line with this view many of the children in the study made comments about helping or looking after both disabled children with whom they had contact and unknown disabled children in the stimuli photographs.

My third point goes back to the use of theory founded in ethnic relations as a framework for looking at attitudes to disability. In chapter four, I listed a number of potential differences between ethnicity and disability. It has been suggested by Gottlieb (1974), among others, that differences are mainly due to differences in the nature of disability, and make using the contact hypothesis in this domain problematic. Others have suggested that contact is one of the most salient features in the assimilation of attitudes towards both the 'physically and the mentally handicapped', (Furnham, 1981). Both of these views are problematic. The first because, in assuming differences between ethnicity and disability, it implicitly denies differences within what is referred to as disability. Findings from all the measures reported in this thesis showed mainstream children differentiated between types of disability (HI, LD & PD). In some cases this discrimination was manifested in subtyping ie. categorizing different disabled groups within a more general disability dimension. In other cases it was seen in differentiation between disabled groups on evaluative measures.

The second view is problematic because it also assumes no difference between PD and 'mental handicap'. In fact, as noted in chapter two and later in this chapter subsequent research by Furnham contradicts their previous position (Furnham and Pendred, 1983). The nature of disability as a dimension is returned to later in this chapter in relation to social developmental theory. There are, however, a number of other differences between ethnicity and disability which may well have implications for theory.

The history of ethnic prejudice differs from that of disability prejudice. The latter is far less visible and the former more founded in overt conflict. Another difference, already highlighted above, concerns the historical view that charity is the best way to provide for the disabled. This second point has implications for the kinds of views children hold about disability, and subsequently, their attitudes. The 'charity ethic' tends to focus on *traditional patronising type views rather than equal opportunities.* These views are not just held by children. Many adults including teachers involved in this research expressed very traditional views about disability and integration. One way forward in this respect would be to ensure that equal opportunities are given more of a central position both in initial and inservice teacher training.

Before moving on to consider social development I would like to introduce one final issue - the applicability of contact theory as it stands as a model for *applied* research. Contact has been seen as an important mediator of human behaviour for over 40 years - since before Allport's pioneering work. Despite this there has been little uniformity in research findings. Two theories have suggested different reasons why this might be (ie. Brewer & Miller, 1984; Hewstone & Brown, 1986). These perspectives are very different. They do however have two things in common - the need for institutional support (to a greater or lesser extent), and the consensus that past research failed to take account of the nature of the contact situation. Hewstone and Brown's CATEGORIZED, intergroup model also has additional mediating factors such as the recognition within the social context of:

> 'superordinate goals, cooperation, multigroup membership and the achieving of equal status by the manipulation of "expectation" states. (Hewstone & Brown, 1986).

The categorized model makes sense both theoretically and ideologically. However, it fails to take enough account of two things. The diversity and complexity of contact situations in the 'real world', and, the fact that researchers rarely have control over the mediating factors needed to promote successful contact situations. Indeed, as both Brewer and Miller and Hewstone and Brown have found, variables such as these are even difficult to control in experimental laboratory based studies.

In applied research such as this, I suggest it is not possible to use traditional methods to define situations as intergroup. For example, we don't have much control over independent variables, or the opportunity to rerun the session or adjust the experimental design, as would be the case in experimental research. I think this highlights one of the main problems with Hewstone and Browns model. Whilst being ideologically sound it is realistically impossible to instigate in the form it presently stands in. For example as just noted, at the core of the model is institutional support, yet in an educational context at what level is this institutional support to occur - the class, the school, the LEA or the nation? In addition the model fails to take account of interactions between, and the cumulative effect of, all these levels. After all it doesn't matter how committed a headteacher is to integration, without the appropriate resources success is limited. Similarly an LEA can have a clear plan to integrate all children with SENs but be required to produce league tables showing academic excellence. In the same vein, both Brewer and Miller and Hewstone and Brown emphasize the importance of cooperative encounters. Arranging cooperative encounters within an education system based on competition poses somewhat of a problem for educators. These points are explored further in the final section in respect of implications for policy. Despite them it does seem that the intergroup model of contact does offer a useful starting point for looking at children's attitudes to disability. Pragmatically LEAs throughout the UK are actually implementing policy for integration - increased contact between children with and without disabilities is occurring anyway. In this research it has become clear that mainstream children involved in this type of contact do differentiate between themselves and disabled children on the basis of DIS and ND membership, thus the initial requirement of categorized contact is met, however resulting attitudes whilst sometimes generalized were in the main negative. I would like to suggest that we should take contact theory one step further and encompass aspects of both the interpersonal and the intergroup models in applied situations such as this. On the one hand acknowledging and recognizing difference, whilst on the other encouraging the development of interpersonal friendships and the recognition of shared group membership. Thus, a friendship (interpersonal) between a DIS and ND child (intergroup), could occur within a class (shared group).

Social development

Three questions arose in relation to the social developmental strand of the thesis:

1. Are non disabled children 'naturally' prejudiced towards disabled children? In other words do they automatically distinguish between and prefer non disabled groups of which they are a member to disabled groups of which they are not?
2. Are there developmental differences in children's attitudes to disability?
3. Can findings of research in the field of ethnic relations be used to explain children's attitudes to disability?

The first question can be answered with a simple yes. The findings from this thesis show all the children differentiated between disabled and ND peers, both in terms of the strategies they used to categorize them, and their evaluative judgements of, and sociometric choice and preference for, them. This finding has important implications, not least for theory and integrated schemes that suggest that differences should be de-emphasized in order to reduce prejudice. Clearly there is little point in de-emphasizing difference if children automatically differentiate anyway, surely a better strategy would be to focus on the qualitative issues, for example emphasizing valued differences.

In answer to the second question, no effects of age were found in how the children categorized, or evaluated either ND or DIS known and unknown children. There were differences between how much the children wanted to play with all the stimuli - with, as one might intuitively expect, younger children generally wanting to play more than older children. Of particular interest, from a developmental point of view, were the reasons the children gave for their categorizing strategies. It will be recalled that the younger children tended to focus on concrete features such as hairstyle whilst the older children cited reasons such as liking and disability. These findings were reflected in the type of responses the children made in the semi-structured interviews, and suggest that there were cognitive differences in the way children of different ages approached the tasks. Findings from the qualitative data support this. Here, there were significant differences in the dimensions the children used to respond to questions about disability.

