

The Social Well-being of Children with Specific Language Impairment (SLI): what goes with what?

Submitted by Karen Josephine Robinson to the University of Exeter as a thesis
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K. J. Robinson

Karen Robinson

Abstract

Specific language impairment (SLI) describes a form of language acquisition difficulty that is not secondary to other developmental conditions. Researchers have identified a number of social and emotional difficulties in children and young people with SLI. However, less is known about the influences upon these difficulties, particularly at times of major change.

This longitudinal study therefore examines the social well-being of children with receptive SLI during their transition from primary to secondary schooling. It focuses on peer social position and social anxiety and considers whether the severity of receptive language impairment, along with other factors, has particular importance for these markers. The markers are explored in terms of their definition, interrelationship and the degree to which they present singularly in children with SLI. The study uses a mixed method design to address six related research questions.

The quantitative results showed that the participants with SLI had higher social anxiety than typical comparisons at both Time 1 and Time 2, but lower self-rated social acceptance at Time 2 only. However, teachers at Time 1 rated their social acceptance lower than they rated typical comparisons. There were no significant changes in self-rated measures from Time 1 to Time 2. A moderately strong and longitudinally robust association was found between social acceptance and social anxiety and between social acceptance and verbal/non-verbal discrepancy. Furthermore, social acceptance predicted social anxiety.

The qualitative findings indicated that a number of factors singly and ecologically influenced the social well-being of children with SLI following secondary transition. Of these, receptive language level, pragmatic development and parental support were found to be particularly important. There was considerable variation in levels of social well-being, but they were generally lower than in a group of children with specific learning difficulties (SpLD).

Overall, the study suggested that some children with SLI face greater social challenges than their peers at this life stage. However, secondary transition did not invariably result in greater difficulties. The study raised questions about policy, provision and practice in relation to children with SLI and identified areas for future research.

Key words: specific language impairment (SLI); special educational needs (SEN); specific learning difficulties (SpLD); peer social position; social anxiety; ecological relationships

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ABBREVIATIONS OF THE KEY TERMS USED

ADHD	Attention deficit hyperactivity disorder
BCRP	Better Communication Research Programme
BESD	Behavioural, emotional and social difficulties
CAT-3	Cognitive Abilities Test – 3 rd edition
CELF-4	Clinical Evaluation of Language Fundamentals – 4 th edition
DA	Dynamic assessment
DCSF	Department for Children, Schools and Families
DfE	Department for Education
DfES	Department for Education and Skills
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders – 4 th edition
EP	Educational psychologist
ICD-10	International Classification of Diseases – 10 th version
LA	Local authority
LRB	Language resource base
MLD	Moderate learning difficulties
PLI	Pragmatic language impairment
SASC-R	Social Anxiety Scales for Children - revised
SEN	Special educational needs
SENCo	Special educational needs coordinator
SLI	Specific language impairment
SLT	Speech and language therapist
SpLD	Specific learning difficulties
SPPC	Self-Perception Profile for Children
SSLD	Specific speech and language difficulties
WISC-4	Wechsler Intelligence Scale for Children – 4 th edition

CHAPTER 1: INTRODUCTION

1.1 Overview of the topic

This study examines the social well-being of children with specific language impairment (SLI). Well-being refers here to the presence of good relationships with peers and the absence of undue concerns about them. SLI is a developmental disorder characterised by a marked difficulty in language acquisition that is unexplained by low non-verbal ability or by frank additional impairments such as deafness. SLI attracted public and academic interest later than autism or dyslexia (Bishop, 2009). Its prevalence is similar to that of dyslexia, but it is much more common than autism (Bishop, 2009, citing Baird et al., 2006).

SLI is now the subject of a substantial body of research. This has focused on the nature of SLI and on its educational implications, both for literacy (for overviews, see Bishop & Leonard, 2000; Hulme & Snowling, 2009; St Clair, Durkin, Conti-Ramsden & Pickles, 2010) and for wider academic outcomes (Dockrell, Lindsay & Palikara, 2011). The terminology used by researchers to describe the impairment remains inconsistent, but SLI, synonymous with 'specific speech and language difficulties': SSLD (e.g. Dockrell, Lindsay, Letchford & Mackie, 2006), is now a common term in research within the United Kingdom (UK). SLI is therefore used throughout this study, unless an alternative is employed in work that is discussed rather than just cited. In such cases, the author's chosen term and abbreviation will be given.

Much has also been published on the behavioural, emotional and social difficulties (BESD) linked with SLI, especially in the past fifteen years. Several aspects of difficulty have been studied, including anxiety (Beitchman, Wilson, Johnson, Atkinson, Young & Adlaf, 2001; Voci, Beitchman, Brownlie & Wilson, 2006), social stress (Wadman, Durkin & Conti-Ramsden, 2011a), anxiety and depression (Botting, 2006; Wadman, Botting, Durkin & Conti-Ramsden, 2011), vulnerability to bullying (Knox & Conti-Ramsden, 2003; Conti-Ramsden & Botting, 2004; Lindsay, Dockrell & Mackie, 2008; Savage, 2005; Redmond, 2011), reduced peer popularity (Gertner, Rice & Hadley, 1994; Fujiki, Brinton, Morgan & Hart, 1999), self-esteem (Jerome, Fujiki, Brinton & James, 2002;

Lindsay, Dockrell, Letchford & Mackie, 2002; Lindsay, Dockrell & Palikara, 2010), shyness (Wadman, Durkin & Conti-Ramsden, 2008), conduct disorders (Hooper, Roberts, Zeisel & Poe, 2003), difficulties in joining group interactions (Brinton & Fujiki, 2002; Fujiki, Brinton, Morgan & Hart, 1999) and mixed BESD (Lindsay, Dockrell & Strand, 2007). For those with a more eclectic range of language difficulties than SLI, offending (Bryan, 2004; Bryan, Freer & Furlong, 2007; Tomblin, Zhang, Buckwalter & Catts, 2000) and reduced quality of life, including social aspects (Markham, van Laar, Gibbard & Dean, 2009), have also been explored.

The features of BESD in SLI are thus widely documented, but there is debate about the extent and nature of their interrelationships (Goodyer, 2000; Brinton & Fujiki, 2002; Durkin & Conti-Ramsden, 2010). In part, this stems from the heterogeneity of age group, domain of BESD and language domain that have been studied. St Clair, Pickles, Durkin & Conti-Ramsden (2011) have helped to clarify this picture by analysing discrete BESD domains and language domains in their longitudinal study of 7-16 year olds with a history of SLI. An important finding was that behavioural and emotional difficulties decreased by mid-adolescence, but that social difficulties with peers increased steadily over the four time points of the study. This applied to both genders.

Snowling, Bishop, Stothard, Chipchase and Kaplan (2006) suggested that although early non-verbal abilities are generally more strongly linked than early language ability with later social difficulties, social outcomes are much poorer if language impairment remains unresolved by school entry. In this case, future social difficulty may be pervasive and indicate a more severe socio-cognitive impairment. In contrast, Conti-Ramsden and Botting (2004) found few such associations, but reported a significant link between social outcomes and pragmatic language impairment, an association also reported by St Clair et al. (2011). Pragmatic language refers to the understanding and appropriate use of language in social context, including the ability to infer non-literal meaning, rather than to the structural aspects of language.

Overall, the literature provides irrefutable evidence that SLI and social difficulties are linked in some way, but an assumption that the latter are a direct

outcome of SLI should be treated with caution. There has also been debate on the extent to which SLI intrinsically differs from language delay that is associated with general learning difficulties (Tomblin, 2008) and/or with psychiatric and neurological diagnoses (Elbro, Dalby & Maarbjerg, 2011). The notion of specificity in relation to language is highly complex and it will be discussed further in Chapter 2.

There is now more research on social functioning in older adolescents and younger adults with a history of SLI. For example, Lindsay, Dockrell and Palikara (2010) found that following transition from statutory education at 16 -17 years, young people's non-social self-esteem improved, but their social self-esteem did not. In a review of studies focusing on social and emotional functioning in adolescents with SLI, Durkin and Conti-Ramsden (2010) concluded that at a group level, adolescents appeared to be vulnerable over several socio-emotional markers, but they found considerable individual differences. St Clair et al. (2011) also reported that by age 16, 40% of their sample had social difficulties with peers.

There is evidence that some of these social difficulties persist well beyond early adulthood (Clegg & Ginsborg, 2006) and co-exist with reduced functioning in other areas of daily life. In one of the few but growing number of adult studies, Clegg, Hollis, Mawhood and Rutter (2005) noted significantly poor outcomes for employment as well as for social confidence and close friendship, in a small male cohort with SLI in their mid-thirties. (These researchers used the term 'developmental language disorders'.) Studying the same age group, Tornqvist, Thulin, Segnestam and Horowitz (2009) also reported limited friendships and weak social confidence in three Swedish participants with a history of 'language impairment' (LI), this being the terminology used at the time in Sweden to describe specific language difficulties in children. The evidence therefore suggests that the social effects of SLI can be long lasting.

Despite strong research to date, greater precision is needed in the definition of SLI, before examining its links with social well-being. Even if SLI is separated from more general language delay (by whatever means), it is a non-uniform impairment (Conti-Ramsden, 2008), which covers a wide range of receptive and

expressive impairments across the three language domains of content, form and use (Bloom & Lahey, 1978). Content refers to word meanings and semantic relationships, form to the structural elements, i.e. phonology, syntax and morphology, and use to communication in a social context.

Attempts to define SLI and to categorise it into sub-types have proved to be challenging, and this issue is explored further in Chapter 2. However, one useful distinction can be made between children with structural SLI and those with primary pragmatic language impairment (PLI). These are children who may also have structural SLI, i.e. difficulties with language form and/or content, but who are noticeably unusual in their social use of language and for whom Conti-Ramsden and Botting (2004) reported significantly worse social outcomes. However, before examining social well-being in children with 'structural only' SLI, it is important to rule out less obvious features of pragmatic impairment. Historically, fine-grained assessment of pragmatic impairment was a difficult task, due to a lack of agreed norms, but it has been facilitated by the availability of the Children's Communication Checklist, 2nd edition (Bishop, 2003). This tool, commonly abbreviated as CCC-2, allows pragmatics to be assessed thoroughly and scored separately from structural language.

Some headway has been made in establishing a hierarchy of 'social risk' within SLI. Social risk is a very broadly based concept. I put it in inverted commas, because I am using it as a shorthand term to denote the likelihood of experiencing one or more situations that are detrimental to social well-being. This encompasses the wide range of social difficulties that researchers have linked to SLI generally, and sometimes to receptive SLI in particular. For instance, Botting (2006) found significant associations between social difficulties and receptive language at ages 14, 16 and when progress was considered over ages 7-16. Clegg et al. (2005) also highlighted receptive impairment in childhood as a strong predictor of psychosocial impairments in adult life. This was mirrored by the findings of Schoon, Parsons, Rush and Law (2010) for a large cohort study with unspecified receptive language impairments in childhood. Clegg et al. conceded that methodological issues (notably a reliance on questionnaires) may have obscured the interpretation of their findings. They also acknowledged that the participants in their own small study all had severe

receptive and expressive language impairment in childhood, that other cognitive impairments may have contributed to their difficulties in adulthood and that social outcomes for those with milder language impairments may be different. There is scope, therefore, for examining the social well-being of children whose receptive SLI spans a broader range of severity.

Diverse social and emotional difficulties have been reported in children with SLI (Lindsay et al., 2007; St Clair et al., 2011), but this study of well-being will focus on social anxiety and peer social position, since they are likely to have considerable importance for children's daily lives. As an illustration, poor social acceptance by peers can undermine a sense of belonging (Pijl & Frostad, 2010). For the purposes of this study, I am using social position as an umbrella term that encompasses social acceptance by peers, social participation with peers in and out of school and friendship. The rationale for including these three constructs will be discussed in Chapter 2. There is also some evidence of an interrelationship between peer acceptance and social anxiety in SLI (Fujiki et al., 1999; Wadman et al. 2011a), but the link has been remarkably under-researched for this population at various ages.

In summary, further research is needed on social anxiety and social position in children and young people with receptive SLI. Comparison with other children is required, along with a closer examination of the association between these two social markers. Moreover, it remains unclear whether the language impairment itself is the most influential factor in social anxiety and social position, or whether other personal and environmental factors are strongly implicated. Intervention outcomes for different sub-types and degrees of language and social difficulty are imperfectly understood, but there is evidence that language intervention does not necessarily reduce social difficulties (Fujiki et al., 1999; Conti-Ramsden & Botting, 2004). This suggests that some children with SLI have social processing difficulties that are not entirely attributable to their language impairment (Goodyer, 2000; Wadman et al., 2011a). However, it has also been suggested that unsuccessful interactions in the early years simply leave them socially unpractised, leading to lasting gaps in their social competence (Stanton-Chapman, Justice, Skibbe & Grant, 2007).

Overall, the evidence points to receptive impairment as the language area most clearly associated with reduced social well-being in children with SLI. This study therefore investigates whether social position and social anxiety are partly influenced by the *severity* of receptive SLI and whether they manifest differently at times of major change. In the UK, the transition to secondary school is one such change. This transition occurs at a life stage which may be crucial in terms of status formation for children generally (Boulton, Trueman, Chau, Whitehand & Amatya, 1999). The study will therefore focus on this same age group. However, it will differ from previous studies of children with SLI at the same age (e.g. Lindsay et al., 2002) by including a range of individual and environmental factors that may influence the social well-being of children with receptive SLI at this important time and by examining the interrelationships between these factors. Ecological processes are worthy of investigation, since: 'What is clear is that social and emotional functioning are interwoven with other developmental and environmental processes in adolescence and that together these contribute to the complex and heterogeneous outcomes of young people with SLI.' (Durkin & Conti-Ramsden, 2010, p. 114)

The principal context of the study is mainstream primary and secondary schools, where the majority of children with SLI in the UK are educated. Some mainstream schools, including several participating in this study, have designated language provision. This is typically called a resource base or centre, although the older term, 'unit', is still sometimes used. For ease of reference, the term language resource base and its abbreviation (LRB) will be used throughout this study. It should be noted that this PhD research took place within English schools only. As such, it does not reflect contextual features specific to other countries in the UK or beyond.

1.2 Relevance, motivation and timeliness

This study is relevant to practitioners and policy-makers working with, or on behalf of, children and adolescents with SLI. It is also topical for student researchers in the wider field of special educational needs (SEN). My own interest in the research topic stems directly from my professional and academic

background. I worked for almost twenty years as an advisory teacher for children with SLI in mainstream primary and secondary schools. Many of these children struggled to achieve a positive social position with their peers. During that period, I undertook a research MSc at Sheffield University's Department of Human Communication Sciences on the self-monitoring of verbal comprehension in primary aged children with SLI. My continued interest in children with receptive SLI motivated me to undertake the PhD.

Lastly, the research is timely. 2011 was nominated as *Hello!* - the National Year of Speech, Language and Communication. This followed an extensive review of services in England for children with a wide range of speech, language and communication needs, including SLI (Bercow, 2008). The review highlighted major concerns about the inconsistent quality and availability of provision for these children and young people across the country as a whole. It led to concerted efforts for improvement by The Communication Trust (a coalition of organisations with expertise in the field) and to the Better Communication Research Programme (BCRP), an ambitious initiative involving four English universities. The programme, which ended in March 2012, is due for final report in late September 2012. Meanwhile, full descriptions of the research projects and the issues that gave rise to them are set out in the second interim report (Lindsay, Dockrell, Law & Roulstone, 2011).

1.3 Objectives of the research

The main objectives of this research were:

- To investigate levels of social acceptance and social anxiety and the relationship between them in pupils with receptive SLI before and after their transition to secondary school;
- To determine whether the severity of receptive SLI is related to social acceptance and social anxiety in these pupils;
- To explore ecologically a wider range of factors that may be related to the social well-being of these pupils following secondary transition.

1.4 Structure of the thesis

The thesis is divided into six chapters. The chapters broadly follow the sequence that is commonly seen in journal articles on comparable topics. The introductory chapter is therefore followed by a review of the literature, methodology, analysis, discussion of findings and a short conclusion.

CHAPTER 2: REVIEW OF THE LITERATURE

2.1 Introduction to the chapter

This chapter reviews the literature on the nature of SLI, peer social position and social anxiety, and ecological perspectives on child development. The literature draws on many disciplines, including psycholinguistics, social and clinical psychology, developmental psychology, psychiatry and neurology. Educational perspectives have been somewhat eclipsed, particularly in relation to child and adolescent anxiety. The review therefore incorporates many studies which are not educational in focus, but which have direct bearing on the research questions. The review is largely confined to work published in the past twenty years, with just occasional reference to earlier studies for which no follow-up has been identified. The rationale for this decision is that each area of interest has been researched over the last two decades and it can be deduced from citation lists that such work was informed by important earlier findings. The review includes studies from other countries, both English speaking and not. Inevitably, this results in a range of terminology being used for core areas of interest. The equivalence of terms across countries is therefore specified wherever it could be in doubt.

2.1.1 Structure of the literature review

The review is divided into three parts. The first is on the conceptualisation of SLI itself. The second and largest part covers the topic addressed by the research questions: social well-being. This overall topic is sub-divided into the two specific areas of interest: social position and social anxiety, followed by the links between them. The last part of the review focuses on ecological perspectives that are applicable to social well-being. Some interim summaries are included. A chapter summary then draws together the main points from the three parts of the review.

2.1.2 Review procedures and sources

The review was carried out in stages and drew on a number of sources. First, a general overview of the topic was built up from seminal publications by eminent authors in the field. Of note are: Bishop (1997) and Leonard (1998) on receptive

SLI; Hulme and Snowling (2009) on cognitive and developmental psychology perspectives of SLI; Verhoeven and van Balkom (2004) on the classification of developmental language disorders; Clegg and Ginsborg (2006) and Norbury, Tomblin and Bishop (2008) on language and social impairment and Rinaldi (2000) on language impairment in an educational context.

Recent and current issues of widely cited peer-reviewed journals were then examined and key references from the relevant articles were followed up. Further issues of these journals were then checked on a quarterly basis. The Educational Resources Information Center (ERIC) database was consulted regularly to identify the most up-to-date information and to ensure that less familiar sources were not overlooked. An electronic alert for relevant titles was also set up with the ProQuest Education Journals. Finally, specialist conference papers were examined for relevant topics. For example, the 2012 annual conference of the National Association of Professionals concerned with Language Impairment in Children (NAPLIC) provided a valuable up-date on the status of provision for speech, language and communication needs in England since the recommendations of the Bercow Review (2008). The literature review was conducted over the three years of the study. The main part was written in the first year, but revisions took place up to a month before submission of the thesis. This ensured that the review included important recent studies on the topic.

2.2 SLI: history, definitions and diagnosis

2.2.1 Introduction

This section reviews the ways in which SLI has been labelled and conceptualised over time. As such, it provides important background to the research questions. The section serves two purposes. Firstly, it contextualises the present study at a time in which services for children with a wide range of speech, language and communication needs, including SLI, have attracted national attention in England. This was outlined in Chapter 1. Secondly, it explores the complexities of definition, diagnosis and categorisation, since

these are relevant both to interprofessional working (Lindsay, Dockrell, Desforges, Law & Peacey, 2010) and to research (Bishop, 2004).