In response to the third question. The differences between disability and ethnicity discussed in relation to contact theory, become even more salient when considered in the light of children's social and cognitive development. The relationship between ethnic and gender self-identification, along with the recognition of self as non-disabled, was introduced in chapter five. Of particular interest here, is whether this recognition of ND as a group of which one is a member involves the same process as,

> 'the perceptual and cognitively based knowledge that one is a member of a particular ethnic group (Aboud 1988)',

or gender group (eg. Maccoby & Jacklin, 1987). I suggested in chapter four that being nondisabled is unlikely to be a salient self category in the same way as gender and ethnicity. In the chapter I also discussed the role of social comparisons in children's recognition of their ingroup (ND) membership, and proposed that again social comparisons may not play the same part in children's awareness of their own ability as they do in gender and ethnicity. Findings from the field study lend some support to this view. Past research into children's attitudes towards different ethnic groups found that children categorized by ethnic group and that the use of ethnicity as a strategy increased as children got older (Yee & Brown, 1992). In the principal study, few developmental differences were seen in relation to the way the children sorted the stimuli. Similarly, few effects were found on the evaluative measures.

I proposed earlier that an important difference between ethnicity and disability, is the relative complexity of disability generally, along with the diversity of types of disability contained within the term. I also suggested in chapter four, that disability is a continuous category ranging from able to disabled, unlike categories such as ethnicity and gender which I suggest are discrete. I also highlighted a second related point which has been alluded to earlier in this chapter. Namely the stability and visibility of the categories of disability *vs* categories such as ethnicity. For example, as already noted a number of times there are often few if any visible physical cues to LD and the main indicator that someone is LD is likely to be their behaviour. Whereas, HI and PD are far more salient, particularly when aides such as wheelchairs and hearing aides are used.

THE CURRENT SITUATION IN INTEGRATION

The debate and reappraisal of research into integration of children with SENs is accompanied by a growing lobby of professional who doubt the advisability of integration as a 'blanket' policy for all children with SENs. Hornby (1992), in a recent paper suggests that policy has exceeded the intentions of legislation resulting in adverse effects on integrated children. He proposes that:

> 'less idealistic and more carefully considered policies regarding the integration of children with SENs be adopted'. (Hornby, 1992, p. 133)

Similarly, Lindsay (1992) counsels caution when discussing integration. He suggests that any debate must take account of two sets of issues: children's rights and efficacy. He goes on to propose that the problem which many commentators have encountered is caused by confounding these two issues rather than treating them as orthogonal dimensions. A further problem highlighted by Lindsay is the variance in perspectives between parents of children with SENs and those of the 'professionals'. There has been a changing perspective on provision for children with disabilities following the 1979 Warnock report, and the subsequent 1981 Education Act. The focus of both Warnock and the 1981 Act was on identification and appropriate provision, within the mainstream where possible, for children with all kinds of SENs - from problems such as mild reading difficulties to others with more serious SENs. Legislation has now moved into another phase with the 1988 Education Reform Act (ERA), which introduced the National Curriculum (NC). ERA presented a challenge for all concerned in education, but particularly for those involved in SENs provision (Bovair 1991). The emphasis of ERA and subsequent Department of Education and Science (DES) and National Curriculum Council (NCC) guidelines (eg. DES, 1989; NCC, 1989), is that access to the NC is the entitlement of all pupils. It is important within this framework that all children with disabilities should have their educational needs addressed, and have access to a broad and balanced curriculum. How this entitlement and the accompanying need for assessment should be achieved is the subject of much debate.

For example, as cited in chapter two, Lindsay (1989) argues that in order to evaluate integration effectively, researchers need to take a multifaceted approach and take account of; the child, the peer group, teachers, parents, social interactions, the curriculum, child-curriculum interaction and support. In this thesis I have highlighted the effects that different ways of implementing the 1981 Act have on children's attitudes. Future research should consider the implications of integration in the light of the NC.

The delivery of curriculum and classroom practice in mainstream primary education has been the subject of much debate recently (eg. Alexander, Rose and Woodhead 1992). Much of the debate has centred on teaching styles (eg. whole class *vs* individual approaches), standards of achievement and ability grouping. Similarly, researchers in Special Education, both in the United Kingdom and North America, have focused increasingly on the need to identify appropriate practice for delivering curriculum (eg. Manning and Lucking, 1990; Lewis, 1991; Ashdown, *et al.* 1991).

LEAs are implementing and evaluating policy for addressing the needs of students with varying degrees of SENs and often practice does not reflect policy. For example, in this thesis I have identified a number of different policies operating within just one division of an LEA. If resources earmarked for SENs provision are to be efficiently utilised it is essential that policy is informed by authoritative research.

IMPLICATIONS FOR POLICY

As already noted a number of researchers have suggested that the 'contact hypothesis' falls short when used to predict attitudes to disability (eg. Gottlieb, 1974). Whilst others have said contact is the most salient feature in determining attitudes towards both the physically and the 'mentally handicapped' (eg. Furnham, 1981; McConkey *et al*, 1983). It must also be said that often research in this area whilst claiming to either "fit" or "not fit" a model or theory does not seem to have been stringently applied to that model or theory in the first place, rather as already noted, the model has been used to explain findings *post hoc* (eg. Lewis & Lewis, 1988). This point is equally relevant to policy directions, for example, as noted in chapter two 'the LEA' policy claims to adhere to one clearly specified model of integration yet within just one area at least three models of integration were identified. This last point is reflected in the increasing number of case studies that report positive effects of integration by describing different examples of good practice rather than focusing on integration *per se*. (eg. Bennett & Cass. 1989).

The findings from the main study seem to suggest negative outcomes after having contact with children with various kinds of disabilities. On a number of measures children in 'contact' schools evaluated unknown children with disabilities less favourably than did children in the 'control' schools. There was also evidence, particularly in the 'categorized' schools, that the evaluations 'spilled over' from one target group to another. These findings were particularly evident in schools where HI children were integrated. However, before writing an obituary for integrated education it is important to underline the fact, already stated in section two and earlier in this chapter, that in the schools studied the type of contact was far from optimal. The constraints of space, teaching resources, and pressure on the curriculum meant that where children with disabilities were brought into the mainstream they often encountered large classes, little opportunity for structured cooperative learning experiences, and, again mainly because of constraints on resources and time, sometimes a lack of preparation on the part of the teachers and the mainstream children. Furthermore, in some schools there may have been insufficient explicit institutional support for the integration. These deficits, all of which have been identified by past research and theory, as being important ingredients for successful intergroup contact, may have been important factors in the attitudes observed. The importance of organizing contact experiences more carefully, and of preparing mainstream children for them was borne out in the longitudinal case study conducted. Here, and in contrast to the main study, several positive benefits of contact were clearly visible. It is particularly noteworthy that in the second context the numbers of children involved were much smaller, the collaborative work they engaged in was carefully planned and implemented, and there is a strong ethos in the school of the importance of the integration of children with SENs. Having said that, even in the case study the mainstream children rated the children with disabilities lower than children without. The most positive findings were in the group with contact at time three and it is interesting to note that at time three these children seemed to be categorizing less on either the disability or gender dimension. These findings seem to be suggesting that in addition to the categorized contact, other factors such as interpersonal friendship and shared groups (eg. the mainstream classroom group or the special school group) may have been important in determining attitudes. Having made these points I would like to briefly hypothesize how integration in a mainstream school might be best achieved.

Ideally classes would be small, access as easy as possible and children would be integrated into their local schools. Both group differences and interpersonal relations would be encouraged along with shared group memberships. Non teaching staff would be used effectively to ensure all children were adequately supported. Sessions involving integrated contact would be structured and involve cooperative tasks in which all participants would have clearly defined roles. Mainstream children and teachers would be prepared for integration and be given basic information along with the opportunity to ask questions. This last point is particularly important in relation to teachers.

Teachers' impressions of pupils relationships with, and opinions of peers with SENs elicited responses that were very different from findings in the schools. For example, they felt that younger children were not generally aware of peers having SENs unless they were quite marked. Older children, the teachers suggested, would be more aware of them. They generally seemed to feel that in the main ordinary children did not mind having SENs children in classes, in fact a number of teachers suggested the mainstream children 'would'nt notice' if children with disabilities were integrated. The teachers generally felt that ordinary mainstream children would play with children with SENs and that a few friendships would continue outside of school. In fact findings contradicting most of these views were found in the main study.

Main implications for policy

In summary, the research reported in this thesis has considered the effects of integrated school contact on children's attitudes to disabled peers. Findings show that there are differences between how the children viewed the three disabilities (HI, LD & PD) both generally and as an effect of type of school. I was particularly interested in attitudes towards known children and how these generalised towards unknown children and adults with similar disabilities and disability generally. In the main study the children who had contact with hearing impaired children generalized more than in the other conditions and showed the strongest attitudes towards both known and unknown children. This was particularly the case when the contact was organised so that the hearing impaired children were clearly identifiable as a group, however these attitudes were, in the main, in a negative direction. These findings have the following important implications for policy:

- Integration *per se* is not enough to produce positive outcomes if other factors (eg. cooperative activity and strong institutional support) are not also present.
- Policy should be informed by research, in 'The LEA', this did not appear to be the case. *Vice versa* research should take account of policy and practice as well as theory. Much past research in the area has failed to do this.
- Schools should be encouraged, and provided with support, to write clear and realistic policy statements. These should be written collaboratively with, and reflect the views of, teachers, NTAs, parents, children and any other involved parties.

- Where possible, children should be integrated into schools in their catchment area. Few of the children in this research socialized with their disabled peers out of school hours. One practical reason for this was that many of the integrated children lived some distance from the schools.

- The type of disability being integrated has to be taken into account. The data in this research suggested that there may be particular problems with integrating sensory impaired children.

- More time should be spent preparing teachers and other professionals for integration. Similarly, mainstream children need preparation and information about disability and pragmatics such as how to communicate with children who are HI.

- Group differences should be acknowledged, interpersonal relations encouraged and shared group memberships highlighted.

- Whenever possible, integration should involve structured activities involving cooperation between mainstream children and children with disabilities. Given the practical constraints of most primary school classrooms, this indicates a greater use of non-teaching assistants or other auxiliary staff to assist mainstream teachers on a regular basis. It goes without saying that such activities are much easier to implement in smaller rather than larger classes.

In addition anecdotal evidence from the field study, revealed that mainstream teachers and children had very mixed feelings about participating in integrated projects, often feeling unprepared and under-resourced. It is likely that these attitudes of mainstream children and teachers will have an effect on the children with disabilities with whom they are having contact in the future. Findings from this thesis suggest that future research should focus on three questions.

1. What kinds of classroom activities will help to reduce mainstream children's anxiety about anticipating or experiencing contact with children with disabilities?

2. What strategies will ensure that integration maximises the potential of all the children participating?
3. How do disabled children respond to participating in integrated sessions?

I suggest that in response to the first question it is essential that mainstream children are informed and prepared for integration, and that activities that promote awareness and disseminate information are likely to have the most effect. In answer to the second question the area of cooperative working offers a promising avenue from which to develop strategies, although it should be said that it is essential that cooperative situations are well structured to ensure equal participation and mutual interdependence of all involved. Finally, evidence on how disabled children feel about participating in integrated programmes is equivocal and is clearly an area that needs exploring, however the following piece of prose from a girl with LD integrated into a mainstream class offers some hope for the future of integration.

> 'My friend is a very important person in my life. This is for several reasons, and I shall explain what I mean.
>
> Sophie makes me laugh, and we never quarrel. We like the same things. I love Sophie better than anyone except Sarah or Beth. She is eleven like me. She is black and not very tall. Most of the time she laughs, but she sulks too. She jokes good jokes and she giggles. She is kind hearted and she does not mind that I do not talk yet. No one makes me feel as normal and she is accepting, but not stupid. She does expect me to do things.
>
> The most important thing for me is having a friend, if one has a good friend, life is new and tasty like fresh baked bread'.
>
> Friendship - prose by a girl with LD in integrated school. (Maras, 1988b)

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APPENDICES

APPENDIX A

PHASE 1. QUESTIONNAIRE

HEADTEACHER'S - IN AN AREA OF THE 'LEA'

CHILDRENS ATTITUDES TOWARDS PEERS WITH LEARNING DIFFICULTIES: THE EFFECTS OF CONTACT IN MAINSTREAM SCHOOLS.

Phase 1. A questionnaire survey of Primary Schools in

Pam Maras

SECTION 1

In this section we are looking for factual information about both ordinary and special needs children. Please answer the questions by putting the relevant numbers in the boxes to show your answers. If in your school you do not identify classes sequentially by number can you fill in the grid by age, ie. the class with the youngest children would be class 1 and so on.

[Where number of classes exceeds 10 please continue in the second grid.]

1 How many children do you have on roll at present in each class.

	CLASS NO.										
CLASS	1	2	3	4	5	6	7	8	9	10	
SIZE											

	CLASS NO.										
CLASS	11	12	13	14	15	16	17	18	19	20	
SIZE											

2 How many children with special educational needs would you say you have on roll at present, in each class and at the three support levels.