2.2.2 Historical context

The key event that placed specific impairments of language on the academic stage was the Stanford Conference on Childhood Aphasia, which took place in September of 1960. Twenty-eight experts met at the Stanford Medical Centre for this event, which was sponsored by the California Society for Crippled Children and Adults. Its purpose was to examine widely divergent practices in the diagnosis and treatment of the condition termed aphasia at that time, with a view to establishing guidelines for the development of services for children. Topics included the neurological bases of language, semantic aspects of aphasia, and causes of the condition. The conference was distinctive, because it included informal contributions as well as prepared speeches. The stenographic report of proceedings was published by the general chairman of the conference, Robert West, in 1962. These verbatim records provide a fascinating insight into a topic which was already highly controversial.

During the conference, aphasia was referred to as 'childhood', 'infantile', 'congenital', or 'developmental'. Interestingly, the term 'pure language disorder' was also used and was contrasted with 'mental retardation with language disorder'. The conference was led by eminent members of the medical and psychological professions. However, it was reported that parents wanted teachers to defer less to psychologists and psychiatrists on matters relating to educational provision.

Overall, the majority consensus at the conference was that language impairment constituted a special entity, but there was considerable division on the nature of that entity and on the appropriate terminology. Most contributors felt that in order to establish service guidelines, functional linguistic descriptions of aphasia were required and it was suggested that greater links should be made between the psychological, psychiatric and linguistic disciplines. A total of 26 research recommendations were made, including the need for classification and definition of the disorder.

Since then, the issues of classification and definition have continued to exercise the minds of academics and professionals in the field. A further landmark event, which took place in 1987, was the First International Symposium on Specific Speech and Language Disorders in Children, held in London. Allen & Rapin published their key contribution to the proceedings (1987), focusing on dysphasia (their term) and autism in preschoolers. The terms aphasia and dysphasia have now largely fallen into disuse as labels for developmental language difficulties, as they are commonly associated with adventitious events such as stroke or head injury. As noted in Chapter 1, the term SLI is now widely used in the English speaking world to label the developmental disorder.

The interdisciplinary debates and recommendations of the Stanford Conference offered opportunities to elucidate academic and professional thinking about what is now termed SLI. However, there is a sense in which these opportunities have never led to real clarity, at least in the UK. This is not entirely surprising. SLI is intrinsically complex (Hulme & Snowling, 2009) and a continued theoretical debate on the subject, as detailed below, is to be expected. Nonetheless, it probably has some bearing on the current difficulties in defining and diagnosing SLI. Potentially, this creates challenges both for empirical researchers seeking SLI samples and for practitioners allocating rationed services to children with a range of speech, language and communication needs (Bishop, 2004).

2.2.3 Definitions, diagnosis and SLI sub-types

2.2.3.1 The exclusionary definition

There is no single way to define SLI (Bishop, 2004). Of course, problems of definition are by no means confined to SLI. They have been noted for other areas of special educational need, including moderate learning difficulties (Norwich & Kelly, 2005). Nevertheless, SLI is rather unusual, since it is defined not only by what it *is*, i.e. a language learning difficulty, but also by what it is *not*, i.e. an impairment underpinned by something else that commonly affects speech and language, such as severe deafness or cerebral palsy. According to this model, alternative explanations for the language difficulty must be excluded before SLI can be considered. The exclusionary definition contrasts with that of

other developmental conditions, such as autism. Autism is defined (and diagnosed accordingly) as a communication disorder that manifests across a triad of impairments (Wing & Gould, 1979). The impairments are those of social interaction, communication and imagination. For a diagnosis of autism to be made, there must be evidence of impairment in each part of the triad. However, co-existing needs such as deafness, attention-deficit/hyperactivity disorder (ADHD) or cerebral palsy do not preclude a diagnosis of autism, as long as the triad criteria are met. In other words, autism is defined in relation to the triad, not by the exclusion of other impairments that might explain the child's difficulties. This is clearly different from the exclusionary definition of SLI.

2.2.3.2 The discrepancy model definition

SLI has not only been defined in exclusionary terms, i.e. by the absence of other developmental or sensory difficulties. Traditionally, the definition of SLI has also been based on the discrepancy model, whereby non-verbal abilities are notably higher than verbal abilities. This discrepancy model is also referred to as cognitive referencing (Tomblin, 2008) and has typically been the basis for identifying individuals with SLI for research samples (Bishop, 2004). However, the model has not escaped criticism and this is discussed further below.

2.2.3.3 Health and educational service terminology and definitions

Anecdotally, the exclusionary and discrepancy definitions of SLI continue to inform the perspectives of health service professionals, notably speech and language therapists (SLTs). However, both the use of terminology and adherence to the exclusionary and discrepancy models appear to be inconsistent. For example, Dockrell, Lindsay, Letchford and Mackie (2006) carried out interviews with SLT service managers and noted that ten different terms, including SLI and specific speech and language difficulties: SSLD, were used to label the impairment. Moreover, there was considerable variability in the services' criteria for accessing designated services for this population. For instance, several managers confirmed or implied that average non-verbal ability was a criterion that they applied, but less than half stipulated the requirement for a verbal/non-verbal discrepancy.

In contrast, professionals in educational contexts, including schools, often refer to a term and definition that are specified by a governmental framework. The term is 'speech, language and communication needs', for which the commonly recognised abbreviation is SLCN. This is used in two different ways that reflect different purposes. The first use approximates to SLI, but does not match it exactly (Lindsay, 2011). The second use encompasses SLI, but is not exclusive to it. The term is used variously:

1. As a sub-category of Communication and Interaction Needs within the Pupil Level Annual School Census (Department for Education and Skills, 2005). State schools in England are required to complete this census on children with more severe SEN, using one of four overarching categories.
2. To refer to a wider range of interaction difficulties. The Bercow Review (2008) used the term in this more inclusive way to reflect concerns about service provision for the whole range of difficulties. The range can be condensed into three main areas (Lindsay, 2011). These are: primary language difficulties definable as SLI/SSLD; SLCN that are secondary to another difficulty, e.g. sensory, cognitive, or physical impairment; and SLCN linked to life circumstances such as socioeconomic disadvantage.

The first use is intended for children with primary language needs, but it is not fully equivalent to the exclusionary or discrepancy models of SLI. For example, the guidance states that the term covers the full non-verbal ability range and makes no mention of verbal/non-verbal discrepancy.

This dual use of the term SLCN is potentially misleading. Moreover, the inconsistent use of this and other terminology pertaining to SLI, notably between health and educational providers, has undermined the effective collection and analysis of child data for this population (Lindsay, 2011). Tellingly, the imprecision of the term SLCN as a school census sub-category also has implications for researchers seeking appropriate samples for SLI research. This is addressed further in Chapter 3.

2.2.3.4 *Diagnostic issues*

Definition and diagnosis are not synonymous, but they are closely linked in the present context. Definition refers to a description of a word or term that is reasonably crisp but unambiguous. Diagnosis implies use of that description in a particular situation and for a particular purpose.

Purpose is crucial here. Bishop (2004) made a very clear distinction between diagnosis for research purposes and diagnosis for clinical purposes. She noted that many early attempts to establish SLI diagnostic criteria were made by researchers investigating the core cognitive or linguistic features of this puzzling impairment. Their endeavours demanded the imposition of stringent criteria in order to avoid confounds such as low non-verbal ability or other developmental difficulties. However, Bishop argued that such stringency may be inappropriate to clinical decision-making, since it excludes many children who would benefit from intervention that is dependent on a diagnosis of SLI. In this, Bishop identified a paradox. Research rigour apparently demands the use of pure SLI cases, but she claimed that, in reality, such pure cases of SLI are not the norm. She therefore concluded: 'I argue here that an insistence on stringent discrepancy and exclusionary criteria has no rational justification in clinical and educational contexts.' (p. 310)

The currently recognised diagnostic criteria for SLI are those of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994), due for published revision in 2012, and the World Health Organization's International Classification of Diseases (ICD-10, 1993), due for revision in 2015. ICD-10 stipulates that language scores must fall below the two standard deviations limit for chronological age and at least one standard deviation below non-verbal scores. The DSM-IV specifications similarly stipulate that verbal scores should be substantially below non-verbal.

Stark and Tallal (1981) also provided a diagnostic framework for SLI. This differs from the ICD-10 and DSM-IV in the way it quantifies the SLI criteria. Unlike them, it uses age gaps rather than standard deviations for discrepancies. To clarify, it states that receptive language age should be at least six months below chronological age or non-verbal ability, based on whichever is lower. The

mean combined receptive and expressive language age should be at least 12 months below chronological age or non-verbal ability, based on whichever is lower. A non-verbal cut-off of 85 is specified.

The diagnostic frameworks are not above criticism. For example, it has been noted that ICD-10 does not specify which language tests would demonstrate that the criteria are met, that language tests differ markedly in their sensitivity to language impairment, and that the requirement for language to fall two standard deviations below chronological age is arbitrary (Bishop & McDonald, 2009). In fact, there is evidence that some diagnosticians operate more thorough procedures. For instance, Archibald and Gathercole (2006a), citing Records and Tomblin (1994), noted the increased use of composite language tests, which provide more robust evidence of a child's linguistic functioning and of a revised language cut-off of 1.25 standard deviations below chronological age, calculated over two language measures.

In Stark and Tallal's framework, the diagnostic value of measuring discrepancies in months rather than in standard deviations might also be challenged. A six or 12 month discrepancy between language age and chronological age in a very young child would warrant concern, whereas the same discrepancy in an adolescent would be less remarkable. In this respect, the use of month gaps may become diagnostically less helpful once children reach school age.

There is increasing evidence that SLI is not a pure language disorder (Conti-Ramsden, 2009) and that non-verbal scores in some children with SLI decline over time (Wadman et al., 2011a, citing Botting, 2005; Mawhood, Howlin & Rutter, 2000; Tomblin, Freese & Records, 1992). A reliance on earlier non-verbal scores might therefore be problematic in longitudinal studies which include participants whose non-verbal scores were above the cut-off at the beginning of the study, but not at later times.

Essentially, there are two issues involved in using non-verbal scores diagnostically. One is the amount of discrepancy required between verbal and non-verbal scores. The other is whether the non-verbal score itself is relevant to the identification of SLI. In other words, is the SLI diagnosis applicable only to

those whose non-verbal scores are in the average range? Or does it extend to those of below average non-verbal ability, as long as their verbal standardised scores are, for example, one standard deviation below their non-verbal scores? If the latter is accepted, important questions are raised about the boundary between SLI and mild general learning difficulties.

As noted, the DSM-IV and ICD-10 criteria define SLI in statistical terms with clear cut-offs. However, statistical definition has created problems, particularly for establishing prevalence, since it assumes that a prevalence figure of 3% (based on 2 standard deviations below age level on language assessment) is a constant, regardless of age and geographical area (Bishop, 1997). Yet, there is evidence that SLI profiles are highly diverse in their prospects for resolution, with mixed receptive-expressive SLI much more likely to persist throughout childhood than expressive only (Archibald & Gathercole, 2006a, citing a number of longitudinal studies). Tomblin's prevalence figure (2008) of 7% is generally accepted for 5 year olds. However, this prevalence cannot be assumed to remain stable throughout the life stages.

Bishop (1997) referred to the DSM-IV's additional requirement for the language impairment to interfere with academic, occupational or social achievements. This conceptualises SLI in functional rather than statistical terms. Bishop noted the advantages of the functional definition, which avoids over-reliance on arbitrary statistical definitions. However, she cautioned that functional judgments may also be arbitrary and that, in practice, most children who are clinically referred or recruited for research are identified via both statistical and functional judgements.

2.2.3.5 Interpretation of the diagnostic criteria

We have seen that the ICD-10, DSM-IV and Tallal and Stark taxonomies differ in detail, but not in essence. In general, non-verbal ability in the average range is an assumption for a clinical diagnosis of SLI (Eisenmajer, Ross & Pratt, 2005). However, researchers' interpretation of the average range varies somewhat. Statistically, the average range encompasses scores up to one standard deviation from a mean of 100, i.e. scores falling between 85 and 115. In fact, there is little consensus on the lowest permitted non-verbal score in

studies of SLI (Wadman et al., 2011a). Many researchers use non-verbal cut-offs of around 80 (e.g. Durkin & Conti-Ramsden, 2007; Botting & Conti-Ramsden, 2008; Redmond, 2011), or, less frequently, as low as 70 (e.g. Clegg et al., 2005). Leonard (2009), quoting the cut-off of 85 used by Tomblin and Zhang (1999), argued that the cut-off is unhelpful, since children in that study who were just below the 85 cut-off presented very similar linguistic profiles to those above. Alas, this is in the nature of cut-offs and does not necessarily justify dispensing with them altogether. What it does strongly suggest is the need to avoid *over*-reliance on cut-offs and to examine individual verbal and non-verbal profiles qualitatively alongside the non-verbal scores.

2.2.3.6 *Usefulness of SLI sub-type categories*

Since SLI is heterogeneous in severity and type, some form of categorisation is important. As noted earlier, language can be categorised by domain (content, form or use) and by channel (receptive or expressive). Channel is relatively straightforward for typical language development, but less so for describing SLI. Recent evidence suggests that expressive-only SLI may be more apparent than real (Leonard, 2009), since a closer analysis of children's language profiles frequently reveals additional weaknesses in language knowledge or processing. Thus, despite the ICD-10's separate diagnostic category for expressive language, it may be prudent to refer to this SLI sub-type as *predominantly* expressive, not as expressive-only.

A number of attempts have been made to establish SLI sub-types. Two of the most widely known are outlined by Hulme and Snowling (2009). These are the taxonomies developed respectively by Rapin and Allen (1987) and by Conti-Ramsden, Crutchley and Botting (1997). Stated economically, Rapin and Allen's taxonomy, based on their earlier proposals (1983), emphasises discrete domains, although their descriptors also indicate whether comprehension, expression or both are affected. Conti-Ramsden et al.'s taxonomy categorises SLI under five cluster profiles, which highlight co-existing areas of weakness and the affected channel. Of these profiles, the most pervasive was also deemed by Conti-Ramsden et al. to be the most common. Children with this

sub-type profile present severe receptive and expressive SLI, performing poorly over a range of language tests.

Both of the taxonomies have value, because they acknowledge the heterogeneity of SLI and describe some of its important features. However, their application across childhood and beyond is curtailed by the difficulty in establishing the *stability* of sub-type (Law, Tomblin & Xuyang et al., 2008). In other words, the sub-type of SLI in an individual is likely to change over time (Leonard, 2009), even if marked language difficulties of some kind remain.

Dissatisfaction with previous attempts to establish SLI sub-types has led to new conceptualisations based on children's receptive language trajectories rather than on discrete sub-types (Law et al, 2008). These track the rate of progress within a domain, rather than establishing a fixed sub-type. They are emergent, but may prove to be a fruitful way forward, since they focus on patterns of change over time. In sum, the two taxonomies referred to above are probably useful for clinical purposes and for empirical researchers carrying out cross-sectional studies. However, they may create difficulties for those carrying out extended longitudinal studies with participants of homogeneous SLI sub-type, since the sub-type could change in some cases. Overall, the taxonomies help to organise a complex and heterogeneous impairment into clearer categories, but they need to be applied with some caution.

2.2.4 Theories of SLI: influences and underlying mechanisms

2.2.4.1 Structure of the sub-section

The fundamental nature of SLI can be conceptualised in several ways, none of which are entirely satisfactory (Bishop, 1997). However, an attempt must be made, in order to place this study within recognised frameworks. For convenience, I will therefore outline each conceptual area in turn, under separate headings. Using this structure, SLI is first discussed with brief reference to the genetic and neurobiological literature. Next, some environmental findings are examined. Lastly, the literature on the main theories of underlying mechanisms is reviewed.

Inevitably, these groupings are arbitrary. To illustrate, there is overlap between neurobiology and cognitive processes. However, the use of succinct and discrete sub-sections aids readability and permits a clearer summarisation of the literature on the main theories. The aim of the present section is not to provide an in-depth review of current thinking about the nature of SLI (Norbury, Tomblin & Bishop, 2008 and Hulme & Snowling, 2009 have undertaken substantial work of this kind). Rather, the aims are to demonstrate the difficulties in conceptualising the nature of SLI by *whatever* means and to reflect on how these difficulties may affect the conduct of empirical research in the field.

2.2.4.2 The role of genetics

There is robust evidence of a genetic influence upon SLI, although this may be truer for speech disorders than for language impairment (Hulme & Snowling, 2009, citing Bishop & Hayiou-Thomas, 2008). Of the language channels, receptive SLI is thought to be less heritable than expressive (Law et al., 2009, citing Kovas et al., 2005). Stromswold (1998) noted that between 20% and 40% of a sample with SLI had a co-family member with SLI, whilst Bishop (1997) reported an unsurprisingly higher concordance for SLI in monozygotic than in dizygotic twins. Molecular genetic studies have identified four potential chromosomal regions for SLI risk (see Hulme & Snowling, 2009, for discussion). In common with other developmental disorders, males with SLI greatly outnumber females (Lindsay & Dockrell, 2004), although Hulme and Snowling (2009), citing Tomblin et al.(1997), suggested that the gender margin is narrower than is commonly thought.

2.2.4.3 The role of neurobiology

Neurobiological science, which focuses on brain structure rather than on heritability, is an emergent contributor to the SLI literature. Notably, Hulme and Snowling (2009) described Ullman and Pierpont's 'procedural deficit hypothesis' (2005). This neurobiological theory proposes that many of those with SLI have abnormal structures within the frontal cortex and basal ganglia and that these affect procedural (but not other) aspects of memory. This in turn impedes the acquisition of syntax, which is a procedural learning task. I will

describe this more fully below. As noted by Hulme and Snowling, the hypothesis is inviting, since it appears to integrate the rival theories of SLI (linguistic and cognitive), which are also described below. However, the theory is probably more relevant to syntactic than to lexical impairments, which are thought to be governed by other brain structures (Ullman & Pierpont, 2005). Longer term, neurobiology should extend our knowledge of the structural properties of SLI. However, it cannot be assumed that it will offer early insights into effective language and social interventions for children with SLI.

2.2.4.4 The role of the environment

SLI has direct links with genetics and neurobiology. Direct links with the environment are not evident in the same way. Nonetheless, I am including the role of the environment here, because Law et al. (2009) point to associations which are highly complex. Law et al. did not claim any direct causal relationship between socio-economic disadvantage and SLI, but they suggested that some adverse socio-economic features, sometimes interacting with biological ones, are in fact associated with both SLI and non-specific language impairment (N-SLI), as well as with literacy, mental health and employment outcomes in adulthood for both groups. For example, those with a history of SLI or N-SLI were more likely than typical comparisons to have been raised in overcrowded housing, been small for gestational age and to have had a mother who smoked in pregnancy and left education early.

This raises interesting questions about the way that environmental conditions may interact with heredity and/or biology to affect a range of *outcomes* for those with SLI. Law et al. reported that the SLI participants were three times as likely as those with a typical language history to have had a parent with poor literacy or one who had required speech and language intervention. These parents' language history was not further specified. However, some may have experienced persistent and pervasive SLI which reduced their own educational and employment opportunities and, by extension, those of their children. The outcomes of the study seem to suggest that potentially, the life chances for children with SLI could be challenged in three ways: by having a parent with unresolved SLI as their main language model in the early years, by suffering the

socio-economic legacy of their parent's SLI and, at worst, by experiencing biological risks from maternal smoking, whilst in utero.

Scenarios of this kind make it difficult to uncouple heredity from bioenvironmental associations with SLI. In sum, the evidence is that, unlike genetic and neurobiological factors, environmental and bioenvironmental ones do not directly underpin SLI. However, they appear to exert considerable influence on a range of adult outcomes for those who have experienced SLI in childhood.