SUPPORT LEVEL	CLASS NO.										
	1	2	3	4	5	6	7	8	9	10	
1											
2											
3											

SUPPORT LEVEL	CLASS NO.										
	11	12	13	14	15	16	17	18	19	20	
1											
2											
3											

n.b. there are questions overleaf.

3 Approximately how many hours a week are children with special educational needs withdrawn from mainstream classes at each support level and in each class.

SUPPORT	CLASS NO.										
LEVEL	1	2	3	4	5	6	7	8	9	10	
1											
2											
3											

SUPPORT	CLASS NO.										
LEVEL	11	12	13	14	15	16	17	18	19	20	
1											
2											
3											

The next three questions are about additional (to the class teacher) support for special needs children within their mainstream classroom.

4 Approximately how many hours, a week, do children with special educational needs have support teachers with them in their mainstream classroom at each support level and in each class.

SUPPORT	CLASS NO.										
LEVEL	1	2	3	4	5	6	7	8	9	10	
1											
2											
3											

SUPPORT	CLASS NO.										
LEVEL	11	12	13	14	15	16	17	18	19	20	
1											
2											
3											

5 Approximately how many hours, a week, on average do children with special educational needs have non-teaching assistants with them in their mainstream classroom at each support level and in each class.

SUPPORT	CLASS NO.										
LEVEL	1	2	3	4	5	6	7	8	9	10	
1											
2											
3											

SUPPORT	CLASS NO.										
LEVEL	11	12	13	14	15	16	17	18	19	20	
1											
2											
3											

6 Approximately how many hours, a week, on average do children with special educational needs have parents with them in their mainstream classroom at each support level and in each class.

SUPPORT	CLASS NO.										
LEVEL	1	2	3	4	5	6	7	8	9	10	
1											
2											
3											

SUPPORT	CLASS NO.										
LEVEL	11	12	13	14	15	16	17	18	19	20	
1											
2											
3											

7 Do all children with special educational needs at all support levels have playtimes with the mainstream?

8 Do all children with special educational needs at all support levels eat with the mainstream at dinnertimes?

9 Do you have a remedial (or equivalent) class in your school?

Yes/No

If yes what is it called? (eg Mrs Bloggs class, Class 11)

n.b. there are questions overleaf.

Is it known colloquially by any other name?. If so please elaborate.

10 Have you any comments you would like to add to this section.

SECTION 2

In this section we are concerned more with your own ideas about policy. Some of the questions are open ended. whilst others involve indicating on a scale how much you agree or disagree with simple statements. If you wish to attach any documents such as policy statements please feel free to do so.

1 What would you see as the main objectives of the educational integration of children with special educational needs?

2 Would you briefly describe what your current policy objectives are with particular reference to integrating children with special educational needs within your school.

3 *In an ideal world how would you see these objectives developing?*

Below are some statements. please indicate on the scale after each how much you agree/disagree with each statement.

4 All children with special educational needs should be educated in mainstream schools.

disagree 1 2 3 4 5 6 7 agree

5 Separate units on the same site as mainstream schools are the best way of providing for children with special educational needs.

disagree 1 2 3 4 5 6 7 agree

6 The best way of of providing for children with special educational needs is in segregated special schools.

disagree 1 2 3 4 5 6 7 agree

7 Children with special educational needs that are in mainstream schools should be TAUGHT with the mainstream all of the time.

disagree 1 2 3 4 5 6 7 agree

8 Children with special educational needs that are in mainstream schools should be taught in separate classes.

disagree 1 2 3 4 5 6 7 agree

9 Children with special educational needs gain SOCIALLY by being in mainstream schools.

disagree 1 2 3 4 5 6 7 agree

10 Children with special educational needs gain EDUCATIONALLY by being in mainstream schools.

disagree 1 2 3 4 5 6 7 agree

n.b. there are questions overleaf.

11 Ordinary children gain SOCIALLY by children with special educational needs being educated in mainstream schools.

disagree 1 2 3 4 5 6 7 agree

12 Ordinary children gain EDUCATIONALLY by children with special educational needs being educated in mainstream schools.

disagree 1 2 3 4 5 6 7 agree

13 Children with special educational needs become more independent if they are educated in mainstream schools.

disagree 1 2 3 4 5 6 7 agree

14 Have you any comments you would like to add to this section.

SECTION 3

In this section we would like to find out about your implementation of your policy objectives, about any problems you might have had or anticipate having, and about how you see L.E.A. support for integration.

1 Can you briefly identify areas of your policy planning for special educational needs in which you have found support from the L.E.A. at AREA EDUCATION OFFICE level most helpful.

2 Can you briefly identify areas of your policy planning for special educational needs in which you have found support from the L.E.A at LOCAL SUPPORT TEAM LEVEL most helpful.

3 Overall how helpful would you say this support has been:

(i) at AREA EDUCATION OFFICE level:

very unhelpful 1 2 3 4 5 6 7 very helpful

(ii) at LOCAL SUPPORT TEAM Level:

very unhelpful 1 2 3 4 5 6 7 very helpful

4 Are there any comments you would like to make about this support.

5 How well do you think you are able to implement your policy objectives for special needs children.

not at all well 1 2 3 4 5 6 7 very well

6 Could you briefly identify any problems that are preventing you from implementing these objectives.

6 Of these which would you say has the most impact?

7 Have you any comments you would like to add to this section.

n.b. there are questions overleaf.

SECTION 4

In this section we are interested in your general subjective impressions about relationships of and between ordinary mainstream children and children with special educational needs. When answering please consider how these may or may not differ from the same situations between ordinary mainstream children. Where relevent please feel free to illustrate points with examples.

1 Do you feel that ordinary mainstream children are aware of other children having special educational needs.

2 How do you think ordinary mainstream children feel about having children with special educational needs in mainstream classrooms.

3 How do you think parents feel about having children with special educational needs in mainstream classes.

4 How do you think class teachers feel about children with special educational needs being in mainstream classes.

5 Would you say that ordinary mainstream children are kind or unkind to children with special educational needs.

6 Have you had occasions of children with special educational needs being bullied.

7 Do you think ordinary mainstream children think children with special educational needs need help in anyway.

8 Are ordinary mainstream children helpful to children with special educational needs.

9 Do ordinary mainstream children play with children with special educational needs.

10 Are friendships formed between ordinary mainstream children and children with special educational needs.

n.b. there are questions overleaf.