2.2.4.5 Linguistic theories of SLI

Theoretical accounts of the underlying mechanisms in SLI have fallen into two main camps, the linguistic and the cognitive (for overviews, see Bishop, 1997; Hulme & Snowling, 2009). The linguistic account is rooted in Chomsky's influential work (1957) on generative grammar. According to Chomsky's theory, young children have an innate modularity for acquiring the rules of language. Children with receptive SLI are therefore considered to have impairments in the modular system, notably in the dependent relationships between the various grammatical components. These impairments impede the acquisition of grammar itself, but also the ability to learn individual word meanings via the linguistic signposts known as syntactic bootstrapping (Fisher, Gertner, Scott & Yuan, 2010). Bootstrapping works by allowing the language learner to use their knowledge of syntax to deduce the probable meaning of an unfamiliar word that is contextualised within the syntactic unit. However, if the learner's syntactic knowledge is weak, the unit cannot be used in this way. This might help to explain why children with SLI appear to rely more heavily than typical language learners on semantic associations between individual words in order to extract word meanings (Pizzioli & Schelstraete, 2011).

In SLI, diverse components of the modular system may be affected, including verbs (van der Lely, 1994) and pronomic forms (van der Lely & Stollwerck, 1997). Chomsky continued to hold the view that language is acquired independently of other skills, stating: 'There is reason to believe that humans have a specialized "organ" dedicated to the use and interpretation of language, call it "the faculty of language" (FL)'. (2000, p.168)

2.2.4.6 *Cognitive theories of SLI*

Chomsky's theory eased the path towards the conceptualisation of SLI as a pure language impairment, because it suggested a dissociation in learning between the verbal and non-verbal domains. However, there are now compelling arguments that difficulties in various non-verbal aspects of cognition underpin the linguistic difficulties of children with SLI. Broadly speaking, the arguments point to limitations in the following areas: phonological perception and memory (Briscoe & Rankin, 2009); verbal working memory (Lum & Bleses, 2012); verbal short-term and working memory (Archibald & Gathercole, 2006b); less specified short-term auditory memory (van Daal, Verhoeven & van Balkom, 2009); the perception of auditory salience (Bishop, 1997, citing Leonard, 1989); overall processing capacity (Bishop, 1997); executive functioning (Hughes, Turkstra & Wulfeck, 2009; Henry, Messer & Nash, 2012); verbal and non-verbal auditory processing (Weber-Fox, Leonard, Hampton Wray and Tomblin, 2010) and speed of auditory and visual processing (Oram Cardy, Tannock, Johnson & Johnson, 2010). In short, some researchers have focused on fairly specific cognitive areas, whilst others have suggested that clusters of difficulty, or one overarching one, may account for the linguistic difficulties of SLI.

Let us turn to memory first, since it has attracted much attention amongst researchers. A brief definition serves to distinguish between the memory sub-types, whilst noting potential overlaps between them. Lum and Bleses (2012) provided a useful summary. Cited succinctly, declarative memory governs the learning and storage of general knowledge; procedural memory underpins the learning and storage of sequential structures; working memory supports the manipulation of information held in temporary storage. However, Lum and Bleses claimed that since declarative and working memory are linked, there is a possible confound when studying these memory systems discretely. Finally, a distinction must be made between short-term and working memory. Both involve the temporary storage of information, but short-term memory involves little processing, whereas working memory involves the processing and active use of the stored information (Archibald & Gathercole, 2006b).

Lum, Gelgic and Conti-Ramsden (2010) observed that most SLI research on memory has focused on working memory (e.g. Archibald & Gathercole, 2006b). However, Lum et al.'s own study of 7-8 year olds with SLI produced evidence of more pervasive weaknesses, including verbal declarative memory (implicated in vocabulary learning) and procedural memory (implicated, as noted above, in syntactic learning). Declarative memory involves the ability to make links between verbal or non-verbal representations. Procedural memory facilitates the retrieval of familiar sequences without conscious awareness. Interestingly, Lum et al. found that *visual* procedural memory in the participants with SLI was also reduced. Their study was small, but as they noted, the findings highlight the need for further research on the relationship between memory sub-systems in children with SLI.

More research in areas that have produced unexpected findings would also be valuable. For instance, Lum and Bleses (2010) reported counterintuitive results in their small Danish study. Their participants with SLI had greater syntactic than lexical impairment, yet their procedural memory, which is the very area thought to be implicated in the acquisition of syntax, was comparable to that of typical language learners. In sum, the literature suggests that memory systems, both singly or in synergy, are often implicated in SLI, but that our insight into how they impact on language acquisition remains incomplete.

Next, we turn to less specific cognitive areas. Of relevance here is the research of Hughes et al. (2009), which identified executive functioning as an area worth exploring further in adolescents with SLI. Executive functioning was described in this small study as a set of higher cognitive functions thought to coordinate lower order functions including memory and attention. Executive functioning, which is implicated in the self-regulation and strategic use of language, was found to be reduced in these adolescents. Henry et al. (2012) also found weak executive functioning in 8-14 year olds with SLI, compared with a typical comparison group, but the performance of the former was similar to that of children with non-specific language delay. The researchers concluded that: 'Such findings call into question the "specific" nature of SLI as a disorder and are consistent with multiple deficit models ...' (p. 43)

Weber-Fox et al. (2010) provide another interesting example of research on less specific cognitive areas. Their small study compared 14-18 year olds with and without SLI. The participants with SLI were significantly poorer on the auditory processing of both non-linguistic stimuli and morpho-syntactic violations and their performance was particularly affected by speed. The study included only 15 participants in each group. Nonetheless, it adds to the evidence that SLI may involve a range of cognitive difficulties and that these might, to some extent, have a differential impact on the individual parts of the language system (Hulme & Snowling, 2009, citing Bishop, 2006).

Lastly, cognitive theories of SLI have extended their influence beyond language functioning itself to socio-emotional difficulties and these are particularly relevant to the present study. Bishop (1997) described three models by which these social difficulties can be conceptualised. According to her Model A, social difficulties in SLI do not stem from an innate social impairment, but reflect cognitive limitations in working memory and overall processing capacity. Model B is more directly linear, with poor language skills leading to social rejection by peers. This in turn leads to limited interactive opportunities, culminating in immature social cognition. In Model C, social rejection by peers and poor communication skills are secondary to immature social cognition. This third model is distinctive, insofar as it views social cognition as a core impairment of SLI, rather than one that emanates from the language impairment itself or from the processing difficulties that underpin it.

These models have contributed to the shift in thinking about the nature of SLI. The conceptualisation of SLI as a pure language impairment has steadily given way to recognition of the cognitive and social difficulties that often accompany it. Indeed, by adolescence, problems with social relationships and emotional health may be more defining of SLI than language difficulties (Conti-Ramsden, 2009), although the relationship between them seems to be both strong and highly intricate.

2.2.4.7 Integrative theories of SLI

I referred above to the linguistic and cognitive accounts of SLI as rivals and to the procedural deficit hypothesis (Ullman & Pierpont, 2005) as a potential

neurobiological bridge between them. There have been other attempts to develop integrative theories. Of these, the best known are probably the 'surface hypothesis' (Hulme & Snowling, 2009, citing Leonard, 1989) and the 'connectionist hypothesis' (Hulme & Snowling, citing Joanisse & Seidenberg, 1998). The former posits that the detection of morphemes with weak phonological salience (the English tense markers –s and –ed are examples) is compromised by overall processing difficulties such as speed or perceptual finesse. The latter attributes syntactic impairment in SLI to underlying problems of phonological encoding, these in turn being secondary to auditory perceptual weaknesses. A detailed analysis of these two hypotheses is beyond the scope of this study, but given the heterogeneity and complexity of SLI (van der Lely, 1994; Archibald & Gathercole, 2006b), integrative theories of this kind are attractive. Nonetheless, the mechanisms of integration need to be more highly specified. Just as genetic and environmental factors may affect children with SLI in non-uniform ways, the linguistic and cognitive mechanisms underpinning SLI profiles may also be quite distinct, even in children with superficially very similar language profiles.

2.2.4.8 Cognitive comparisons with other SEN groups

Finally, it is important to question whether the cognitive areas thought to underpin SLI are in fact specific to SLI. The literature provides compelling evidence that SLI cannot be explained by linguistic theory alone and that imperfectly understood patterns of cognitive impairment are implicated. However, there appears to be scope for comparing these patterns across a wider range of SEN groups with and without language difficulties. In other words, acceptance of cognitive theories of SLI should not lead to assumptions that the cognitive profiles they describe are singular in children with SLI.

This is a far-reaching topic which cannot be fully covered here. However, a few studies are noteworthy. I referred above to Henry et al. (2012), who found that executive functioning was similarly poor in children with SLI and those with non-specific language delay. This highlights one important cognitive domain that may be associated with impaired language, irrespective of the specificity of the language impairment itself. Nevertheless, it does not tell us about its role in

other forms of SEN, such as mild or specific learning difficulties, that do not invariably include spoken language delay.

When comparing the cognitive profiles of SLI with those of other diagnostic categories, the confound of co-existing difficulties must first be considered. Oram Cardy et al. (2010) addressed this in relation to attention-deficit/hyperactivity disorder (ADHD), which, as they stated, often co-exists with language difficulties. They compared three groups: SLI without ADHD, ADHD without SLI, and typically developing (TD) comparisons across one timed auditory processing task and two timed visual processing tasks. The two SEN groups performed similarly on the auditory task and more slowly than the TD comparisons. However, on a visual test involving speed of reaction, the ADHD group performed worse than both the SLI and the TD groups. The researchers concluded that slow processing was not specific to language impairment, since the ADHD group did not have language difficulties. Nevertheless, they speculated that the slowing *mechanism* may be discrete. For example, in SLI there might be fundamentally slowed internal processing, whereas in ADHD, inconsistent attention control could be implicated. This is an important distinction, since it suggests that performance on cognitive tests may be similar between SLI and, in this case, ADHD, but that similarities in the underlying cognitive mechanisms cannot be assumed.

Comparison between the cognitive profile of SLI and that of specific learning difficulties (SpLD) is particularly interesting, because both are specific developmental disorders that affect parts of the language system. Indeed, it has been suggested that the dyslexia variant of SpLD constitutes a mild form of SLI. Bishop and Snowling (2004) refuted this position (held by Kamhi & Catts, 1986) on the grounds that it makes assumptions about shared core deficits, specifically phonological, and overlooks the importance of semantic and syntactic deficits in SLI. It is probably safer to say that there is overlap between individuals with SLI and SpLD, but that the two are separate entities. Eisenmajer et al. (2005) illustrated this by distinguishing between SLI with and without reading difficulties and SpLD (termed 'specific reading disabilities'; SRD in this Australian study) with and without oral language difficulties). They

supported the recognition of a separate diagnostic category for those with difficulties in both areas.

Comparison of the SLI cognitive profile with that of mild general learning difficulties also poses challenges. For instance, children diagnosed with SLI but with lower non-verbal abilities may appear to merge with those who have learning difficulties. Given this issue and the complexities of comparing group findings across discrete studies, it makes sense to refer to research that involves all three SEN groups: SLI, SpLD and general learning difficulties.

Eisenmajer et al. provide a valuable example of this. In addition to their SLI, SRD, combined oral language and reading difficulty (LIRD) and typically developing groups, they included a group with general learning difficulties (GD), whose non-verbal scores were below 80. The participants, aged 7-12 years, were compared on overall non-verbal scores, short-term auditory memory and phonological processing.

Eisenmajer et al. found that the SLI group did not show a phonological processing impairment, whereas the LIRD and GD groups both performed more poorly in this area. The findings for the SRD group were inconclusive. Findings for auditory memory showed that all the SEN groups, including the SLI group, scored below average and below typical comparisons. However, the LIRD and GD groups again performed more weakly than the SLI group. Interestingly, there were no differences on the phonological or memory measures between the LIRD and GD groups, based on their non-verbal scores. The results suggested that in these two areas, children whose SLI co-exists with reading difficulties may show a similar cognitive profile to those with general learning difficulties. In contrast, those who have SLI without reading difficulties do present auditory memory difficulties, but these are less severe than in children with general learning difficulties and their phonological processing may be intact.

The findings of Eisenmajer et al. differ in some respects from those of Everatt, Weeks and Brooks (2008), who also made explicit comparisons of phonological processing and auditory memory between several groups. These included participants with dyslexia, 'specific language difficulties' (SLD) and moderate

learning difficulties (MLD). I am citing the terms that these researchers used, but they are compatible with those used by Eisenmajer et al. for the equivalent categories. Everatt et al. found that all three groups had difficulties with short-term auditory memory, the differences being a matter of degree only. Unlike Eisenmajer et al., they found that on additional phonological processing measures, all three groups were weak. In other words, their SLD group were not phonologically spared. They confirmed that their findings for phonology were consistent with the literature (e.g. Ellis et al., 1996, for MLD; Briscoe, Bishop & Norbury, 2001, for SLI). The apparent discrepancy between their findings and those of Eisenmajer et al. might be attributed to the heterogeneity of their participants, both in SLI sub-type and in the presence or absence of marked literacy difficulties. To illustrate, it was unclear whether Everatt et al.'s SLD participants more closely resembled Eisenmajer et al.'s SLI group or their LIRD group. Again, this highlights the difficulty of making direct comparison between studies.

Summing up, the literature suggests that some cognitive impairments associated with SLI are evident in other categories of learning difficulty as well. General and specific learning difficulties provide useful comparisons, since they are separate entities from SLI, but have some similarities. However, the evidence on shared cognitive weaknesses is inconsistent and some apparently shared features, e.g. weak auditory memory, may not in fact be the most influential features within SLI. At the present state of knowledge, it may be hypothesised that patterns of cognitive weakness in SLI are heterogeneous, reflecting the disorder itself. If this is the case, some SLI profiles would be expected to resemble those of other SEN groups such as general or specific learning difficulties, whereas others would not.

2.2.5 Conclusions on using SLI definitions and diagnostic criteria

The literature suggests that SLI is far from straightforward and presents considerable challenges to definition and diagnosis. So the following questions are inescapable. In the light of recent evidence, is the very term SLI meaningful? Does the evidence not point to weaknesses in cognitive domains such as processing or memory that challenge the very notion of specificity and

which may also be present in other SEN types? And if the non-verbal scores of children with SLI sometimes decline, does the use of non-verbal cut-offs have any real value in the diagnosis of children with SLI?

I uphold that the answer to these questions is both yes and no. Certainly, non-verbal scores which are not recent need to be used cautiously in some circumstances, since they will not reflect a child's current non-verbal abilities if cognition has declined. Yet, there are clearly children for whom language development is disproportionately difficult, but who exhibit average non-verbal ability in some areas, despite having weaknesses in cognitive domains such as processing or memory. In some of these children, an uneven cognitive profile means that the verbal/non-verbal discrepancy based on single non-verbal scores is not great, but they nonetheless show all the linguistic characteristics of SLI (Bishop, 1997). Despite some cognitive similarities with other SEN groups, children with SLI are likely to present distinctive features within the *language* profile.

In terms of identifying these distinctive features, linguistic theories offer more than their cognitive counterparts. They have identified receptive grammatical features that challenge children with SLI far more than younger typical children, even though the latter are cognitively less mature (van der Lely, 1994; van der Lely & Stollwerck, 1997). This strongly supports the view that language learning in those with SLI is qualitatively different from that of typical learners and does not follow a 'delayed but normal' pattern of development. Of course, comparisons with typical learners do not necessarily mirror comparisons with children who have non-specific language delay, with or without general learning difficulties. However, anecdotally at least, speech and language therapists rely on atypical language features, often termed 'clinical presentation', to identify SLI in children, especially when non-verbal scores are unavailable or the verbal/non-verbal discrepancy is not large. These features include difficulties with word retrieval, non-word repetition or with morphological markers (Bishop, 2004). Of these, Bishop suggested that morphological difficulties are the least likely to be attributable to problems other than SLI.

Further research might reveal more about the linguistic singularities of SLI. Fine-grained error analysis of language profiles in children with SLI and those with non-specific language delay would be helpful. If singularities are many, the matching by language scores of specific and non-specific language groups for other comparative purposes will need particular care, because similar overall language scores may in fact conceal important qualitative differences.

Summing up, I maintain that SLI remains a meaningful concept, although the term itself is somewhat misleading and may require up-dating. The use of non-verbal cut-offs for diagnostic purposes is potentially a crude tool. Characteristics within the language profile may be more diagnostically informative than either exact non-verbal cut-offs or the exact degree of discrepancy between a child's verbal and non-verbal scores. However, the discrepancy model has some diagnostic value if it is applied judiciously.

2.2.6 Interim summary

This sub-section has focused on the nature of SLI. It has covered historical background, definitions, diagnosis, SLI sub-types and aetiology. It has also reviewed the most influential theories of SLI. Integrative accounts, which draw on both linguistic and cognitive theories, have been included. These are promising, since they may lead to more sophisticated models of SLI in the future. The section has highlighted the complexities of SLI and the challenges that these pose for clinicians and researchers. At present, definitive accounts of SLI remain elusive, although categorisation models have helped to demarcate some important sub-types. Meanwhile, there is robust evidence that SLI is not purely a language impairment, but one in which cognitive and social difficulties often co-exist. The precise nature of these difficulties in different SLI sub-types and the way they compare with those of other SEN groups require on-going investigation.

Finally, theoretical accounts of SLI focus on within-person characteristics. They describe a complex set of psycholinguistic and psychosocial difficulties and thereby constitute deficit models. The theories have added greatly to our knowledge of SLI. Yet, the understanding and use of language are overwhelmingly social phenomena which cannot be divorced from the systems

within which they occur. When studying the social implications of SLI, it is pertinent to take socioenvironmental factors into account, as well as features within the impairment itself.

2.3 Social well-being

2.3.1 Introduction

This substantial section reviews the research findings on what I have termed social well-being. The review focuses on social position, social anxiety and the links between them. Within each sub-section, the literature is reviewed separately for general populations, a range of SEN types and SLI. Both similarities and differences might be expected. Separation into sections is for ease of management, but it inevitably creates some artificial boundaries. For example, general population studies of children and adolescents may include cases with SEN. Where research specifically compares SLI with another SEN group, I have included the findings within the relevant SLI sub-section. At the end of the section, an overall summary draws the findings together, states the gaps in the research and makes links with the present study.

2.3.2 Conceptual models of social position

In Chapter 1, I specified my use of the term social position to encompass the constructs of peer social acceptance, social participation and friendship. These are based on the model of Cullinan, Sabornie and Crossland (1992). Cullinan et al. used three indexes for what they termed 'social inclusion': acceptance for group membership, having at least one reciprocal friendship and participating within an in-class network.

For this study, I have favoured the term social position over social inclusion, since inclusion now has broader societal and political connotations. By way of illustration, Meyer (2001) emphasised that inclusion is not an empirical question, but: '... a question of values regarding what we want for our children, their families, and our schools.' (p.14). Kelly and Norwich (2004) observed that inclusion is a central international policy issue. In contrast, social position, as I

have defined it, refers to the social actualities that children experience. It is therefore more useful in a study of this kind.

Despite the wider connotations of inclusion, the term '*social* inclusion' is often used empirically in relation to children with SEN in mainstream schools. It is not the only one. Indeed, there has been a profligate use of terms. This is unsurprising, given that studies have been conducted in a range of languages and national contexts. Koster, Nakken, Pijl and van Houten's systematic review of studies (2009) is therefore of considerable value in clarifying the concepts used and in proposing a common one – social participation. However, they concluded that the terms used in the 62 studies: social integration, social inclusion and social participation, actually reflected the same constructs and embraced the same key themes of friendship/relationships, interaction/contacts, perception of pupils with SEN and peer acceptance.