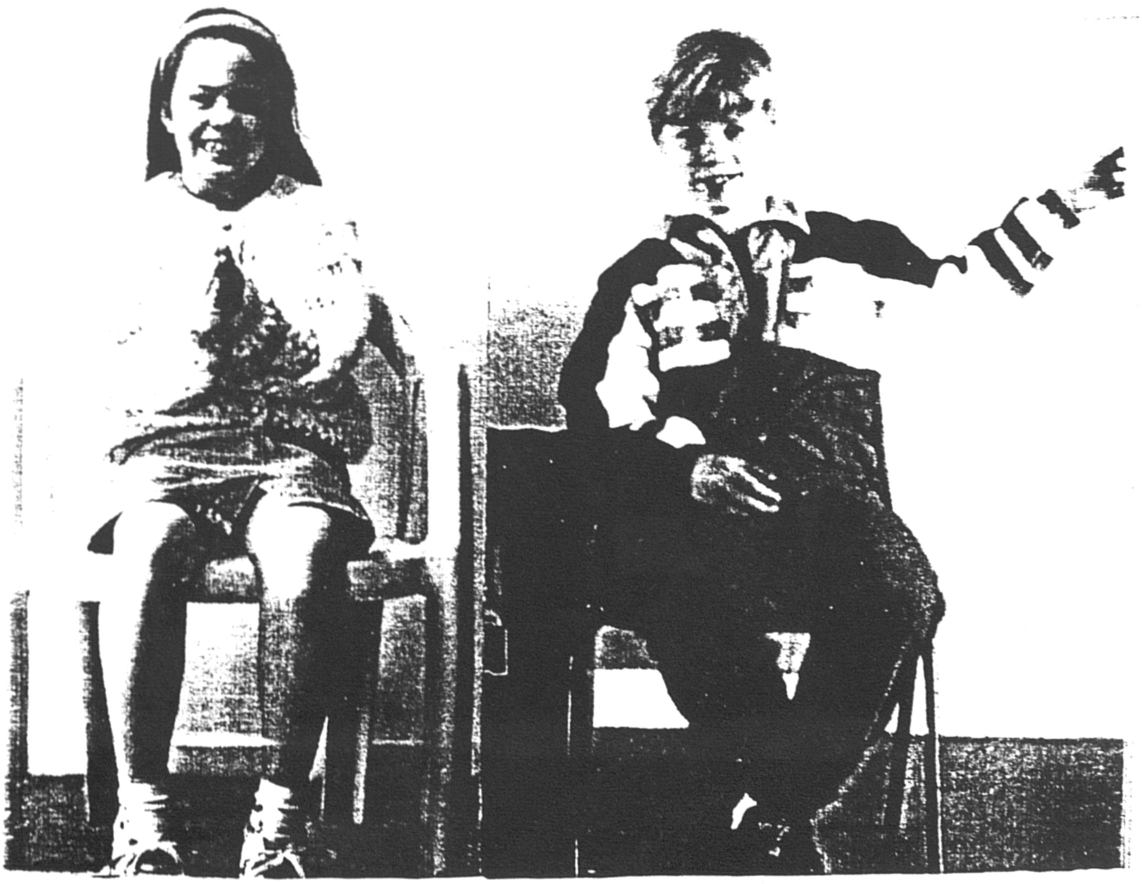
11 Out of school hours do you think ordinary mainstream children play with children with special educational needs.

12 Is there anything you would like to add to this section

Thank you for completing this questionnaire. If you would like to add any comments in the space below, or attach any material please feel free to do so.

APPENDIX B

STANDARD STIMULI



APPENDIX C

PHASE II PROTOCOL & VERBATIM INSTRUCTION

CHILDREN'S ATTITUDES TO DISABLED PEERS: EFFECTS OF CONTACT IN SCHOOLS

A Social Psychological Perspective

Pam Maras

PHASE II - Verbatim Instructions

GENERAL INSTRUCTIONS AND INFORMATION

The procedure falls into three sessions:

1. Training/familiarization;
2. Sorting tasks with photographs of classmates and unknown children;
3. Semi-structured interview and measures of effect and evaluation.

Prior to these sessions an interviewer will have visited the class/school and introduced her/himself to the children and taken photographs of ten randomly selected non-disabled children and two children with physical or learning disabilities. At this visit the class will have been told that the names of the children to be photographed have been "drawn out of a hat" and that we will be returning to play some games with some of the children whose photographs have been taken (it is important that all the children in the class see the selection procedure as "fair" both at this juncture and throughout the whole procedure.

The procedure should take approximately half an hour in all. However, do not rush children who take longer. If children are uneasy about undertaking any of the tasks reassure if still uneasy or upset then stop the procedure reassure by chatting generally and escort back to the classroom and note and inform Pam Maras or Rupert Brown.

Younger children - 5 and 6 years - should be escorted to and from room, during which time chat naturally with the child: first tell the child where you are both going and that s/he will be helping you with some games; then talk about something not connected with the project, eg. the weather or what the d has just been doing. Make sure the teacher is aware which child you have with you.

For older children - 7 + - ask each child to return to the classroom after her/his session and request the next child you name.

SESSION 1. TRAINING/FAMILIARIZATION

Once in the room, make the child feel at ease by saying:

> "*(child's name)*, do you remember me coming to visit your class the other day. Well today we are going to play a couple of games. First of all I want to use these faces".

(lay smiley face measure on table and say:)

> "Here are five faces, can you see them?. These are happy faces (point to the two

happy faces). These are sad faces (point to two sad faces). The one in the middle (point to the middle face) has a straight mouth it isn't happy or sad. We can use these faces to see how much you like or don't like something. If you like something you smile and the more you like it the bigger your smile (point to appropriate faces whilst saying this). If you don't like something you have a sad face and the more you don't like it the sadder your face (point to appropriate faces whilst explaining this). If you think something is just okay then you don't have a sad or a happy face (point to mid face). Can you think of something you like a lot?."

(when child responds say:)

"Which face tells me how you feel about that?. Now can you think of something you don't like at all?".

(when child responds say:)

"Which face tells me how you feel about that?. Good. Now lets play a game with these pictures of people of the television".

(Show child pile of pictures of TV charecters and say:)

"Can you point to the face which tells me how you feel about each one of them?".

(Show each TV character in turn and record child's response to each on recording sheet. Remove smiley faces measure and lay down balloons measure and say:}

"Great. That's good now lets do something else. This time lets use these balloons to show how much of something we have. If you had a lot of something say a great big bag of sweets this balloon could show that"

(Point to largest balloon. Then point to appropriate balloon in turn as you say:)

> "And if you gave some away this balloon would show how big the bag of sweets was and some more away this balloon and then some more away..."

(etc pointing to each balloon)

> "until you only had a very few this smallest balloon would show us how big the bag now was. Lets use the balloons to guess how big/tall people are. Which balloon would show me how tall *(teachers name)* is and which balloon would show me how tall you are?. Great and which balloon would show me how big a mouse is?. Good now lets see if you can show me how tall/big you think each of the people from the TV. are. Can you point to the balloon that tells me how tall each one is?."