Notwithstanding the clarity of Koster et al.'s review, I am not using the term social participation in the way that they advocate, i.e. as an umbrella term for the key social themes. For this study, I am employing Cullinan et al.'s conceptualisation of social participation as just one aspect of social engagement. As stated above, I am extending their term to include engagement out of school.

Cullinan et al.'s model rests on the premise that their three social constructs are importantly related. This premise is not universally accepted. Gest, Graham-Bermann and Hartup (2001) used the umbrella term that I have adopted: social position, but used different terms for two individual constructs. These were: social network centrality and sociometric status. Broadly speaking, social network centrality equates to Cullinan et al.'s social participation and sociometric status to social acceptance, although full conceptual parity should not be assumed. Gest et al. acknowledged both commonalities and unique features amongst the three constructs that they used, but argued: 'Several studies suggest there are limited associations among the three dimensions of social position.' (p. 24). The findings of their own study of 7-8 year olds in the USA confirmed their view that the constructs are conceptually distinct. An example of the evidence they gave, based on participants' social status, was

that 30% of children who were rated as 'rejected' had at least one reciprocal friendship, whilst 31% of 'popular' children did not.

Gest et al. highlighted important distinctions between the constructs, not least in terms of their behavioural correlates. Nonetheless, the commonalities amongst the constructs may be as important as the differences. Howe (2010) suggested that despite the traditional research schism between the constructs, it is inadvisable to view 'status' (her term) and friendship in isolation from each other, because they share the attitudinal dimension of liking/disliking. She noted that liking is distinct from other positive attitudes such as admiration, which may be felt towards those in a leadership role. Not all researchers accept that social status always shares the dimension of liking/disliking and this emerges below. However, it is reasonable to assume that liking has at least some importance for being accepted socially as well as for having friends. For this reason too, Cullinan et al.'s model is accepted for the present study.

2.3.3 Terminology within social position

The previous sub-section drew attention to the diverse umbrella terms used on this topic. However, the separate constructs within social position are also labelled in different ways. Social participation, as defined for the present study, is relatively straightforward. In comparison, social acceptance is problematic, since alternatives such as 'status' and 'popularity' are frequently used and the boundaries are not always clear.

Popularity is arguably the most common alternative term and 'popular' is one of the rating categories used by Gest et al., citing the procedures of Coie, Dodge and Coppotelli (1982). The term 'popular' suffers from over-use and under-specification. It is familiar to the average layperson, and is applied liberally to items and destinations, as well as to people. Thus, it has acquired quite a loose set of meanings, best summed up perhaps as 'liked by many', or 'preferred over others'. Yet, this is simplistic when applied to attitudes towards people, since the same individual could be preferred by peers for certain activities, but dispreferred for others. For instance, an individual might be in great demand as a football player (because their skills enhance the team's performance), but not at parties (because their taciturnity and aversion to loud music are socially off-

putting). Being 'preferred over others and by many' in this sense is quite situation-specific and is rather an unsatisfactory way of defining popularity.

Unfortunately, there is no clear-cut definition of the term and no absolute distinction between popularity and social acceptance, either. Tentatively, it might be suggested that social acceptance spans a continuum from a benign but relatively neutral dimension through to much warmer attitudes, whereas popularity is invariably associated with stronger feelings of liking and/or admiration. Yet, there can be no assumption that other researchers define and demarcate the terms in this way. The same applies to comparisons with status. When reviewing studies in detail, I will therefore adhere to the rule that I used in relation to SLI: I will cite the term used by the authors. In more general discussion and reference, I will use the term social acceptance. Lastly, where researchers are clearly referring to more than one construct simultaneously, I will use my own term, social position, as a consistent shorthand.

2.3.4 Social position and general populations

It is well-documented that as children enter adolescence, social acceptance by their peer group becomes increasingly important (de Bruyn & Cillessen, 2006; Tatar, 1995; Tomblin, 2008). This seems to be fairly universal, at least in societies which conceptualise adolescence as a developmental stage that is distinct from childhood and adulthood. Tatar's study, which was conducted in Jerusalem, sought the views of parents on the factors thought to underpin popularity in their typically developing teenage children. Of these, 50% cited open, friendly behaviour towards classmates as key, along with a strong personality, although this was not defined. High grades were also valued. Being athletic, a rebel, or knowledgeable about adolescent media culture came well below friendly behaviour and were listed by 6% or less of the sample.

Tatar's study is interesting because it conceptualises adolescence as a progressive rather than as a unitary state. As adolescence progresses, social values gradually change. For example, the parents of the older adolescents rated personality as even more important, irrespective of family background or the gender of the young person. The evidence showed that to some extent the parents did link popularity with 'admired' characteristics such as achievement or

appearance. Nonetheless, they increasingly emphasised the importance of 'liked' characteristics, especially personality.

This apparently contrasts with de Bruyn and Cillessen's study (2006) of perceived popularity among Dutch 13-14 year olds. These researchers identified two types of popular student, i.e. the 'populistic' and the 'pro-social-popular'. Individuals of the former type were described as anti-social, academically disengaged and influential, but not always as well liked. The pro-social-popular were considered helpful, affiliative and academically focused, the very qualities listed by the parents in Tatar's study. It should be noted that de Bruyn and Cillessen's data were obtained directly from the adolescents, not from their parents, and the young people's willingness to accord high social status to peers based on admiration and awe rather than on liking may have reflected their early age *within* adolescence. A longitudinal study would be valuable to measure attitudinal changes from late childhood into early adolescence and beyond.

Further comparisons of the popularity of pro-social and anti-social young adolescents were reported by Sentse, Scholte, Salmivalli and Voeten (2007). Their Dutch participants were also aged 13-14. For the pro-social popular youths, data yielded findings that were highly convergent with each of those cited above. Friendliness, co-operation and helpfulness predicted popularity. Conversely, anti-social, aggressive behaviour did not automatically lead to rejection. Furthermore, some adolescents with these characteristics were actively liked.

The apparent divergence from de Bruyn and Cillessen's findings in terms of liking can be explained by Sentse et al.'s psychological model of person-group dissimilarity. Citing Singh and Ho (2000), Sentse et al. postulated that whilst pro-social behaviour was widely accepted, the acceptance or rejection of anti-social behaviour was dependent on the norms of the group, rather than on the behaviour itself. Adolescents who bullied were therefore more likely to be rejected in classrooms where bullying was non-normative. In other words, young people could gain popularity for either positive or normative behaviour, but experience rejection for non-normative anti-social behaviour. Interestingly,

the rejection of individuals also appears more likely when anti-social behaviour (at least in the form of aggression) coexists with social withdrawal (Howe, 2010).

If the dissimilarity model is accepted, there are implications for teachers in terms of the classroom culture they create, since: '... social preference cannot be treated as an invariant individual characteristic.' (Sentse et al., p.1016). It would be rare to encounter a teacher who condoned anti-social behaviour, but teachers who are highly explicit about class behavioural norms may exert greater influence on pupils' attitudes towards peers who violate the norms than teachers whose expectations are more implicit. It should be noted that Sentse et al.'s peer preference questionnaire was specific to bullying and victimisation. The findings are valuable, but they do not relate to the social rejection of young people who are not anti-social. Just as the anti-social are not always unaccepted, the unaccepted are not always anti-social. This is explored further below.

So far, the literature has shown that social acceptance can be attitudinally ambivalent, since a high sociometric rating does not always equate with liking. As noted above, Howe's view is not entirely compatible with these findings. In fact, social acceptance may be rather compartmentalised. In classrooms where diversity is valued by teachers, pupils are encouraged to work alongside a range of pupils. Interestingly, this sometimes leads teachers to overestimate the social acceptance of certain pupils, particularly those with SEN (Pijl, Frostad & Flem, 2008). Co-working is certainly an important aspect of peer social engagement, but it does not guarantee liking - or even tolerance - outside the classroom. Likewise, non-acceptance does not necessarily constitute outright rejection. It can manifest as a form of indifference, equivalent to social neglect. Howe (2010), citing Coie et al.(1982), noted that the five ratings generally accepted for status categorisation include 'neglected', along with 'popular', 'rejected', 'controversial' and 'average'.

Friendship is distinct from social acceptance in its reciprocity (Greco & Morris, 2005). The nature of friendship changes over the school years and this change is likely to have implications around the time of secondary transition, a threshold

period between late childhood and early adolescence. It has been noted (Durkin & Conti-Ramsden, 2007; Pijl et al., 2008) that in the early school years, friendship is based on sharing daily activities, whilst in middle and late childhood, common interests and values predominate. In adolescence, friendship becomes more centred on sharing information and exploring feelings or problems, particularly for females (La Greca & Lopez, 1998), whose friendships are also more likely to be dyadic than those of males (Howe, 2010).

Friendship can be qualified in many ways, e.g. by its intensity, durability, function and quality. Of these, quality and function were examined by Boulton et al. (1999), whose focus on transition into secondary education has particular relevance to this study. Boulton et al.'s study of typically developing children used both peer and self-report to test the 'friendship protection hypothesis'. According to this hypothesis, friendship provides a shield against peer victimisation. The study provides a valuable insight into this subject, since it looked not just at the presence or absence of friendship, but at some key characteristics of friendship, such as freedom from betrayal and conflict. The hypothesis was upheld in Boulton et al.'s study, at least for protection against verbal victimisation. These researchers, who collected data before and after secondary transition, speculated that having a best friend by this age - even if the friendship did not last - may have an inoculatory effect against victimisation, possibly via a labelling process that influences peer attitudes towards the individual.

For the present study, the key issue is not protection from victimisation per se, important though that is, but Boulton et al.'s suggestion that labels can be self-fulfilling, i.e. that an individual's social acceptance may be determined by whether they are perceived by the peer group as being befriended or friendless. If this is the case, at least one strong friendship is crucial as a shield against the common ills of this age group, such as low self-esteem, loneliness and general worry (Boulton et al., 1999).

The social benefits of friendship appear to be greatest if friends are themselves well-adjusted, as this helps to build social resilience (Hartup & Abecassis, 2002). More recently, Ojanen, Sijtsema, Hawley and Little (2010) noted that

friendships that are intrinsically motivated (i.e. by the rewards of the relationship itself rather than by a desire to please people who approve of it) are more likely to be socially protective. The participants in Ojanen et al.'s study were young US adolescents who were experiencing school transition.

In sum, friendship is distinguishable from social acceptance by its reciprocity, but it may in some cases be a prerequisite for gaining adequate social acceptance by the wider peer group. However, a degree of circularity exists here. Children who are marginalised from a group may have difficulty in finding a peer with whom they can cultivate friendship in the first place. This in turn could result in a label of friendlessness and is likely to reduce further their social attractiveness to the peer group (Greco & Morris, 2005).

Overall, it is unclear whether children with and without SEN employ the same mechanisms to form and sustain friendships. Boulton et al. (1999) stressed the importance of loyalty and harmony within friendship, but even close friends can experience periodic conflict. The ability to repair conflict is crucial if friendships are to survive. The skills that are needed to negotiate the path of friendship are of interest here. If such negotiation depends on adequate language and social communication skills, it is likely to prove a challenge for young people with SLI and certain other forms of SEN.

2.3.5 Social position and children with SEN

2.3.5.1 Mild, moderate and severe learning difficulties

SEN and disability encompass a range of needs, including cognitive barriers to learning. Pijl and Frostad (2010) cited evidence from several countries that mainstream children and adolescents with mild, moderate and severe learning difficulties experience problems with social acceptance and friendship and Diamond (2002) noted this even in the preschool years.

Children with mild or moderate learning difficulties (MLD) are the largest SEN sub-group, but research on their social position in mainstream schools outside the USA is relatively limited. Norwich and Kelly (2005) drew attention to Nubuzoka and Smith's large UK study (1993) of 8-10 year olds. These children were less popular and more actively rejected than their peers. The reasons are

potentially revealing. The children's relatively poor social position was attributed to their difficulties in handling inter-personal demands. This is not trivial, since potentially it points to the issue raised above – social communication. By middle childhood, a reasonable level of language competence is required for successful interaction with peers and the language status of the least popular children in Nubuzoka and Smith's study may have been illuminating. Despite revealing a rather unpromising picture of social acceptance in relation to children with MLD, Norwich and Kelly also cited Vaughn et al.'s smaller study (1996), which reported an *increase* in popularity (again in 8-10 year olds). Nevertheless, in Norwich and Kelly's own study (2005), several children with MLD expressed their perceptions of being isolated, unwanted or even bullied by their peers.

Meyer (2001) found that positive peer relationships with pupils who had more severe learning difficulties tended to be based more on helping than on reciprocity. This is in line with the findings of Siperstein, Parker, Norins Bardon and Widaman (2007) for middle school students with intellectual disabilities in the USA.

Further comparative studies are needed of children over a continuum of learning difficulties. These would help to address contradictory findings and to determine whether the severity and/or the aetiology of a learning difficulty influence social position. Guralnick (2002), who noted that much research on intellectual disability has focused on heterogeneous groups, compared peer social participation in 4-6 year old children with Down syndrome with those whose intellectual disability had a different aetiology. Such comparisons are useful, since distinctive social characteristics might be hypothesised. In fact, no group differences were found in the frequency and nature of social contact. However, Guralnick acknowledged that the parents of children with Down syndrome were particularly motivated to seek social opportunities for them and this may have influenced the findings.

Parents' influence on their children's social lives does not disappear during adolescence (Parke, Simpkins, McDowell, Kim, Killian, Dennis et al., 2002). However, it generally declines, especially in relation to peers in school. Cuckle

and Wilson (2002), describing their small qualitative study of 12-18 year olds with Down syndrome in UK mainstream schools, noted that the young people were unable to organise their social lives independently. Furthermore, their parents were no longer able to assist them via daily playground contact with other parents. Most of these young people had a good insight into the meaning of true friendship, but they found it hard to sustain friendships with typically developing peers. They expressed a wish for more friendships and tended to make close relationships with other pupils who had SEN. Few had neighbourhood friends, although some parents were at least able to engineer social contact out of school via organised activities, hobbies or church commitments. Nonetheless, these contacts remained compartmentalised and were dependent upon parental facilitation.

Cuckle and Wilson's research raises several issues that are relevant to the present study. It did not directly compare the social position of these pupils with Down syndrome with that of their peers, but it illustrated how, by secondary school age, both in-child and environmental factors increasingly impacted on the social opportunities available to them. In-child factors included the growing mismatch between their intellectual level and that of typical peers. Environmental factors included a reliance on public transport that the young people could not yet use independently. This reduced their opportunities to see classmates outside school hours. In fact, only three of the very oldest students met their friends independently in town.

Realistically, intellectual disability and its associated communication difficulties may pose insuperable barriers to close friendship with typical peers as these peers mature and become more sophisticated in their interests. Nevertheless, the extent to which children with intellectual disabilities are at least accepted at a more *general* level by peers could be influenced by environmental factors, including school ethos. To illustrate, in a small Norwegian study, Dolva, Gustavsson, Borell and Hemmingsson (2011) found that the ability of teaching assistants to seize socially appropriate opportunities increased the social participation of 10 year olds with Down syndrome. They achieved this by setting up interactions with just one TD peer at a time and withdrawing from the interaction once it was successfully underway. Of course, not all children's

learning environments are so favourable and this may partly explain the slightly inconsistent findings on the social position of children with learning disabilities.

2.3.5.2 *Behaviour difficulties and autism*

There is a fairly strong consensus on the social position of pupils with behavioural difficulties (Farmer & Farmer, 1996) or with autism. Both have been consistently reported as poorly accepted by their peers (Pijl et al., 2008; Frostad & Pijl, 2007). For this reason only, I am reviewing the relevant literature for these groups under a single heading.

Consistently with other researchers, Mand (2007) found that German primary school children with behavioural difficulties were not liked by their classmates. Moreover, their social position was similarly poor in both mainstream and specialist settings. It is unclear whether anti-social conduct or poor social communication is more detrimental to the social position of children with behaviour difficulties or autism. Interestingly, a study of sixteen 8-12 year olds with autism in the USA (Ochs, Kremer-Sadlik, Solomon & Gainer Sirota, 2001) concluded that social acceptance by mainstream peers may be linked to disclosure practices in school. The researchers found that children whose diagnosis of autism was made explicit to peers and staff experienced more peer tolerance and caring, even when their behaviour violated the classroom norms.

Further research on this topic would be worthwhile, because diagnostic disclosure perhaps helps typical peers to understand and accept children whose behaviour would otherwise attract ridicule or censure. In fact, many pupils with behaviour difficulties have no associated developmental disorder such as autism or ADHD. However, they may have learning difficulties, so the task of identifying the influences on their social position is challenging. Moreover, there are findings that diverge from the majority view that such pupils are not well liked. Avramidis (2010) reported that a small sample of 9-11 year old pupils whose SEN included behavioural, social and emotional difficulties *did* enjoy reasonable peer regard within their own social clusters, possibly because they possessed status-enhancing leadership or athletic skills. This is compatible with the findings reviewed above for typically developing but anti-social young

people. It confirms that there are exceptions to the general findings for children with SEN who present behavioural difficulties.

2.3.5.3 Diverse SEN categories and children with overlapping needs

A comparison of social position across different categories of SEN and disability is difficult, since studies frequently include participants from a range of categories (e.g. Cambra & Silvestre, 2003). Moreover, some children have complex needs that do not fit a single category. For example, Diamond (2002) cited Yude and Goodman's findings (1999) on 9-11 year olds with hemiplegia. They reported that these children were less popular than peers, but possibly as a result of having special needs that were additional to those of mobility. Nikolarazi and de Rebekiel (2001) found that older Greek primary children were more positive towards deaf, blind and physically disabled peers than their UK counterparts, but noted conflicting evidence elsewhere for other SEN groups. However, even the Greek children's positivity was relatively superficial, expressed as concern, but not as a willingness to interact. The study suggested a level of tolerance, but nothing more.

Of interest is the association between classroom teachers' attitudes towards SEN and the relationships between their pupils with and without SEN. Ben-Yehuda, Leyser and Last (2010) studied Israeli pupils with SEN and their teachers. They found that peer sociometric ratings of classmates with SEN were significantly higher when their teachers demonstrated inclusive pedagogy, beliefs and daily practice and where their sense of teaching self-efficacy was high.

Ben-Yehuda et al. did not specify the age of these pupils, who were grouped very broadly in terms of their special needs. Nevertheless, the study raises interesting questions for future research. Teachers who are committed to mainstream school placements for children with SEN would usually set a positive example of social acceptance within their classes. They are likely to adapt their teaching and organise seating or SEN support to maximise co-working and interaction between pupils with and without SEN. It is unclear whether this truly increases the social acceptance of pupils with SEN. Pupils who are aware of their teachers' beliefs might seek to please them. If so, their

positive nomination of pupils with SEN could reflect compliance with perceived expectations rather than personal preference. Positive nominations may also be confined to certain SEN groups, such as those without intellectual or behavioural needs. Nonetheless, dedicated teachers may be able to influence attitudes to quite a degree.

Pijl et al. (2008) studied the social position of pupils with a range of SEN in Norwegian primary and secondary schools. Their participants were 9-10 year old and 12-13 year olds, the year groups adjacent to those chosen for the present research. Their study therefore provides a valuable picture of social position over a slightly extended age range. In common with the present study, Pijl et al. used the three constructs of Cullinan et al. (1992) and therefore distinguished between social acceptance and friendship, whilst acknowledging their interrelationship. The three indexes were considered both separately and together, in order to gain a richer picture of pupils' social position. Data were obtained via sociometric nominations, teacher ratings and pupil self-ratings. Negative nominations were disallowed for ethical reasons.