(Show each TV character in turn and record child's response to each on recording sheet. Then say:}

> "Thanks for helping me *(child's name)*. Can you help me again later/tomorrow. We'll play some more games then".

SESSION 2. SORTING TASKS

> "*(child's name)*, we're going to look at some photographs and play some more games today - its going to be more fun than your usual schoolwork and you are helping me, okay?"

Known Classmates - Spontaneous sort

(Start of by making sure the child is comfortable. Then say:

> "Do you remember the photos of some of the children in your class that I took the other day. I have them here".

(Lay the class photos out in a predetermined random order and say:)

> "Can you see them all right".

(re-adjust the photos if necessary and then say:)

> "What I would like you to do is take a good look at them - then put into piles any photographs that are alike, that go together. You can make as many piles as you want. Lay them next to each other like this, so we can look at them after. Okay?."

(If child asks any questions, just reply):

> "Put the photos that you think go together into piles, however you like".

(If child is still unsure say:)

> "look at each picture carefully - and see which ones you think go together".

(This can be done any way child wants preferably there should be more than two photos in each pile. Be careful not to say this though, as child may understand you to mean JUST put the photo in pairs. If child insists on putting a photo on its own (not in a pile) record accordingly. While child is doing this, record the photographs in each pile - try and do this surreptitiously so as not to distract child from the task. If child asks questions, looks at you or keeps stoping try and look as non-committal as possible. When task is completed say:)

> "Thank you. Lets look at the piles you have made. Can you tell me a bit about why you put the photos in the piles that you did?".

(Take each pile in turn spread out pictures and say:)

> "What about the photos in this pile, tell me why you put these together".

(If necessary prompt ie. if child says "don't know" record as DK. If child says something like "their the same" say:)

> "There the same?" or "How are they the same?".

(Record comments and reasons next to sort tally on data sheet. When task is completed move on to next task by saying:)

> "Now we'll do something a bit different with the photos. I would like to see how much you play with the rest of the children in your class. First of all though, can you tell me how much you play on your own?. Do you play on your own all the time, a lot of the time, some of the time not very much or do you never play on your own?".

Known Children - Measure of friendship

(Place postboxes in a line and say:)

> "I have 5 post boxes here. I would like you to use them to show me how much you play with the children in the photos. Each box has something different written on it. And underneath is a balloon like the ones we used before to tell how much of something we had".

(Point to each box and say clearly:)

> " This box says ALWAYS on it. It has the biggest balloon on it. This box is for the children you play with all the time. This box says A LOT on it. It has the next biggest balloon on it. This box is for the children you play with a lot. This box says SOMETIMES. It has the next biggest balloon on it. This box is for the children you play with sometimes. This box says NOT MUCH. It has the next biggest balloon on it. This box is for the children you don't play with very much. This box says NEVER. It has the smallest balloon on it. This box is for the children you never play with.

(If child is unable to read just use the balloons to show "how much of", and say:)

> "Can you see how the balloons are like the ones we used the other day?. They start with a big one and get smaller. This box has the biggest balloon on it. This box is for the children you play with all the time. This box has the next biggest balloon on it. This box is for the children you play with a lot. This has the next biggest balloon on it. This box is for the children you play with sometimes. This box has the next biggest balloon on it. This box is for the children you don't play with very much. This box has the smallest balloon on it. This box is for the children you never play with".

(Get child to repeat after you what each box is for and then say:)

> "Will you put the photos in the boxes that tell me how much you play with the children in each of the photos."

(Give each photo individually in a predetermined random order and let child post into a box. If child asks do you mean play with at school or home say at school and note on data sheet. Record which box each photo is put in as surreptitiously as possible. When child has finished say:)

> "thanks that's really good".

(Let child take the photos out of each box in turn. Lay photos from each box out side by side and say:)

> "Do you think you can tell me a bit about why you put these photos in this box?".

If child says "don't know" record DK. If child says something like "because they go together". Expand by prompting:)

> "Because they go together?".

(Move on to next task by saying:)

> "Right, now you have done that, lets look at these photos. They are photos of children you don't know. Can you do the same sort of thing with these photos of other children".

Spontaneous sort - standard stimuli

(Lay the stimulus photos out in a predetermined random order and say:)

> "Can you see them all right".

(re-adjust the photos if necessary and then say:)

> "What I would like you to do is take a good look at them - then put into piles any photographs that are alike, that go together. You can make as many piles as you want.

Lay them next to each other like this, so we can look at them after. Okay?."

(If child asks any questions, just reply):

"Put the photos that you think go together, however you like".

(If child is still unsure say:)

"look at each picture carefully - and see which ones you think go together".

(This can be done any way child wants preferably there should be more than two photos in each pile. Be careful not to say this though, as child may understand you to mean JUST put the photo in pairs. If child insists on putting a photo on its own (not in a pile) record accordingly. While child is doing this, record the photographs in each pile - try and do this surreptiously so as not to distract child from the task. If child asks questions, looks at you or keeps stoping try and look as non-committal as possible. When task is completed say:)

"Thank you. Here is your photo"

(hand child his/her own photo and say:)

"which of these piles would you like to put your photo in?. Why did you put your photo in that pile?".

(record pile and reason and then say:)

"Lets look at the piles you have made. Can you tell me a bit about why you put the photos in the piles that you did?".

(Take each pile in turn spread out pictures and say:)

"What about the photos in this pile, tell me why you put these together".

(If necessary prompt ie. if child says "don't know" record as DK. If child says something like "their the same" say:)

"There the same?" or "How are they the same?".

(Move on to next task by saying:)

"Now can you put the photos in the post boxes like you did with the pictures of the children in your class".

Measure of friendship - Standard Stimuli

(Place postboxes in a line and say:)

" This box says ALWAYS on it. It has the biggest balloon on it. This box is for the

> children you WOULD LIKE TO play with all the time. This box says A LOT on it. It has the next biggest balloon on it. This box is for the children you WOULD LIKE TO play with a lot. This box says SOMETIMES. It has the next biggest balloon on it. This box is for the children you WOULD LIKE TO play with sometimes. This box says NOT MUCH. It has *the next biggest balloon on it. This box is for the children* you WOULD NOT LIKE to play with very much. This box says NEVER. It *has the* smallest balloon on it. This box is for the children you WOULD never play with.