Overall, the findings were that pupils with SEN fared significantly worse on all three indexes than their typical peers and that the situation was poorer for the older group: '... most likely because of a growing intellectual and emotional distance to their peers.' (Pijl et al., 2008, p. 402). Depending on the measure of isolation used, the researchers estimated that between 20% and 50% of their participants with SEN would reach the threshold for what they termed social exclusion. These are high rates. The findings certainly suggest a deterioration between middle childhood and early adolescence which is concerning. Koster, Pijl, van Houten and Nakken's small study (2007) of younger Dutch children suggested that pupils with SEN were only slightly less popular than their peers, frequently rated as averagely popular rather than unpopular. If a decline in social acceptance does occur, it is unclear whether it is a gradual and fairly even process or one accelerated either by adolescence or by entry to a larger, more complex educational environment. This highlights the importance of spotlighting the age group experiencing secondary transition (which varies somewhat between countries) and examining some of the environmental factors that may influence pupils' social position at that time.

Pijl et al.'s study is one that does provide between-group comparisons of social position. They divided their participants into five broad SEN categories. The findings raised interesting questions. Pijl et al. found that the social position of those with behavioural difficulties was poor, but they reported even higher rates of social rejection for those in their communication category, 58% of whose members had no friends or only one. It was uncertain whether this category was confined to autism, or included other social communication difficulties such as PLI (which I defined in Chapter 1), SLI or non-specific language delay. Doubt therefore remains about the role of structural language, pragmatic language or their combination in determining the social position of this group. One further issue warrants a mention. For analytic purposes, Pijl et al. combined single sociometric nominations with zero nominations as a criterion for non-acceptance by the peer group. They justified the decision on the basis that a single nomination did not realistically suggest much acceptance.

This makes sense. Nonetheless, it is worth considering the perception of the individual concerned and, more importantly, the importance that the individual attaches to social acceptance. Messiou (2006) concluded that non-acceptance (which she termed marginalisation) is a multifaceted process, which has reality within the individual's recognition and interpretation of it. Her ethnographic study of 5-12 year olds in Cyprus allowed an intense level of personal exploration, revealing perspectives that would be harder to capture via quantitative methods. Important themes for group acceptance included academic performance and ethnicity. The extent to which these interacted with other variables such as language and social communication is unknown, but the study is a timely reminder that peer group acceptance is a complex phenomenon. To some children, one good friendship could be more important than acceptance by a larger group. In such cases, a single social nomination, if reciprocal, is surely more positive than none at all.

2.3.5.4 Issues specific to friendship

In fact, Pijl et al. suggested that beyond the age of twelve, friendship might be more relevant to social inclusion than social acceptance and participation. In this case, consistent reciprocal nominations over time, even if very few, may be

more meaningful than the number of nominations received. The qualitative analysis of nominations would provide insight into the durability of friendships in children with SEN and reveal whether longer-term friendships are more likely to be with other pupils who have SEN.

This is an important issue, because the literature suggests that friendships are generally homophilic (Frostd and Pijl, 2007, citing McPherson, 2001; Ojanen et al., citing Prinstein and Dodge, 2008; Howe, 2010). Homophily refers to the tendency for individuals to form relationships with those who are in some way similar to themselves. The friendships of individuals with SEN, like those of their typical peers, do appear to be homophilic (Farmer & Farmer, 1996; Norwich & Kelly, 2005), but it is uncertain whether this reflects an active choice, a self-protecting response to rejection by peers without SEN or a combination of the two. There could also be a more prosaic explanation – proximity. For example, Durkin and Conti-Ramsden (2010) speculated that children with SLI may be more likely to form relationships with those experiencing similar difficulties or other forms of SEN simply because they have regular contact via shared educational support.

2.3.5.5 Associations with social position in children with SEN

It has been shown that generally, peer acceptance and the number of friendships are associated with particular social characteristics. Broadly, positive characteristics can be grouped under the ‘sociability construct’ (Howe, 2010), whereas aggression and social withdrawal fall outside it. Howe, citing Newcomb et al. (1993), summarised sociability as comprising social interaction, communication, problem solving and positive social behaviour (e.g. helpfulness) and traits (e.g. empathy).

It is logical to assume that the social position of children with SEN is directly influenced by the same characteristics. However, the concept of sociability and the related terms, ‘social skills’ and ‘social competence’ are in fact quite slippery. Cillessen and Bellmore (2002), citing Rose-Krasnor’s review (1997), cautioned against conceptualising social competence as a unitary domain or using a limited number of behavioural markers to quantify it. Unaccepted children with behavioural difficulties have certainly been deemed socially less

competent than other children with SEN (Koster et al., 2007) and a lack of empathy has been linked to their poor social position (Frostad & Pijl., 2007). Nevertheless, the social skills that underpin social *success* in children with a range of SEN deserve more attention.

Recalling the findings above for typical populations, there is ample evidence that friendly, affiliative behaviour is conducive to social acceptance. What is less clear is whether such behaviour is *sufficient* for acceptance as children get older. Social skills need to be appropriate to the individual's age (Diamond, 2002, citing Guralnick, 1999; Frostad & Pijl, 2007) and the demands of social communication increase in adolescence (Durkin & Conti-Ramsden, 2010). Since the exigencies of friendship also change over the school years, social skills that suffice in the play and activity-based primary years might be inadequate during the adolescent years, when language plays an increased role in relationships (Stringer, 2006). Well-accepted children with SEN who possess adequate language skills in adolescence may be better able to protect their social position than children who lack these skills.

Children with SEN, including those with learning or behavioural difficulties, tend to have fewer friends than typical peers (Koster, Pijl, Nakken and van Houten, 2010). In this study, Koster et al. did report reasonable levels of social participation, but the social clusters to which children with learning or behavioural difficulties belong tend to display less positive social characteristics (Farmer & Farmer, 1996). That said, some of the characteristics that have been associated with lower social position in those with SEN, such as shyness or withdrawal, have also been reported in disfavoured children *without* SEN (Avramidis, 2010). In short, it is no easy matter to compare the underpinnings of social success or failure in children with SEN and those without.

2.3.5.6 *Specific forms of learning difficulty*

So far, I have reviewed the literature for mild, moderate and severe general learning difficulties, along with some other types of SEN. The longitudinal study of Estell, Jones, Pearl, van Acker, Farmer and Rodkin (2008) is of particular

interest to the present thesis, because it addresses more specific learning difficulties. The aim of their study was to compare the social status of children with 'mild learning disabilities' (a term used in the USA) with typically developing peers, using multiple measures at three points between grades 3 and 6. The children were aged approximately 8-12 years. The social status of these children did not change substantially over the course of the study. They belonged to social groups similarly to typical peers, but their overall social rating by these peers was lower.

Thus far, the study broadly mirrors the research findings for other SEN types, including general learning difficulties. However, all of Estell et al.'s 55 participants appeared to have needs that would meet the criteria for specific learning difficulties (SpLD) or for SLI in the UK. The study therefore raises two pertinent questions. Firstly, does the social position of children with more specific forms of learning difficulty differ from that of children with general learning difficulties and/or with other single or combined forms of SEN? Secondly, do these more specific groups also differ from each other in their social position? The issue here is whether children with SpLD but not with receptive or expressive language difficulties fare differently from those with SLI, once other factors are taken into account.

In the first section of this review, I noted that SLI and SpLD are distinct categories of SEN, but with overlapping characteristics. Neither is associated with markedly low non-verbal ability, but academic difficulties, especially in literacy, are common to both (Bishop & Snowling, 2004; Hulme & Snowling, 2009). The second question above is therefore particularly relevant to the present study and is addressed in it.

There is some evidence that children with SpLD have negative scholastic self-perceptions, but their self-reports on social position seem to be more mixed. The research findings have mainly been for dyslexia, the best-known form of SpLD. Burden (2008), in his review of studies, found little evidence that dyslexia affects social interaction with peers and Terras, Thompson and Minnis (2009) found no differences in the self-rated social acceptance of children with dyslexia compared with typically developing peers. However, these same young people

reported that dyslexia had affected the number of friends they had. This ambivalent picture can be compared with that provided by Ingesson (2007), who interviewed Swedish participants with dyslexia. These individuals, reflecting on their earlier school years, claimed that dyslexia had had no negative impact on their social relationships with peers. In fact, they perceived that their friendships had been a real compensation for their scholastic problems.

One interpretation of this limited evidence is that young people with dyslexia do not have an unduly low social position, compared with those from other SEN groups. Yet, great care is needed when comparing findings based on self-report with those derived from other measures. Many of the studies of other SEN groups used sociometric nominations, which sometimes yield very different results from those obtained from self-perceptions. For instance, Cambra and Silvestre (2003), in their Spanish study, found no relationship between the social self-perception of children with diverse SEN and the way in which their typically developing peer group regarded them. Of course, it is possible that the social self-perception of children with dyslexia is more compatible with peer perceptions of them than is the case for other SEN groups. Nonetheless, this cannot be assumed from the literature that I have cited.

2.3.5.7 Evidence as a whole

Overall, the literature provides mixed but not highly encouraging evidence of the social position of children with SEN. This mainly refers to mainstream schools, but certain children did not fare well in special settings either. Some lack of consensus is unremarkable, given the heterogeneity of SEN populations and the environments in which they live and learn. Cambra and Silvestre (2003) and Pijl and Frostad (2010) highlighted the need for more focused research on individual SEN sub-types. Meanwhile, the multiplicity of measures and terminologies employed by researchers has perhaps contributed to inconsistencies in the evidence.

Despite the picture as a whole, some children and adolescents with SEN clearly do well socially. Skills such as football, which are valued by peers, may be compensatory and enhance their social position. Fox, Farrell & Davis (2004),

provided an example of this in primary aged children with Down syndrome. Some other determinants of social position with typical peers have also been discussed, but their relative importance probably changes over time. For example, the role of language is likely to increase in adolescence. However, this factor appears to have been under-researched for young people from different SEN groups.

Generally, the evidence suggests that younger children with SEN fare better socially than adolescents. Interestingly, the reverse seems to apply to those with moderate learning difficulties. This might be because they form a fairly numerous group, thus increasing social access to similar peers after secondary transition (Norwich & Kelly, 2005).

2.3.6 Social position and children with SLI

2.3.6.1 Overview

Like children with other forms of SEN, those with SLI frequently experience difficulties with peer relationships (see Farmer, 2006, for an overview). This manifests in a variety of ways. Farmer's overview highlighted internalising features, such as social withdrawal and passivity during group work. Fujiki et al. (1999) described three sub-types of withdrawal: solitary-active, reticence and solitary-passive, all of which are associated with reduced peer popularity. Their participants with SLI (termed 'language impairment': LI) were particularly likely to be rated by their teachers as reticent. This describes a situation where the child wishes to engage, but lacks the skills or confidence to do so, and spends much time watching peers but not participating with them.

Conti-Ramsden and Botting (2004) provided evidence of externalising features, notably a high rate of problematic behaviour towards peers in eleven year olds with SLI. This was based on data from the children's teachers. Higher rates still were reported across a more extensive age range by McCabe and Meller (2004), citing Benner (2002) and Hummel and Prizant (1993). Thus, it appears that both under-engagement and engagement in children with SLI can adversely influence peer relationships.

Unsurprisingly, studies that address social position in children with SLI are heterogeneous in scope and in the age groups that they include. For children aged 4-5 years with receptive and expressive SLI, McCabe and Meller (2004) reported lower scores than typical peers on some measures of emotional knowledge, but not on peer sociometric ratings or the number of mutual friendships. This contrasts with other findings that even preschoolers with impaired language are regarded as less desirable play partners by their typical peers (Gertner, Rice & Hadley, 1994). However, the more optimistic findings of McCabe and Meller do not rule out a subsequent decline in the social position of these same children. I suggested earlier that characteristics such as overall friendliness may be insufficient to sustain peer relationships in later childhood and adolescence.

This possibility is supported by the research of Howlin, Mawhood and Rutter (2000) in relation to friendship. Their small longitudinal study examined social outcomes in young adult males with autism and those with SLI (defined as 'severe receptive developmental disorder'). Unsurprisingly, the latter group experienced better social relationships at 7-8 years of age, but their friendship quality declined in adulthood. Well over 50% experienced problems with reciprocal friendship and over 30% had no particular friends.

Wadman, Durkin and Conti-Ramsden (2011b) reported similarly mixed findings for the post-childhood friendships of young people with SLI. Over 90% of their 16-18 year olds claimed to have at least one close friendship, but their emotional engagement with their close relationships was significantly poorer than that of a typical comparison group. Carroll and Dockrell (2010) also presented compatible findings for the ease of making friends in a group of 17-22 year olds with SLI. Over half of their sample claimed that making new friends was quite or very easy. However, the authors noted that over one third did report some social difficulties, despite most of the sample having one or two friends. In summary, the findings for this age group again point to some on-going social difficulties, but the evidence is complex and tempered by considerable individual differences.

After reviewing the literature for SEN, I drew attention to the fact that evidence of children's social position has been gleaned from a variety of sources, which may or may not be convergent. The same applies to children with SLI. For instance, Lindsay et al. (2002) found that self-reported social acceptance for such children was higher than the levels reported by their teachers. Much of the evidence for the social acceptance of these young people has in fact been derived from self-report. Based on this measure, Lindsay et al. (2002) found that the social acceptance of 10-12 year olds with SSLD was lower than that of typical peers, both in their last year of UK primary schooling (Year 6) and after their transition to secondary schooling (Year 7). In contrast, the research of Jerome et al. (2002) only revealed such group differences for children aged 10-13 years. In a separate group, aged 6-9 years, the social self-perception of their participants with SLI was in line with that of typical peers. Tentatively, it might be interpreted that children with SLI above a certain age are likely to rate their social acceptance conservatively, when compared with their peers, but recent evidence (Wadman et al., 2011a) challenges that view. The study found no group differences on self-rated social acceptance in 11-15 year olds. The implications are discussed in Chapter 5.

Bullying is related to social position, particularly to social acceptance (Knox & Conti-Ramsden, 2003), but the associations are complex. Bullying, also termed victimisation, may be physical, verbal, reputational (e.g. spreading unpleasant rumours), or relational (e.g. withholding friendship). Again, there is inconclusive evidence that children with SLI are at greater risk of bullying, or are more likely to perceive themselves as being at risk. Lindsay et al. (2008) reported high levels of bullying in eleven year olds, but no significant differences between the experiences of children with SSLD and typical peers or those with general learning difficulties.

It is interesting to speculate whether those with SSLD or general learning difficulties who *were* bullied had substantially weaker language skills, particularly receptive, than those who were not. Redmond (2011) has shown this to be a very complicated area. Contrary to expectations, he found that children who were better able to understand language at a narrative level (i.e. beyond single words or short sentences) actually reported *more* victimisation

than those with more pervasive receptive difficulties. Having ascertained that the differences were not simply due to differences in the participants' ability to report their problems, Redmond hypothesised that children with very severe receptive difficulties might simply be ignored, whereas those whose comprehension allowed some social participation were seen as a fair target for victimisation.

Of course, the perception that one might be bullied does not necessarily match its actual occurrence. Both Knox and Conti-Ramsden's study of Year 6 pupils and the much smaller one conducted by Savage (2005) with Year 7 pupils identified children with SLI who perceived that they were at greater risk of bullying, compared with the self-ratings of their peers. However, it is not certain whether children who are bullied (or who fear bullying) actually have a lower overall social position than children who are not especially liked, but who are not overtly bullied.

Lastly, a direct comparison can be made between the social position of children with SLI and those with general learning difficulties. I theorised earlier that the cognitive distinction between these two categories is less clear-cut when SLI co-exists with relatively low non-verbal scores, although the linguistic profiles could differ qualitatively between the categories. In view of this, both similarities and differences in social position are probable.

Tomblin (2008) undertook a key longitudinal study of the two groups from 5-16 years of age, with follow-ups throughout the period. Both groups had receptive language difficulties. Levels of social participation were found to be similar, but in adolescence, the participants with general learning difficulties expressed more feelings of social isolation and had fewer satisfying intimate friendships. Socially and academically, both groups fared worse than typical peers and Tomblin concluded that early language impairment was more closely implicated than cognitive level in the outcomes. In essence, the findings suggested that both groups experience social challenges, but that young people with SLI fare somewhat better. Possibly, this reflects the fact that most have higher non-verbal abilities, which they may use in some way to compensate for the social impact of their language difficulties.

2.3.6.2 Links with social cognition and language

When reviewing the cognitive theories of SLI, I referred to Bishop's three models of social cognition. Recall that these demonstrated alternative views of the social communication difficulties that frequently co-exist with associated SLI. The social cognition of children with SLI and its relationship with language and social functioning has interested a number of researchers and the relevant literature is therefore reviewed in this section. However, the specific links between social cognition, language and social position are not always transparent.

Chiat and Roy (2008) found that receptive language impairment in young children was the strongest all-round predictor of language and social outcomes, but that early social cognition was the strongest predictor of social communication. This suggests quite a strong but complex set of interrelationships between receptive language, social cognition and later social relationships. There is some evidence that early impairments of social cognition persist. For instance, within their group with receptive SLI, Howlin et al. (2000) identified individuals who were socially quite successful at the age of 18, but who exhibited subtle difficulties with social cognition. Interestingly, they found no significant correlations between friendship quality and concurrent verbal or non-verbal scores. Howlin et al. acknowledged that receptive language disorder is heterogeneous and that social findings might vary accordingly. Nonetheless, they concluded that the decline in friendship quality may indicate a broader impairment of social cognition within receptive language disorder.

Botting and Conti-Ramsden (2008) examined social outcomes at 16 years for adolescents with a history of SLI, whom they had tracked since the age of 7. They too included social cognition in their analysis. Modest associations were found between social cognition, social skills and functional social outcomes (defined by the authors as friendships and levels of social activity), both for the participants with SLI and for typical comparisons. There was a strong significant link between social cognition and language functioning in those with SLI. Friendship and social activity were also strongly related to the other factors. The findings led the authors to conclude that children with SLI may have subtle but

qualitatively distinctive impairments in social cognition. Botting and Conti-Ramsden also examined relationships between social cognition and the respective language channels. The links with concurrent expressive language were particularly highlighted, but the researchers also found moderate correlations between receptive language and social cognition.

Drawing on the same longitudinal sample, Durkin and Conti-Ramsden (2007) attributed much greater weight to receptive language at 7 years as a predictor of friendship outcomes at 16. Of particular relevance to the present study (and rare in the literature) is the authors' emphasis on the *degree* of receptive language impairment as a risk factor for poor friendship outcomes. The individual odds ratio was .93, with risk reducing by up to 64%, depending on the standard score increment at age 7. This suggests that early receptive SLI, even if ameliorated, carries a potential social legacy for adolescence, although the study also revealed more *concurrent* receptive impairment in those with poor friendship outcomes. Based on highly intercorrelated self and parent report ($r = .73$), 60% of the SLI group did experience good quality friendships, which is heartening. Despite this, receptive language also appears to be linked to the wider aspects of social position. For example, Craig and Washington (1993), noted that receptive language impairment has a higher correlation than expressive language with social acceptance by peers.

Lastly, I suggested in Chapter 1 that successful language intervention does not necessarily reduce social difficulties. Cohen, Menna, Vallance, Barwick, Im and Horodezky's Canadian study (1998) of psychiatrically referred 7-14 year olds lends some support to this view. Children with previously identified (and presumably treated) language impairments still presented severe difficulties with social cognition and rated themselves as less popular than their peers. Nonetheless, an early resolution of language difficulties, particularly receptive, has been shown to determine at least some social outcomes at 15-16 years (Snowling et al., 2006)

2.3.6.3 *Evidence as a whole*

Concluding, the literature suggests that children with SLI experience challenges to their social position, although these may be fewer than the challenges

experienced by children with general learning difficulties. Moreover, there is considerable variation in the social position of individuals with SLI. Like children with other forms of SEN, some clearly experience social success. However, there is increasing evidence that at least some types of SLI co-exist with impaired social cognition. The research also suggests an interrelationship between receptive language, social cognition and one or more aspects of social position, but the precise interface is not fully understood.

Referring back to the findings of Durkin and Conti-Ramsden (2007), it is interesting to speculate on the wider range of factors that allow some young people with SLI to maintain good friendships. Logically, these might include the personal disposition of the young people themselves and the characteristics of their friends. It may also be that their impairments of social cognition are subtle and fairly unobtrusive in day to day interaction with peers. Ecological relationships between the individuals and their environments could also be implicated. Several of these factors are addressed in the present study.

2.3.7 Interim summary

In this section, I have reviewed the literature on the social position of children and adolescents. I have also looked briefly at some evidence for adults. Research on typical populations, a range of SEN and SLI has been included. The literature suggests that young people with SEN, including those with SLI, tend to be socially less well accepted by typical peers, to participate less in social interactions and to have fewer friendships. That said, they are not entirely isolated. Comparisons of social position across SEN categories are problematic and warrant further investigation.

Some characteristics that might influence children's social position were discussed. I suggested that the role of receptive language may have been overlooked, especially in older children and adolescents with a range of SEN. In many children with SLI, there is evidence of a specific socio-cognitive impairment. This appears to be associated with both receptive and expressive language impairment. However, the relationship is complex and may manifest quite differently in children whose language profiles are superficially similar. The

extent to which this interrelationship directly influences the social position of children with SLI also requires investigation.

2.4 Social anxiety

2.4.1 Background

Until the 19th century, there was little documented interest in child and adolescent anxiety, but during the last decades of that century scholarly thought on the topic became increasingly sophisticated and scientific (Treffers & Silverman, 2001).

The literature on a range of childhood anxieties and their correlates is now extensive and a full review is not feasible here. Judicious reference to work will be made, in order to place social anxiety within a theoretical context and to consider its overlap with other forms of anxiety and social unease. Anxieties are categorised within the two clinical diagnostic frameworks discussed earlier: the World Health Organization's International Classification of Diseases (ICD-10) and the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-1V). The frameworks differ somewhat in their criteria for anxiety conditions (Pearce, 2000), leading to inconsistent reports of prevalence (Klein, 2009).

Gazelle, Olson Workman and Allan (2010) noted that the methodologies used in research on anxiety have been informed by either developmental or clinical psychology (these authors cite work from each field). Stated simply for social anxiety, developmental research has focused on the behaviours associated with it, such as hovering and non-participant watching of peer activity, whilst clinical research has examined subjective anxious distress, which may not have behavioural manifestations such as physically distancing the self from peers.

Gazelle et al. attempted to merge these foci by examining rates of clinical anxiety disorder using developmental criteria. In a community sample of US elementary school children, they found considerable overlap between cases with anxious solitude and those with clinical social anxiety, suggesting that

these are closely related constructs. Anxious solitude refers to a withdrawal from nearby social activity that is motivated by fear of participation. Gazelle et al. stressed the importance of investigating whether any peer problems experienced during anxious solitude might trigger clinical social anxiety later. They also highlighted the need to focus on the anxious child's environment, not just on factors and perceptions within the child.

A number of theories underpin anxiety research. These largely follow a deficit or dysfunction model. For instance, La Greca and Lopez (1998) noted that researchers have placed considerable emphasis on biological and familial factors in anxiety. In contrast, cognitive theory views childhood anxiety - including the social variant - as being linked with dysfunctional cognition. According to this theory, the individual overestimates threat in ambiguous situations and underestimates their own ability to cope with it (Bogels & Zigterman, 2000; Voci et al., 2006). There is theoretical polarity about the long-term impact of childhood anxiety on personal well-being. The psychodynamic view of anxiety is conflict-oriented and predicts serious sequelae if the conflict is unresolved. This contrasts with the phenomenological orientation of the ICD and DSM nosologies. These assume that the set of conditions underpinning anxiety are aberrant but will have a relatively transient impact on the individual's well-being (see Benjamin, Costello & Warren, 1990, for a review).

The risk that is posed to longer-term well-being may depend on the severity of the anxiety, an issue that has largely been overlooked (Klein, 2009). Meanwhile, anxiety in school-aged children and in adolescents needs to be viewed in a social context, with more research focus on the importance of peer group relations (La Greca & Lopez, 1998). This does not diminish the role of individual and family characteristics in the development and persistence of anxiety. What it does recognise is that the school years constitute a period in which social activity occurs primarily within peer groups.

2.4.2 Definition

The need to define social anxiety stems from the concurrent use of terms such as social phobia, worry and fear. Cullinan, Epstein and Wills Lloyd (1983) acknowledged overlaps in meaning, but distinguished anxiety as: '...a fear

reaction ... without any apparent evoking situation, or evoked in many seemingly different situations.' (p.143). Applying this to social anxiety, we need to distinguish between the two related types: performance and interpersonal (Klein, 2009). Performance refers to activity conducted before an audience, such as public speaking. Interpersonal refers to interaction that is more likely to be socially oriented. When the individual experiences performance anxiety, a single evoking situation generates a keen sense of fright. In contrast, interpersonal anxiety may be triggered by a whole range of social situations. These situations commonly lead to feelings that are less acute than those suffered by the public speaker, but are sufficient to create persistent unease, discomfort and worry. In this study, I use the term social anxiety and my main focus is on the interpersonal type, which is more relevant to children's day-to-day interaction with peers. However, the term used by individual researchers (e.g. social phobia) will be preserved in context to avoid misrepresentation of their work.

Next, a distinction must be made between trait and state anxiety. Stated rather simplistically, trait anxiety refers to a propensity to worry more readily than other people, over a wide range of situations. State anxiety is more situation specific and can be described as a normal, transient response to a stressful situation. In reality, the dichotomy is not so stark. Endler and Kocovski (2001) described how the anxiety trait and an evoking situation work in tandem to determine the level of state anxiety that the individual experiences. They view the two as dimensional, interactional and part of a continuum.

The boundaries between social anxiety, temperamental inhibition and extreme shyness are also of interest. Oosterlaan (2001), noted a large overlap between temperamental inhibition and withdrawn, shy, fearful and unsociable behaviour. However, social withdrawal and solitude are not simple phenomena. Moreover, their manifestations are not all equally associated with social anxiety (see Coplan, Rubin, Fox, Calkins & Stewart, 1994, for important distinctions between the sub-types).

Heiser, Turner, Beidel and Roberson-Nay (2009) found similarities and qualitative differences between highly shy individuals with and without social

phobia and non-shy persons. Those with social phobia reported a significantly greater number of social fears and avoidances than the shy only, who in turn demonstrated more of these feelings than the non-shy. The study points to the need for further research into the nature of social fears and the overlap between conditions. Interpersonal social anxiety in itself occupies a broad canvas, from fairly mild unease in social situations to incapacitating levels of fearfulness. Moreover, the same individual may experience it discretely according to context, e.g. fearing parties, yet being quite comfortable when conversing with close friends.

2.4.3 Social anxiety and general populations

There are relatively few longitudinal studies that explore the links between specific childhood anxiety disorders and adolescent outcomes. Bittner, Egger, Erkanli and Costello's large investigation (2007) is a welcome addition. The study tested the predictive power of separation anxiety, overanxious disorder, generalised anxiety and social phobia at 9, 11, 13 and 19 years of age. These were first analysed individually and then jointly via a multiple logistic regression. Of interest were the high rates of co-occurring anxieties in those with social phobia (43%) and the persistence of social phobia itself between childhood and late adolescence.

Other studies point to a later onset of social phobia, although there are inconsistencies. Voci et al. (2006) found an average onset age of 11.6 years, with no significant differences between typically developing children and those with language impairment, whereas La Greca and Lopez (1998) identified the onset age as 15-16 years for an undifferentiated sample. These findings support the view that social phobia more commonly begins in adolescence (Pearce, 2000), but they do not counter Bittner et al.'s finding that when social phobia does present in childhood, it is likely to persist during adolescence. This seems particularly true of interpersonal social phobia, for which Klein (2009) noted an earlier onset and greater chronicity. However, its precise manifestation at the threshold to adolescence and particularly at socially challenging times such as transition to secondary education, warrants greater attention.

Gender differences in social anxiety have also attracted interest, with consistent evidence that girls are more anxious than boys after 13 years (Bittner et al., 2007; La Greca and Lopez, 1998; Pearce, 2000). Greco and Morris (2005) likewise found higher anxiety in girls in a cross-sectional study of 8-12 year olds in West Virginia, USA. It was not clear whether the oldest of these girls, who were approaching adolescence, showed qualitative or quantitative differences in their anxiety patterns compared with their younger peers. This has some importance, both for pinpointing more exactly the typical age at which social anxiety develops or intensifies and for considering whether transition between educational phases is significant. Greco and Morris did not specify the type of schools that their participants attended. In the UK, the oldest of this age group would attend either a middle or a secondary school, depending on their geographical area. Comparisons between school types might reveal whether the age itself or the phenomenon of educational phase transition (which middle school pupils in the UK do not experience at 11-12 years) has stronger associations with changes in social anxiety, particularly in girls.

Summarising, the literature suggests that social anxiety may co-exist with other forms of anxiety and overlap with temperamental inhibition and shyness. It also appears to be associated with some, but not all, forms of social withdrawal. Social anxiety generally becomes more common after late childhood, but the interpersonal type presents earlier than the performance type and has a poorer outlook. Within adolescence, the typical age of onset is disputed and it is unclear whether major life transitions trigger or exacerbate social anxiety. There is consensus that social anxiety does increase in girls at about 13 years of age.

2.4.4 Social anxiety and SEN

It was demonstrated above that children with SEN often experience difficulties with social position. The issues for the next two sections are whether social anxiety in SEN populations is similarly widespread, whether meaningful patterns can be identified and whether social anxiety in those with SLI is distinctive or particularly common.

2.4.4.1 General learning difficulties and poor scholastic achievement

The literature does not reveal clear distinctions between social anxiety in children and adolescents with mild general learning difficulties and those with poor academic achievement who do not have learning difficulties. La Greca and Lopez (1998) noted that self-perception of scholastic competence was associated with social anxiety in girls only. It was unconfirmed whether negative scholastic self-perception indicated learning difficulties or unsatisfactory grades for other reasons. Greco and Morris (2005) cited academic difficulties as one of the factors identified in social anxiety by previous researchers, but did not define or explore this further. Benjamin et al. (1990) also suggested links between educational failure and anxiety (including social phobia) in US 7-11 year olds, again more specifically in girls.

Some interesting features emerge from Benjamin et al.'s study. The precise learning needs of these girls were not made explicit, but it was noted that despite average ability, they showed a higher rate of grade repetition. This certainly suggests under-achievement, but whether repetition was due to specific difficulties such as dyslexia or SLI, to general scholastic disaffection, or to broader emotional difficulties of which anxiety was but one manifestation, is speculative. Interpretation is also constrained by the combined anxiety categories. It is therefore uncertain whether poor academic performance raises *social* anxiety (perhaps due to fear of teasing by classmates), as opposed to general anxiety, and if so, whether it affects typically developing under-achievers and those with mild general learning difficulties in a similar way.

2.4.4.2 Dyslexia

The literature on anxiety in children with dyslexia is also somewhat inconclusive. In a discussion of stress (2004), Fawcett cited Rourke and Feurst (1991) and Badian (1992) as evidence that brain development predisposes those with dyslexia towards organisational and social problems. However, it is unclear whether anxiety is widespread in this population and whether it, too, is a trait of dyslexia, or whether it is secondary to feelings of academic failure.

Miller, Hynd and Miller (2005) used multiple informant ratings for US children with dyslexia. The majority of the children were aged 8-12 years and were Caucasian. Miller et al. found that rates of depression and anxiety were not higher than in comparison cases and that participants with more severe forms of dyslexia did not show higher rates on either measure than those with milder dyslexia. In contrast, studying UK 8-16 year olds with dyslexia, Terras et al. (2009) found that anxiety and depression were both associated with dyslexia. Willcutt and Pennington (2000) had obtained similar findings for anxiety and depression in 'reading disability' (their term), but mainly in girls. It should be noted though that none of these studies reported discrete measures of *social* anxiety.

Alexander-Passe (2008) compared stress in primary school children who had dyslexia with that of their unaffected siblings and found higher levels of stress in those with dyslexia. The stress mainly manifested as worry about academic demands. This is interesting, since it might reflect the high profile that dyslexia has in the public domain. If these children are intensely aware of their diagnosis and its implications for school work, academic preoccupations could well predominate over other worries. However, in Alexander-Passe's study, academic anxiety also seemed to make a secondary impact on these children's socio-emotional state, insofar as they perceived that their difficulties led peers to hold negative attitudes towards them.

Collectively, the findings indicate that children with dyslexia are prone to anxiety, but evidence that it is specifically social is not convincing. The evidence suggests that their anxiety is primarily academic, but that the secondary effect may be social, e.g. manifesting as a reduced sense of social confidence and optimism. It is unclear whether the peer relationships of children with dyslexia do actually suffer as a result of their pessimism, or whether these children simply harbour social doubts that are unfounded.

2.4.4.3 Complex and diverse forms of SEN

The study of social anxiety in children with more complex and pervasive SEN, including specific syndromes, offers an invitation to explore distinctive features. For example, attention deficit hyperactivity disorder (ADHD) has been linked

with social phobia, especially in adolescence (Bittner et al., 2007). Bittner and colleagues noted that anxiety in this population has received less attention than oppositional or conduct disorders. Nonetheless, the evidence for anxiety in ADHD is mixed. Jarrett and Ollendick (2008) found that anxiety levels were highly variable within a sample with ADHD and speculated that anxiety might be separable from ADHD itself. This implies that anxiety, or particular variants of anxiety, could be secondary to ADHD, rather than a core feature of the condition. If this is the case, children with ADHD may respond anxiously to the negative responses they receive from their peers, but in the same way as similarly behaved children without ADHD.

Children with Asperger syndrome are prone to numerous affective difficulties including multiple anxieties (Sofronoff, Attwood & Hinton, 2005) and depression (Whitehouse, Durkin, Jaquet & Ziatas, 2009). Comparisons with other SEN groups on interpersonal social anxiety would be enlightening. The challenge lies in determining whether social anxiety manifests similarly between such groups across the same range of social situations and whether it has any common socio-cognitive basis.

Lesniak-Karpiak, Mazzocco and Ross (2003) studied social anxiety in 6-22 year old females with Fragile-X syndrome or Turner syndrome. (The latter does not affect males.) These chromosomal disorders are associated with social difficulties and social anxiety (see these authors for relevant studies and for similarities and differences between the genotypes and phenotypes of the two syndromes). Of interest to the present study is the researchers' novel methodology. The methods included observation, as well as ratings by parents and by the participants themselves. Manifestations of social anxiety were observed during the initiation and maintenance of a brief role play between each participant and an unfamiliar adult.

The researchers reported no differences in social anxiety between participants with either syndrome and an unaffected comparison group. However, the participants with Fragile-X needed more time to initiate interaction than the other groups. The researchers acknowledged the artificiality of role-plays. Nevertheless, the research indicates the need for further observational studies

of social anxiety during the initiation and maintenance of interaction, across a range of formal and naturalistic settings. This particularly applies to interactions with typical peers.

2.4.4.4 Evidence as a whole

The patterns of social anxiety associated with different SEN types are not clearly demarcated. There is some evidence that low scholastic attainment may be linked with social anxiety, particularly in girls. However, low scholastic attainment is not confined to those with SEN. Children with autism are known to experience a range of anxieties, including the social variant. It is unclear whether social anxiety in children with some other forms of SEN develops similarly and whether it constitutes a trait or is mainly a situational response to scholastic difficulties, unhelpful peer attitudes, or other factors.

2.4.5 Social anxiety and SLI

2.4.5.1 Introduction

This sub-section considers whether young people with SLI manifest greater social anxiety than their peers during childhood and beyond and what the important issues might be. Two points are noteworthy. Firstly, as with other groups, studies that include social anxiety have tended to subsume findings within composite measures of anxiety. Secondly, the specificity of participants' language impairment is occasionally unstated. This will be highlighted where it is appropriate to the review. Some of the studies have drawn valuable conclusions about the relationship between anxiety and other factors, including the channel or the severity of language impairment, non-verbal ability, family history and patterns of social withdrawal. These findings are included in the review.

2.4.5.2 Social anxiety, SLI and the links with other factors

Anxiety in some form seems to be fairly common in children and young people with SLI (Goodyer, 2000; Durkin and Conti-Ramsden, 2010). There is evidence of it at several life stages and at elevated levels compared with those of typical comparisons. In some cases, anxiety starts early. For instance, Stanton-

Chapman et al. (2007) found higher levels of internalising behaviours, including unspecified forms of anxiety, in US preschoolers with SLI aged 4-5 years. Group differences were more marked for social withdrawal than for anxiety, but I observed earlier that there is sometimes a relationship between the two.

Wadman et al. (2011a) also found group differences amongst secondary school pupils aged 11-15 years. Those with SLI reported higher rates of social anxiety (termed stress in the study) than their typical peers. This study was particularly revealing, since its anxiety measure was specifically social. The results were broadly in line with those of Conti-Ramsden and Botting (2008) for anxieties that included the social variant. The adolescents with SLI in the latter study showed markedly higher rates of anxiety and depression than typical comparisons, based on both self and parental report. Unlike the evidence for general populations, there were no gender differences and Conti-Ramsden and Botting attributed this to the clinical nature of SLI itself. In contrast, Wadman, Botting, Durkin and Conti-Ramsden (2011) found that the girls in both groups were more anxious (again, on composite anxiety measures) than boys, but the participants with SLI were collectively more anxious than typical comparisons at both 16 and 17 years.

Social anxiety has also been found for those on the threshold of adulthood and beyond. In a longitudinal study of children with SLI, Beitchman et al. (2001) noted significantly higher rates of social anxiety at 19 years than in those without SLI. Clegg et al. (2005) likewise reported both social anxiety and depression in males in their mid-thirties, along with other psychiatric conditions.

The links between social anxiety, non-verbal ability and language have been examined both concurrently and longitudinally. Conti-Ramsden and Botting's 2008 study revealed no associations between current anxiety or depression and early verbal or non-verbal scores, but a relationship was identified between concurrent receptive language and both anxiety and depression. These two measures of emotional health were also highly intercorrelated. Moreover, children who were already anxious at seven years of age were found to be more so at 16 years. Snowling et al. (2006), using social measures that included anxiety sub-types, also found higher rates of social phobia in young

people with receptive-expressive SLI. However, they reported relatively positive outcomes at 15-16 years if the language impairment, particularly receptive, was resolved by five and a half years.

Voci et al. (2006) studied social phobia in Canadian children with an early history of 'language impairment' (their term). Data from the participants of this longitudinal study were obtained when they were 5 and 19 years of age and revealed that those with a language impairment history had 2.7 times the normal rate of social phobia. Like Conti-Ramsden and Botting, Voci et al. observed no gender differences in their measures, but this applied both to their language impaired group and to their comparisons.