(If child is unable to read just use the balloons to show "how much of", and say:)

> "Can you see how the balloons are like the ones we used the other day?. They start with a big one and get smaller. This box has the biggest balloon on it. This box is for the children you WOULD LIKE TO play with all the time. This box has the next biggest balloon on it. This box is for the children you WOULD LIKE TO play with a lot. This has the next biggest balloon on it. This box is for the children you WOULD LIKE TO play with sometimes. This box has the next biggest balloon on it. This box is for the children you WOULD NOT LIKE TO play with very much. This box has the smallest balloon on it. This box is for the children you WOULD never play with".

(Get child to repeat after you what each box is for and then say:)

> "Will you put the photos in the boxes that tell me how much you WOULD LIKE TO play with the children in each of the photos."

(Give each photo individually in a predetermined random order and let child post into a box. If child asks do you mean play with at school or home say at school and note on data sheet. Record which box each photo is put in as surreptitiously as possible. When child has finished say:)

> "thanks that's really good".

(Let child take the photos out of each box in turn. Lay photos in box out side by side and say:)

> "Do you think you can tell me a bit about why you put the photos in the boxes that you did".

If child says "don't know" record DK. If child says something like "because they go together". Expand by prompting:)

> "Because they go together?".

(End this session by sying:)

> *"(child's name)* thankyou for helping me. Will you help me with some more games later/tomorrow. Would you not talk to the other children about what we have been doing untill after we have completely finished as we don't want to spoil the surprise

do we?."

(Either escort back to class or ask child to send next named child to room.)

SESSION 3. SEMI-STRUCTURED INTERVIEW (tape recorded)

"Before we go on I would like to ask you a few questions about children. Children that are like some of the children in the photos we have just looked at - the children you don't know. You have probably noticed some children have things wrong with them. Maybe they can't hear, or who cant walk or run very easily or maybe have trouble thinking as easily as other children do".

(Put tape recorder on unobtrusively. IT IS IMPORTANT THAT YOU ELICIT AND GET ELABORATIONS IN THIS SECTION FOLLOW STRUCTURE OF QUESTIONS MAKE NOTES IF RELEVANT. Start by saying:)

"Did you notice that?. Do you know any children like that? Tell me about them.".

(Then continue with the following questions allowing child to freely talk around the points and prompting as non directively as possible. Using expressions like "Anything else?" between questions. Continue by asking:)

"What do you think about children like that?".

"What do you think they are like?".

"What kind of children are they?."

"What do you think about children say: who can't hear?".

"What do you think they are like these children say: who can't hear?".

"What kind of children are they?."

"Why are they like that?."

"What do you think about children say: who can't run or maybe walk very easily?".

"What do you think they are like these children say: who can't run or maybe walk very easily?".

"What kind of children are they?".

"Why are they like that?".

"What do you think about children say: who can't think things out very easily?".

"What kind of children are they?."

"What do you think they are like these children say: who can't think things out very easily?".

"Why are they like that?".

"These children we have been talking about - will they get better?".

"Why/why not?".

"What about grown ups who have those types of problems?. What do you think about them?"

"Do you have anyone in your family who is like that?"

"Do you have any friends or know anyone else who is like that?."

"How much time do you spend in class with children like that?".

(expand if appropriate and ask about named children from child's class saying something like:)

"What about *(target child's name)....*?".

"How much time do you spend at playtimes with children like that?".

"How much time out of school do you spend with children like that?".

"Would you like to say any thing else about what we have been talking about?".

(move on to final task by saying:)

"Well done. That was really good. Lets go back to the photos of the children you don't know. I would like to ask you some questions about them. This time can you use the smiley faces and balloons that we used before to show me what you think?. Lets take the pictures in sets."

SESSION 3. MEASURES OF AFFECT & EVALUATION

[Photos to be shown in matched pairs ie. hearing impaired, physically disabled, learning difficulties and the three pairs of non-disabled children - no reference to the disabilities of some of the children in the photos should be made. The photos will then be shown in groups of six (DISABLED & NON-DISABLED). Photos will be shown in this way for each question but the order in which the sets of photos are shown will be systematically randomised].
Odd numbers ie. 1 = disabled first even numbers ie. 2 = non-disabled first. Please ensure that you record the order in the box provided.

One score for each pair of disabled children (=3)
One score for each matched pair of non-disabled children (=3)
One score for ALL 6 disabled children (=1)
One score for 6 non-disabled children (=1)
=8 scores in all.

When recording scores please note: 1=hearing impaired pair, 2=learning difficulties pair, 3=physically disabled pair 4=matched hearing impaired pair, 5=matched learning difficulty pair, 6=matched physical disability pair, 7=disabled group, 8=non disabled group.

(Introduce the task by saying:)

> "Do you remember the faces and balloons we used in the game we played earlier?. I have them here. I also have the pictures of the children you don't know. This time they are in sets. I would like to ask you questions about each of them can you use the faces or and the balloons to give your answer. Just as you did with the people of the TV?".

(At this point it may be necessary to recap with the child what each of the measures is for do this if necessary and then ask the following questions about each set recording scores as surreptitiously as possible:)

General measure of affect

1. Now can you show me how much you like the children in each of these sets of photos using the smiley faces that we used before?.

Evaluation of Psychological and Physical attributes

2. This time using the balloons can you show me how good at school work you think the children in each set of photos are?.

3. Again with the balloons can you show me how good at P.E. and things like gym and swimming you think the children in each set of photos are?.

4. Which balloon shows me how easily you think the children in each set of photos make friends?.

5. Which balloon shows me how hard you think the children in each set of photos work at school?.

Manipulation check

6. Which balloon shows me how well you think the children in each set of photos can run?.

7. Which balloon shows me how well you think the children in each set of photos can hear?.

8. Which balloon shows me how well you think the children in each set of photos can think?.

Intragroup similarity

9. Right, this time lets look at the children in each of the sets. Using the balloons can you point to the balloon that shows me how like each other, similar to each other, you think the children in each set of photos are?.

Self Categorisation

10. Last of all can you point to the balloon that tells me how much like you, similar to you, you think the children in each set of photos are.

(Thank the child by saying:)

> "Thankyou very much for helping me with this. Have you got anything you want to say? or any questions you want to ask"

(Answer child's questions and let her/him choose a badge. Ask not to talk to other children about what we have been doing until you have left the school so as not to spoil the surprise.

APPENDIX D

PHASE II QUESTIONNAIRE FOR CHILDREN

ID. No. [ ]

CHILDREN'S ATTITUDES TO DISABLED PEERS: EFFECTS OF CONTACT IN SCHOOLS

QUESTIONNAIRE 1. (Mainstream Children)

Date	Session	Interviewer
School	Class	
Child's Name	Age	Sex (1=f, 2=m)

SECTION 1. SORTING TASKS

Known Classmates

1. Categorisation

Picture sort photos of classmates into piles.