The higher anxiety rates for the language impaired group were compatible with those identified by Beitchman et al. (2001) for participants of very similar age. Some comparison issues arise. Voci et al. demonstrated a clear relationship between early language impairment and social anxiety in late adolescence, but the nature of the language impairments in the sample was not fully specified. Participants, who presented a range of receptive and expressive difficulties, may have included those with SLI and those with non-specific language delay. Social phobia at 19 years was not found to be related to the *severity* of language impairment at five years. If the persistence of language impairment at five years is considered important to later social outcomes, this finding is counterintuitive, but there is a possible explanation. Some of the children diagnosed with severe language delay when aged five may have had mainly expressive impairments. In the light of the research cited above, this could represent a lower risk for social anxiety than receptive language impairment. Nonetheless, the group as a whole were clearly more anxious than comparisons.

The findings suggest that language impairment, even if it is relatively mild or primarily expressive, may increase the future risk of social anxiety, but that does not counter the view that receptive impairment may be more detrimental than expressive. What remains unresolved is whether social anxiety develops via different pathways, according to whether a child's language impairment is specific or non-specific. This review has highlighted evidence of impaired social

cognition in some children with SLI. In such children, social anxiety may reflect this socio-cognitive profile. In contrast, social anxiety in children with non-specific language impairment might be more directly attributed to a history of unsuccessful interactions with peers.

What is the evidence that social anxiety is specialised in this way? Voci et al. theorised that social phobia has a discrete cognitive bias, that the bias leads to a fear of social communication and that: ‘... early language impairment represents a distinct pathway to late adolescent social phobia.’ (p. 915). In other words, social phobia is suggestively part of the cognitive profile of language impairment. This position is by no means incompatible with the literature on social cognition reviewed above, but it does not answer the important question of whether the profile is exclusive to children whose language impairments are specific.

The extent to which anxiety (including social) is related to family history has also been explored. Conti-Ramsden and Botting (2008) found that the parents of the young people with SLI reported higher than expected rates of anxiety and/or depression. Revealingly, these were not related to the rates in their child, a finding that was comparable to that of Voci et al. for social phobia. Conti-Ramsden and Botting also reported that several parents had experienced these emotional health problems themselves in childhood. This led them to conclude that such problems in parents were not entirely attributable to the stresses of raising a child with SLI.

Lastly, I return briefly to the connection between social anxiety and the three types of social withdrawal. I stated earlier that social withdrawal comprises an intricate set of constructs that sometimes, but not always, imply social anxiety. Fujiki et al. (1999), citing Asendorpf (1991; 1993) described how the reticence and solitary-passive types of withdrawal may constitute a merged index of social anxiety. I noted earlier that in Fujiki et al.’s study, the children with SLI (aged between five and 13 years) were rated as reticent significantly more than typical peers. Relevant to the present sub-section is that these children’s teachers also described them as actually fearful of joining social activity with their peers.

2.4.6 Interim summary

So far, this sub-section has reviewed some theoretical models of childhood social anxiety and the implications of anxiety for future well-being. The literature has focused primarily on within-child difficulties, rather than on daily environmental features that might be influential. The review has also explored social anxiety in relation to age and gender. Reference has been made to general populations and to SEN, including SLI. Patterns of social anxiety across SEN groups and between low academic performers with and without SEN are not highly discernible, although language difficulties as a whole appear to carry an increased risk of social anxiety. It has been suggested that social anxiety might be specialised in children with SLI, presenting more as a cognitive trait than a state. So far, commonalities with other developmental disorders and with non-specific language delay are not clear.

The studies reviewed suggest that children with SLI and possibly those with non-specific language difficulties are at greater risk of social anxiety than their typical peers. The anxiety may be persistent and even increase, and a number of associated factors have been investigated. There is a need to examine these factors within a more homogeneous language sample and age group.

2.5 Social position and social anxiety: what are the links?

2.5.1 The links for general populations

Having established that children and adolescents with SLI have a greater risk of poor social position and social anxiety, the question for this section is whether the two are strongly associated and in what way. Even for general populations, there appear to be remarkably few studies specific to social anxiety and the intricacies of close friendship (as opposed to the broader spectrum of social acceptance or rejection). However, La Greca and Lopez (1998) established clear links between social anxiety and peer relations in typical 15-18 year olds, using discrete ratings for social acceptance and close friendships. This recognised that the two constructs are related but can operate at different levels. Gender differences were closely probed. Socially anxious girls

outnumbered socially anxious boys. Additionally, the anxious girls reported fewer friendships and less intimacy and companionship within their friendships than the non-anxious girls. Both friendship quality and peer acceptance were significant predictors of their social anxiety (accounting for 29-43% of the variance in overall scores), whereas for boys, social anxiety had much stronger links with peer acceptance than with close friendship. Similar results were reported by Greco and Morris (2005) for their 8-12 year olds.

La Greca and Lopez acknowledged the limitations of their cross-sectional methodology in determining any on-going relationship between the variables. In common with Vernberg, Abwender, Ewell and Beery (1992), who focused on younger adolescents, the findings from La Greca and Lopez's study do suggest that the relationship between social anxiety and peer relations may be cyclical, with anxiety both resulting from and leading to impaired relationships. Both studies confirmed the importance of quality friendship for girls, and, given the friendship difficulties reported by these typically developing young people, it is probable that girls with SLI or other barriers to social communication would face even greater challenges.

A cyclical, or bidirectional relationship between social anxiety and poor peer relationships has also been found in the context of relational victimisation (Siegel, La Greca & Harrison, 2009). Relational refers here to the deliberate withdrawal of friendship, rather than to overt maltreatment (physical or verbal) or reputational (indulging in unpleasant gossip). It is important to distinguish between *withdrawal* of friendship and *withholding* of friendship. The former can be conceptualised as an active decision to marginalise a previous friend, whereas the latter may entail either an active refusal to establish friendship in the first place or simply a passive non-engagement which falls short of victimisation. These constitute quite different levels of non-acceptance by peers, ranging from hostility to indifference, and it is not clear whether bidirectional social anxiety operates similarly across them.

There is some divergence from the broader consensus (see Siegel et al., 2009, for other convergent studies) that social anxiety and peer relationships are linked in some way. For example, Zimmer-Gembeck, Waters and Kindermann

(2010), in a study of 10-13 year olds, found no association between social anxiety (termed worry) and either liking or being liked by peers. Overall, multiple regression indicated that the worried children were less liked, but not significantly so, even when their social worries were extreme. The authors suggested that the divergence from previous findings may be due to differences in measures, age, and the degree of mutual familiarity between the raters. They also acknowledged that the patterns might not apply to peer relationships out of school.

Greco and Morris (2005) looked beyond the association between broader peer social acceptance and social anxiety towards the role of social skills and close friendships. They hypothesised that cooperation, assertion and self-control may mediate between social anxiety and peer social preferences. Modest associations were found, again suggesting a cyclical relationship between social anxiety and social acceptance. However, whilst friendship quantity and good quality were important to girls, they failed to moderate social anxiety in either gender. Greco and Morris acknowledged the limitations of their study, which mainly comprised middle-class Caucasian participants and noted that the results could be different in relation to more severely anxious children. Other findings on the links between social anxiety and social position are inconclusive, though intriguing. To illustrate, Gazelle et al. (2010) found substantial heterogeneity of social position in children manifesting anxious solitude. This ranged from persistent (though unspecified) mistreatment by peers to normative levels of both friendship and peer acceptance.

A novel perspective on the link between social anxiety and perceived social skills is that of Miers, Blöte and Westenberg (2010). Unlike Greco and Morris, these Dutch researchers examined the social impact of a speech sample, facial expression, posture/body movement and way of speaking in a community sample of socially anxious and non-anxious adolescents. On a short videoed public speaking task, performance on the four measures was rated by unfamiliar, similar aged peers who were naive to the performers' anxiety status. The anxious participants scored significantly worse on all four measures than the non-anxious and the measures were highly correlated. The researchers

acknowledged some design limitations, not least the possibility that the peer observers were actually rating public speaking rather than social skills per se.

Three further points are noteworthy. Firstly, the observers may have been unwittingly primed by the experimental conditions to notice social skill deficits that would have been less obvious in naturalistic settings. Secondly, it remains debatable whether these social skill measures, those of Greco and Morris, or others are more strongly related to social anxiety *and* to social evaluation by peers. Lastly, does the *transparency* of poor social skills relate strongly to peer social evaluation and in what context? To clarify, Miers et al.'s observers may have rated a speaker's public *performance* negatively, but empathised with the speaker's nervousness and therefore not judged them harshly in social terms. A similar performance in an informal social context may have attracted annoyance or mirth rather than empathy.

Miers et al.'s design is intriguing for the present study because two of the social variables, speech sample and way of speaking, were directly related to verbal performance. The speech sample focused on clarity and way of speaking was judged on tone, speed, volume, grammatical fluidity and inarticulate use of fillers such as 'um'. These are the very areas in which children with SLI and other language impairments would reveal their weaknesses. It would therefore be revealing to rate the same four variables and their correlation in anxious and non-anxious children with SLI and to explore links between peer performance ratings and peer social ratings.

2.5.2 The links for children and young people with SLI

Wadman et al. (2011a) have broken new ground with their evidence on social anxiety (stress) and social acceptance in young people with SLI. Recall that their participants were aged 11-15 years. This research has key importance for the questions of the present study, since the authors found an association between stress and social acceptance in their sample with SLI. The implications are discussed in Chapter 5. The sample was not sub-divided by age and the authors noted the need for a longitudinal study of early, mid and late adolescence. They also included data on social skills, which the participants self-rated at similar levels to the comparison group.

In young people with SLI, it is uncertain whether social skills mediate between social anxiety and peer social preferences, as hypothesised by Greco and Morris. Durkin and Conti-Ramsden (2010) speculated that self-awareness and the use of compensatory skills such as letting peers do the talking, whilst actively signalling an interest in joining in, may improve the social chances of children with SLI. This might or might not have a positive effect on their social anxiety. Direct observation would be needed to identify the features that help or hinder social participation in anxious and non-anxious individuals.

A small observational study by Schneider (2009) provides a valuable insight into this issue, although it did not include children with SLI. Schneider observed 38 socially anxious and withdrawn boys and girls aged 10;0-12;11 years. Both genders were passive, uncommunicative and avoided convivial competition, even in dyadic activity with close friends. They also showed relatively neutral affect. As noted earlier, the same features of social withdrawal and passivity in groups have been observed in some children with SLI. However, this does not imply that they are unsociable. Indeed, the evidence suggests that neither children (Fujiki, Brinton, Isaacson & Summers, 2001) nor adolescents (Wadman et al., 2008) with SLI lack social interest. Yet, they often struggle to gain a good social position and their poor comprehension may lead to anxiety about repairing conversational breakdown (Markham et al., 2009). Whether this constitutes performance anxiety or more specific interpersonal anxiety is debatable.

2.5.3 Interim summary

There is evidence that social anxiety and social position are associated in typically developing older children and adolescents, although there are gender differences. Girls are more anxious and appear to be more dependent than boys on close friendships, but similarly fear negative evaluation by the wider peer group. The factors underpinning this link have been less well researched. Greco and Morris (2005) made modest claims for cooperation, assertion and self-control as mediators and shortcomings in these skills may indeed predispose children to behaviours that alienate their peers. This in turn could lead to social anxiety. However, Greco and Morris' three skills are quite broadly

based and fine-grained research is required on how they play out in practice. Observational assessment of dyadic and group interactions are potentially revealing in this respect. Lastly, there is recent evidence that social anxiety and social acceptance are also interrelated in young people with SLI. The research now needs to be extended to children at different ages.

2.6 Social well-being: what influences the outcomes?

2.6.1 Introduction

So far, the review has focused on the cognitive, linguistic and social characteristics associated with SLI. The final part of the review considers some factors that might influence social outcomes for young people with this impairment. The review is in two sub-sections. The first examines ecological theories related to developmental outcomes and refers to some work that broadly reflects them. This is conceptually important, because the present study investigates discrete factors, but also their ecological relationship. The second sub-section relates specifically to children with SLI or other forms of SEN.

2.6.2 Ecological accounts of human development

Ecological influence is distinct from environmental influence, although they are frequently connected. Environmental factors are sometimes referred to as demographic (Law et al., 2009), but there are differences here as well. Demography includes immutable factors such as birth order, ethnicity or being a twin, whereas environment extends to factors that can change, such as the quality of housing or the ethos of a school. Ecology refers to the way that factors work in synergy to enhance or diminish the likelihood of particular outcomes. These factors may be personal, environmental or both. Synergy is a core interest in this research, because the social consequences of having SLI cannot be divorced from the attitudes, values and other contextual features with which the individual connects.

Probably the greatest influence on human ecology has been the developmental psychologist, Urie Bronfenbrenner. Bronfenbrenner was born in Russia, but moved to the USA at the age of six. In later years, his thinking was informed by his concerns about the impact of social trends on developmental outcomes for

young people in the USA. Bronfenbrenner's original model (1979; 1992) was named Ecological Systems Theory (EST). This was based on the view that the individual's development is influenced by four interconnected hierarchical systems: micro-, meso-, exo- and macro.

Described briefly, the systems range from (micro) factors in the child's most immediate environment through to those that have a more distant, indirect connection. The systems work in synergy and outcomes cannot therefore be attributed to single factors, whether personal or environmental. Within this synergic relationship, the child may encounter 'ecological niches' which are particularly beneficial or detrimental to their personal development.

The path from EST to Bronfenbrenner's Bioecological Theory of Human Development (BTHD) reflected his growing conviction that EST had overestimated environmental features at the expense of personal (biological) ones. Bronfenbrenner also added a temporal element to his revision, referred to as the chrono-system. His later theory therefore comprised process, person, context and time.

The development of Bronfenbrenner's thinking and its influence are clearly demonstrated in his last edited book (2005). His revised theory is of particular relevance to the present study, which involves processes linked to secondary transition (an example of a chrono-system). Of additional note is Bronfenbrenner's concept of developmentally instigative characteristics within the individual. These characteristics do not in isolation determine development, but they do interactively influence events in the environment.

The work of Parke et al. (2002) on children's socialisation provides an example of how influences can interrelate. Parke et al. argued that peer and parental influence are transactional and not easily dichotomised. They proposed a tripartite model of parent-child interaction. The three elements were: parental advice about peer relationships, parental monitoring of children's activities and time spent with peers. They also claimed that both the quantity and the quality of parents' own family and friendship networks may influence the success of children's peer socialisation. The influence can be differential. As they observed: 'Of particular concern is the need to increase our understanding of

the specific family subsystem experiences and processes, which are related to different aspects of peer relationships, such as friendships, peer groups, and social acceptance.’ (p.170). Of course, the synergy between these factors might in turn mesh ecologically with others, such as the organisation and ethos of schools and neighbourhood clubs.

Cook, Herman, Phillips and Settersten (2002) included such factors in relation to young US adolescents. Their study was extensive, since it looked at three outcomes: academic achievement, mental health and social behaviour. They found that each factor facilitated positive change, but some influences were discrete. For instance, family was the greatest influence on mental health, peers on social behaviour and neighbourhoods on participation in social activities. Interestingly, in terms of ecological relationships, the joint influence of the factors on the outcomes was large.

2.6.3 Ecological influences: SEN and SLI

In comparison, the research has tended to refer rather fleetingly to ecological influences on outcomes for children with SLI or other SEN. Nonetheless, ecological importance has not gone entirely unrecognised. For example, Guralnick (2002) stated: ‘ ... both child-specific behaviours and family patterns which emerge as a consequence ... may combine to create a unique ecology with implications for many aspects of child development and family functioning.’ (p. 380). By implication, this unique ecology can be either advantageous or disadvantageous to the child’s well-being.

As noted earlier, Guralnick was reporting on young children with intellectual disabilities, including those with Down syndrome. It is worth noting that Down syndrome has a powerful parental lobby and some parents of children with this condition may feel relatively empowered to secure the best opportunities for them, including social ones in playgroups, schools and leisure facilities. This could constitute a positive ecological influence. However, I also noted earlier that parental efforts were less influential for a group of adolescents with Down syndrome and that environmental factors, e.g. transport, constituted a barrier to their socialisation (Cuckle and Wilson, 2002). Ecological influence on social position has also been noted in the classroom. I refer again to Ben-Yehuda et

al. (2010), who found that teachers' inclusive beliefs and practices had some positive impact on the social acceptance of pupils with diverse types of SEN. Likewise, Farmer and Farmer (1996) noted that the characteristics of the individual child are influenced by the classroom social structure - and vice versa.

Sometimes, references to ecological influences are implicit. For example, in their review of studies on socio-emotional functioning, Durkin & Conti-Ramsden (2010), citing Veisson (1999) and Ollson and Hwang (2001), observed that the demands of raising a child with SLI can increase anxiety and depression in parents. It could be hypothesised that parents who feel emotionally depleted in this way would be less resourceful about seeking recreational and social opportunities for their children. A negative ecology could therefore result.

Overall, the literature appears to be limited on this subject. Researchers have noted, sometimes indirectly, that the social well-being of pupils with SEN does not depend wholly on their own characteristics. They have provided a few examples of ecological influence in the classroom. Yet, examples which show the ecological influence of a wider range of factors appear to be lacking. Lindsay and Dockrell (2004) used the EST framework to conceptualise the interface between schools, professionals, policy makers and parents who were endeavouring to secure appropriate provision for their children with SSLD. In contrast, neither EST nor its bioecological successor, BTHD, seem to have been used extensively by researchers in the context of the social well-being of children with SLI.

2.7 Chapter summary: evidence and gaps

In this chapter, I reviewed the key literature in three related areas: the nature of SLI; social position, social anxiety and their interrelationship; and ecological perspectives that are pertinent to children's social well-being. Wherever relevant, population studies and those addressing other types of SEN were included for comparison with SLI. Theoretical models demonstrate that SLI is a complex impairment and research increasingly supports the view that difficulties with social cognition are a core feature in many cases. Unsurprisingly, the definition and diagnosis of SLI have attracted controversy. Further, it has been

claimed that SLI shares core features with dyslexia and general learning difficulties, but this too has been debated.

There is quite strong evidence that a history of poor receptive language hinders social relationships, either directly or in synergy with impaired social cognition. It is unclear whether current receptive impairment is particularly detrimental and, if so, the extent to which the severity of the impairment matters, when other factors are accounted for.

The literature shows clearly that many children with SLI experience poorer social position than their typical peers and are more likely to experience anxieties. Moreover, these manifestations of poorer social well-being often persist well into adulthood. Nonetheless, some of these children do participate successfully in peer groups and make satisfying friendships. It is unclear whether children with SLI experience additional difficulties in their social well-being in the approach to adolescence and whether the transition to secondary education in itself poses particular challenges.

In conclusion, there is a growing body of evidence on this substantive topic. However, a review of the literature has revealed gaps in the research that are addressed in the present study. Specifically, these relate to the severity of receptive language impairment, to the relationship between social acceptance and social anxiety around the time of secondary transition, and to the broader range of factors that exert ecological influence on the social well-being of children with SLI.

CHAPTER 3: METHODOLOGY

3.1 Introduction to the chapter

Chapter 3 describes the methodological position, design and operationalisation of this empirical, longitudinal inquiry, carried out over two school years. The overall design encompasses both quantitative and qualitative methods and analytic techniques, commonly associated with different philosophical traditions. As such, it is a mixed method design (Teddlie & Tashakkori, 2003).

The chapter first outlines the theoretical stance that informs the methodology as a whole. It then looks at some issues raised by adopting this stance and specifies the taxonomies underpinning the study. An overview of the methods used follows, with the rationale for choosing them. For ease of reference, the chapter is then divided into two design parts, the quantitative and the qualitative. Each part details the methods and data collection instruments employed, along with the specific research questions that each method seeks to answer. These are followed by sub-sections on sampling, operational procedures and ethics. A short conclusion draws together the main points of the chapter.