Note to interviewer: *please ensure you follow verbatim instructions exactly*.

No. of piles [ ]

Note to interviewer: tick to indicate pile each photograph appears in. Record child's own photo thus *.

Pile no.	Photo no.												Reasons
	13	14	15	16	17	18	19	20	21	22	23	24	
1	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	
2	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	
3	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	
4	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	
5	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	
6	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	

Additional comments

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

2. Play Preference

How much do you play on your own?.

All the time [ ] A lot of the time [ ]
Some of the time [ ] Not very much [ ] Never [ ]

How much do you play with the children (classmates) in these photos?

Note to interviewer: All the time (5), A lot (4), Sometimes (3), Not much (2), Never (1). Record child's own photo thus *.

Photo No.	Box No.	Reasons
13.	[ ]	
14.	[ ]	
15.	[ ]	
16.	[ ]	
17.	[ ]	
18.	[ ]	
19.	[ ]	
20.	[ ]	
21.	[ ]	
22.	[ ]	
23.	[ ]	
24.	[ ]	

Additional comments

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

Standard Stimuli

1. Categorisation

Picture sort of photos of unknown children into piles. **Note to interviewer: please ensure you follow verbatim instructions exactly .**

No. of piles [ ]

Note to interviewer: tick to indicate pile each photograph appears in.

Pile no.	Photo no.												Reasons
	1	2	3	4	5	6	7	8	9	10	11	12	
1	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
2	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
3	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
4	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
5	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
6	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	

Own Photo Pile no. [ ] Reasons

Additional comments

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

2. Play Preference

How much **WOULD YOU LIKE TO** play with the children (unknown) in these photos?

Note to interviewer: All the time (5), A lot (4), Sometimes (3), Not much (2), Never (1).

Photo No.	Box No.	Reasons
1.	[ ]	
2.	[ ]	
3.	[ ]	
4.	[ ]	
5.	[ ]	
6.	[ ]	
7.	[ ]	
8.	[ ]	
9.	[ ]	
10.	[ ]	
11.	[ ]	
12.	[ ]	

Additional comments

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

SECTION 2. SEMI-STRUCTURED INTERVIEW

Note to interviewer: **FOLLOW VERBATIM INSTRUCTIONS EXPANDING WHERE APPROPRIATE IT IS IMPORTANT THAT YOU ELICIT AND GET ELABORATIONS. FOLLOW VERBATIM INSTRUCTIONS SHEET FOR EXACT QUESTIONS. TAPE RECORD - MAKE NOTES BELOW IF RELEVANT**

General disability

1. Do you know any children like that?.

2. What do you think about children like that?.

3. What do you think they are like?.

Specific disabilities

3. What do you think about children say:

(a) who can't hear?

(b) who can't walk or have something wrong with their bodies?

(c) or who have problems thinking things out?

4. What do you think they are like these children say:

(a) who can't hear?

(b) who can't walk or have something wrong with their bodies?

(c) or who have problems thinking things out?

Additional comments

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

Disabled Adults

5. What about grown ups who have those types of problems?. What do you think about them?

Disabled friends/family members

6. Do you have anyone in your family who is like that?

7. Do you have any friends or know anyone else who is like that?

8. How much time do you spend in class with children like that?

9. How much time do you spend at playtimes with children like that?

10. How much time out of school do you spend with children like that?

Additional Comments

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

SECTION 3. MEASURES OF AFFECT & EVALUATION

Note to interviewer: ensure that you have <u>8</u> scores for each question.

One score for each pair of disabled children (=3)
One score for each matched pair of non-disabled children (=3)
One score for ALL 6 disabled children (=1)
One score for 6 non-disabled children (=1)
<u>=8 scores in all.</u>

When recording scores please note: 1=hearing impaired pair, 2=learning difficulties pair, 3=physically disabled pair 4=matched hearing impaired pair, 5=matched learning difficulty pair, 6=matched physical disability pair, 7=disabled group, 8=non disabled group.

ORDER [ ]
odd numbers ie. 1 = disabled first even numbers ie. 2 = non-disabled first

General measure of affect

1. Now can you show me how much <u>you like</u> the children in each of these sets of photos using the smiley faces that we used before?.

   1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

Evaluation of Psychological and Physical attributes

2. This time using the balloons can you show me how good at school work you think the children in each set of photos are?.

   1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

3. Again with the balloons can you show me how good at P.E. and things like gym and swimming you think the children in each set of photos are?.

   1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

4. Which balloon shows me how easily you think the children in each set of photos make friends?.

   1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

5. Which balloon shows me how hard you think the children in each set of photos work at school?.

   1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

Note to interviewer: ARE YOU FOLLOWING VERBATIM INSTRUCTIONS

Manipulation check

6. Which balloon shows me how well you think the children in each set of photos can run?.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

7. Which balloon shows me how well you think the children in each set of photos can hear?.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

8. Which balloon shows me how well you think the children in each set of photos can think?.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

Intragroup similarity

9. Right, this time lets look at the children in each of the sets. Using the balloons can you point to the balloon that shows me how like each other, similar to each other, you think the children in each set of photos are?.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

Self Categorisation

10. Last of all can you point to the balloon that tells me how much like you, similar to you, you think the children in each set of photos are.

1[ ] 2[ ] 3[ ] 4[ ] 5[ ] 6[ ] 7[ ] 8[ ]

Additional comments

"Thankyou very much for helping me with this. Have you got anything you want to say? or any questions you want to ask".

Note to interviewer: HAVE YOU FOLLOWED THE VERBATIM INSTRUCTIONS EXACTLY. PLEASE CHECK ALL TASKS HAVE BEEN COMPLETED AND ALL SCORES AND DETAILS RECORDED CLEARLY.

CODED BY:
DATE:

APPENDIX E

PHASE II QUALITATIVE DATA - Reliability of coders

Question Number	Reliability (Scott's coefficient)		
	Pair 1	Pair 2	
	Test 1	Test 1	Test 2
1	1	1	1
2	1	.37	.82
3	1	.70	.75
4	1	1	1
5	1	.85	1
6	1	1	.72
7	1	1	1
8	1	1	1
9	.93	1	1
10	1	1	1
11	1	.44	1
12	1	.77	1
13	1	1	1
14	.89	1	1
15	.86	1	1
16	.80	1	1
17	.75	1	1
18	1	1	1

Table E.1 Intercoder reliability (Scott's coefficient) for qualitative data Chapter 10.