3.2 Theoretical position

Planning and designing research do not take place in a vacuum. The researcher comes to the table with certain notions of what is worth researching and probably with some preliminary ideas about how this might be done. Traditionally, research fell into two main camps, the positivist and the constructivist. Described at its very simplest, the positivist perceived knowledge to be objective, 'out there' and discoverable by using quantifiable methods such as experiments and surveys. In contrast, the constructivist perceived knowledge to be crafted and interpreted via the interface between researcher and participant, using qualitative methods. Each tradition, with variants, thus espoused a different ontological and epistemological way of seeing and knowing. These ways are commonly known as 'paradigms', a term defined as follows: 'A paradigm is a conceptual model of a person's worldview, complete with the assumptions that are associated with that view.' (Mertens, 2003, p.139)

The two traditions and the so-called paradigm wars that reflected their differences rested on the belief that the two worldviews were fundamentally incompatible and that the methods associated with each could not therefore be used together in a single study. However, not all researchers accepted the incompatibility thesis. This has led to increasing use of mixed methods (Bryman, 2006), particularly for complex social world questions that cannot easily be answered by methods reflecting a single tradition (Ercikan & Roth, 2006). Interest has now grown to the extent that mixed methods research has evolved as a distinct methodological movement, with a separate orientation and worldview (Tashakkori & Teddlie, 2003). This has attracted researchers who are more interested in solving problems than in philosophical orientation.

Inevitably, the movement has attracted criticism for trivialising philosophical differences (see Tashakkori & Teddlie, 2003). There has been a profusion of terms, such as the 'integrating', 'combining' and 'mixing' of methods, sometimes poorly specified (Moran-Ellis, Alexander, Cronin, Dickinson, Fielding, Sloney & Thomas, 2006). All describe one or more ways of incorporating within a single research enterprise methods that are generally (but not always) associated with different worldviews. The range and definition of terms have been confusing, and Teddlie and Tashakkori (2003) have provided very useful distinctions. They distinguish between research that is multimethod (conducted within a single tradition), mixed method (conducted in parallel or sequentially, within both traditions) and mixed model (conducted integrally, within both traditions). They suggest using *mixed methods* (plural) *designs* (authors' original italics and brackets) as an umbrella term for mixed method and mixed model research. Under this umbrella term, my own study closely fits the mixed method research type. I will therefore use the singular term of mixed *method* in relation to my own design and the plural, mixed *methods*, as an umbrella term, following Teddlie and Tashakkori's distinctions.

Full historical discussion of the movement is beyond the scope of this chapter, but it is important to note the influence of Pragmatism, a philosophy rooted in early 20th century rural America and espousing the belief that thought and action are fundamentally connected. Its early philosophical adherents include William James and John Dewey; more recent influences include that of

Cherryholmes (see Maxcy, 2003, for fuller details). It is also important to avoid confusing the term Pragmatism (which I have deliberately capitalised) with the word 'pragmatic', often used by researchers when describing their decision to employ whatever method works best in a particular situation. This latter use of 'pragmatic' equates to its everyday meaning of applying commonsense to the solution of problems and does not necessarily imply adherence to the American philosophy. It is the everyday meaning of 'pragmatic' that informs my position in this research.

3.3 Methodological approach

3.3.1 *Mixed methods: the issues*

The paradigm wars have abated to a considerable extent. Niglas (2000), in a conference paper on the issues surrounding mixed method use, described three positions, the purist (committed to the incompatibility thesis and upholding only one paradigm), the situationalist (tolerant of different paradigms but not of their combination in a single study) and the pragmatist (willing to mix methods from different traditions). The pragmatist position dissociates paradigm and methodology, and rejects clear-cut divisions between paradigms (Niglas, 2001). For recent examples of studies espousing this position in human research, see Klingner and Boardman (2011) for special education and Glogowska (2011) for speech and language therapy.

Mixed methods have often been used for triangulation purposes and indeed the two have commonly been treated as synonymous (Teddlie & Tashakkori, 2003). The term 'triangulation' itself has been over-used (Niglas, 2000). Developed by Denzin (1978), it generally refers to the integration of findings obtained by different methods or the same method at different times (methodological triangulation), although Denzin also specified triangulation by data, investigator or theory. The assumption of methodological triangulation is that if findings are convergent, they will be more credible, since the strengths of each method (or the combined strength of applying the same method twice) will compensate for any perceived weaknesses. Moran-Ellis et al. (2006) have termed this the 'increased validity' (authors' original inverted commas) model of triangulation.

In fact, using mixed methods for methodological triangulation is not straightforward, even if the methods are from the same tradition (Hodkinson & Macleod, 2010). Niglas (2000), citing Bryman (1992), stated that when different methods are used to answer the *same* social research questions, they may not be addressing the same constructs. In such cases, the equivalence of findings is highly debatable. This is a serious objection and not one that can be dismissed lightly, although replication by the *same* method with a similar sample avoids most of these pitfalls. However, the objection need not pose a barrier to using mixed method approaches per se. After all, triangulation is not the sole purpose of using mixed methods. Greene, Caracelli and Graham (1989) described four other purposes in their taxonomy, i.e. development (whereby one set of results informs another method), complementarity (e.g. for interpretation of results), initiation (e.g. the discovery of divergences) and expansion (using different methods to answer different questions).

Establishing the purpose of using mixed methods is a key task for researchers, to avoid: ‘... lapsing into a feeble eclecticism.’ (Sayer, 1984, p. 234). Greene et al.’s taxonomy provides a valuable framework for this. Interestingly, mixed method researchers frequently fail to specify their purpose. For example, Bryman (2006), in his review of 232 social science studies, found that only 10 authors reported which method was used for answering which research question.

Lastly, using mixed methods often increases the researcher’s workload. Having a clear purpose for using them is therefore important for administrative and even ethical reasons, not least to avoid collecting redundant data and thereby wasting participants’ time (Bryman, 2006).

In sum, I share the view that using mixed methods to triangulate findings needs care. Nonetheless, my own position is that mixed methods can and should be employed if the research questions warrant their use. In other words, like Niglas, I have no philosophical objections to using methods associated with different traditions in the same study, providing they are situated within a clear conceptual and procedural framework. I take the view that different approaches

are needed for different types of research questions (Meyer, 2001, citing Ewert, 1991) and that the questions themselves need to inform the research design.

This is the sense in which my methodological stance, like that of Niglas, is pragmatic. I am not adopting the Pragmatic philosophy to which I referred above. In the present study, the research questions suggested that more than one method would be required, if all questions were to be answered well. However, the primary purpose of the design was not to triangulate findings for individual questions, although some convergence was anticipated and some data were used both quantitatively and qualitatively. Rather, the purpose was to develop a mosaic of knowledge (Hammersley, 2001) around questions that are discrete, but closely related. To this end, I have chosen to use a mixed method design, not to answer each question by several means, but to address each question rigorously, by the *best possible* means.

3.3.2 Methodology: terms and taxonomies for the study

This sub-section briefly outlines the methodological classifications that I have used in the study. I am defining these classifications as: purpose, integration level, design term, temporal properties and method status. For ease of reading, the classifications are summarised first in Table 3.1 and then expanded.

Table 3.1 Summary of design classifications

Methodological aspect	Classification	Source
Purpose	Expansion	Greene et al. (1989)
Integration level	Theoretical	Moran-Ellis et al. (2006)
Design term	Mixed method	Teddlie & Tashakkori (2003)
Temporal properties	Sequential design	Niglas (2000)
Method status	Equivalent status	Niglas (2000)

- The *purpose* of using a mixed method design was to widen the scope of the research, encompassing related but separate questions. Different

methods addressed different questions. This fits the *expansion* type within Greene et al.'s purpose taxonomy.

- The *integration level* refers to the relationship between the methods used, i.e. the stage of the study at which they come together. My own approach fits a model of *theoretical integration*, since it: '... does not combine the methods or the analysis, but, rather, takes each set of findings and brings them together into one explanatory framework.' (Moran-Ellis et al., 2006, p. 55)
- The *design term* refers to the label selected for the study and consistently used. I have chosen to describe my design as '*mixed method*', since:

'*Mixed method research* (authors' original italics) studies use qualitative and quantitative data collection and analysis techniques in either parallel or sequential phases [but] they are often marginally mixed in that they are frequently either qualitative or quantitative in the type of questions they ask and the type of inferences they make at the end of the studies.' (Teddlie & Tashakkori, 2003, p.11)

- The *temporal properties* refer to the chronology of method implementation. This study fits a *sequential design* model (Niglas, 2000) of quantitative-qualitative-quantitative type. The order of the hyphenated words denotes the order in which the methods were implemented.
- The *method status* refers to method dominance, i.e. whether the methods are of equivalent importance or not. This study fits an *equivalent status* model (Niglas, 2000), since the quantitative and qualitative components carry equal weight. There are various shorthand styles in which researchers can express their status model. For the present study, an appropriate notation for the model would be Miles and Huberman's QUANT–QUAL– QUANT (1994). Their capitalisation throughout suggests that neither the quantitative nor the qualitative element is more dominant than the other and that is correct for this study. In contrast, Morse's QUAN-qual notation (2003) is not applicable, since the capitals followed by lower case refer to designs that are deductively driven, not those with equivalent status methods. In other words, QUAN-

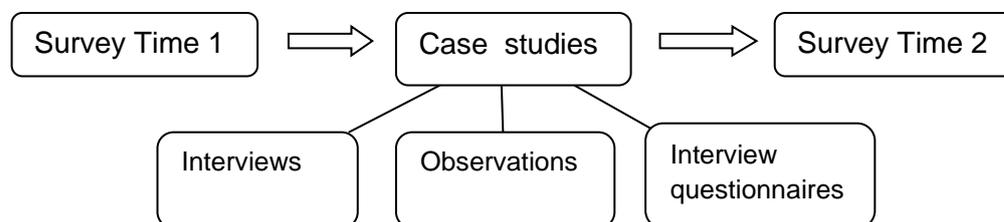
qual indicates that the quantitative method or methods are dominant and that the qualitative method or methods have a subsidiary role. The present research does not conform to that model.

3.3.3 Overview of methods: choice and purpose

Relatively few studies of SLI have used qualitative or mixed methods. Some exceptions are Simkin and Conti-Ramsden (2009) on young people recalling their experiences of life in LRBs, Palikara, Lindsay and Dockrell (2009) on post-16 outcomes, and Lindsay and Dockrell (2004) on parents' concerns about the needs of their children. Markham et al. (2009) also used a qualitative method, a modified focus group technique, in their study of 6-18 year olds who had a broader range of primary SLCN, including SLI. The views of young people with SLI themselves have been particularly under-investigated (Palikara et al., 2009) and further research on their perceptions is warranted. A decision was therefore made to include this important element in the present study.

Three main methods were used. These were: survey, observations and interviews. A short interview questionnaire was also used, as a subsidiary method. The choice of methods reflected the study's focus on both individual and environmental factors in the social well-being of children with SLI. Figure 3.1 shows the order in which the methods were carried out.

Figure 3.1 Sequence of method implementation



The survey was the only quantitative method used. The purpose was to measure the social acceptance and social anxiety of children with receptive SLI

at two time points around secondary transition and to compare measures with those of TD peers.

The observations, interviews and interview questionnaires were qualitative methods employed within a set of pupil case studies. These were conducted after secondary transition had taken place. Note that 'case study' is defined here as a strategy (Robson, 2002), not as a method, and it denotes an overarching approach within which several specific methods are used.

The qualitative methods served the following purposes. The observations focused on pupils' social participation in a classroom context, alongside TD peers. The interviews explored perceptions of pupils' social acceptance, social participation, friendship, social anxiety and of the factors *associated* with these. The interview questionnaires provided a further perspective on pupils' overall social position, particularly in the classroom. Collectively, the methods explored the three social position constructs of interest and their relationship with social anxiety. Importantly, they went further and examined the ecological relationships between the constructs and a number of personal and environmental factors.

I did not include peer sociometric nominations. As I observed in Chapter 2, sociometric surveys have been widely used to gather information about children's peer social position, including those with SEN. A very recent example for children in a primary LRB, some of whom had SLI, is that of Laws, Bates, Feuerstein, Mason-Apps and White (2012). Sociometry refers to a collection of methods whereby children are asked to nominate peers with whom they would or would not wish to work and/or spend social time (see Hymel, Vaillancourt, McDougall & Renshaw, 2002, for fuller discussion). Sociometry taps the extent to which children are judged favourably or unfavourably by their peers and identifies the degree of reciprocal nomination. Reciprocal nomination describes the situation within which individuals favourably nominate peers who in turn nominate them.

There are several reasons for omitting sociometry from this study. Firstly, it would not have been practical to conduct sociometry in contexts outside school and these contexts are important to the study. Hymel et al. (2002) noted that

researchers have generally evaluated sociometric status in the classroom: 'However, the classroom and school context ... reflects neither the breadth nor the dynamic nature of children's peer interactions ... Consideration of a more diverse range of social groups becomes increasingly important with age ...' (p. 273). Hymel et al. referred here to internet contact with peers, the neighbourhood and extracurricular groups. Secondly, I refer to Bronfenbrenner's view that in order to be meaningful, sociometry should not be a single, piecemeal event, because it: '... requires the envisagement of both the individual and the group as developing organic units.' (2005, p. 26). Such development requires the passage of time. Since time constraints in the present study would only permit one sociometric data collection for each pupil, sociometry would have shed feeble light on the developmental processes that were pivotal to Bronfenbrenner's position. Thirdly, sociometric nominations do not reveal the presence or quality of close friendships, which may exist even in children who are apparently rejected (Farmer & Farmer, 1996), nor explain *why* rejection occurs for some children (Avramidis, 2010). The present study is concerned with both these issues.

Summing up, the decision to use each method was based on the ability of the method to address one or more of the research questions as thoroughly as possible. The decision not to use sociometry was made primarily on the same grounds, but also for more practical reasons. Overall, the survey method was employed to address the first four research questions and the methods of the case study strategy (interviews, observations and interview questionnaires) to address the last two.

3.4 Research design (1): quantitative study

3.4.1 Research questions addressed by this design

Question 1. Does the level of social well-being in pupils with receptive SLI differ from that of their typically developing peers around the time of secondary transition?

Question 2. Are there associations between social position, social anxiety and the severity of receptive SLI?

Question 3. Do changes in social well-being occur between the end of primary education (Year 6) and the start of secondary education (Year 7)?

Question 4. What variables can predict social anxiety and social position over the transition period?

3.4.2 Hypotheses and their links with the research questions

Table 3.2 shows the seven hypotheses and null hypotheses, the variables and the statistics used to test each hypothesis. The first page of the table relates to hypotheses 1, 2 and 3 and the second page to hypotheses 4, 5, 6 and 7. To establish the links, I have bracketed after each hypothesis the number of the relevant research question.

3.4.3 Methods and tools

Survey

Surveys allow hypotheses to be tested and a medium-sized data set to be managed within a realistic timescale (Burton, 2000). Further: 'They provide a relatively simple and straightforward approach to the study of attitudes, values, beliefs and motives.' (Robson, 1993, p.128). Surveys can be categorised in different ways, but relevant distinctions for the study are between descriptive and analytic types (Oppenheim, 1992) and between cross-sectional and longitudinal types (Robson, 1993). The survey used in this study was analytic. An analytic survey: '... is less orientated towards representativeness and more towards finding associations and explanations.' (Oppenheim, 1992, p. 21). The survey was also longitudinal, with measures being taken on two occasions. Self-report measures were primarily used in the survey, reflecting the growing interest in children's perception of their own social position (Hymel et al., 2002, citing McDougall et al., 2001).

Table 3.2 Hypotheses, variables and statistical tests

Hypotheses 1-3	Independent variables	Dependent variables	Covariables	Statistical tests
<p>H1. Measures of social acceptance will be lower at Time 1 and Time 2 in SLI participants than in TD comparisons. (Question 1)</p> <p><i>H1o Measures of social acceptance will not be lower in SLI participants than in TD comparisons at Time 1 or Time 2.</i></p>	Group	<p>Social acceptance</p> <p>Social acceptance (teacher ratings) <i>Time 1 only</i></p>		<p>One-way MANOVAs</p> <p>Mann-Whitney U <i>Time 1 only</i></p>
<p>H2. Measures of social anxiety will be higher at Time 1 and Time 2 in SLI participants than in TD comparisons. (Question 1)</p> <p><i>H2o Measures of social anxiety will not be higher in SLI participants than in TD comparisons at Time 1 or Time 2.</i></p>	Group	Social anxiety (composite)		One-way MANOVAs
<p>H3. There will be a relationship between social acceptance (self-ratings), social anxiety, receptive language level and verbal/non-verbal discrepancy in SLI participants at Time 1 and Time 2. (Question 2)</p> <p><i>H3o There will be no relationship between these variables at Time 1 or Time 2 in SLI participants.</i></p>			<p>Social acceptance</p> <p>Social anxiety (composite)</p> <p>Social anxiety (FNE)</p> <p>Social anxiety (SAD-New)</p> <p>Social anxiety (SAD-General) <i>Time 1 Spearman's rho and Time 2 Pearson r only</i></p> <p>Receptive language level</p> <p>Verbal/non-verbal discrepancy</p>	<p>Pearson product-moment correlation coefficient (r)</p> <p>Spearman's Rank Order Correlation (ρ)</p>

Hypotheses 4-7	Independent variables	Dependent variables	Covariables	Statistical tests
<p>H4. Measures of social acceptance (self-ratings) will change in SLI participants between Time 1 and Time 2. (Question 3)</p> <p><i>H4o There will be no changes in social acceptance measures in SLI participants between Time 1 and Time 2.</i></p>	Educational phase	Social acceptance		Paired samples t-test
<p>H5. Measures of social anxiety will change in SLI participants between Time 1 and Time 2. (Question 3)</p> <p><i>H5o There will be no changes in social anxiety measures in SLI participants between Time 1 and Time 2.</i></p>	Educational phase	Social anxiety (composite)		Paired samples t-test
<p>H6. Social anxiety at Time 1 and Time 2 will be predicted from combined social, scholastic and athletic measures (self-ratings) in SLI participants. (Question 4)</p> <p><i>H6o Social anxiety will not be predicted at Time 1 or Time 2 from these measures in SLI participants.</i></p>	<p>Social acceptance</p> <p>Scholastic performance</p> <p>Athletic performance</p>	Social anxiety (composite)		Standard multiple regression
<p>H7. Social acceptance (self-ratings) at Time 1 and Time 2 will be predicted from combined verbal/non-verbal discrepancy and social anxiety sub-scale measures in SLI participants. (Question 4)</p> <p><i>H7o Social acceptance will not be predicted at Time 1 or Time 2 from these measures in SLI participants.</i></p>	<p>Social anxiety (FNE)</p> <p>Social anxiety (SAD-New)</p> <p>Social anxiety (SAD-General) <i>Time 2 only</i></p> <p>Verbal/non-verbal discrepancy</p>	Social acceptance		Standard multiple regression

This survey comprised three questionnaires from two different scales: the Self-Perception Profile for Children (Harter, 1985) and the revised Social Anxiety Scales for Children (La Greca, 1999). Note that from Harter's questionnaire, only items relating to social, scholastic and athletic self-perception were administered, these being the areas of theoretical interest to the study. From La Greca's questionnaire, all items were administered, since all were relevant.

3.4.3.1 Self-Perception Profile for Children: description and rationale for use

The Self-Perception Profile for Children (SPPC) is a widely used measure of children's self-judgements over six domains, Each has its own sub-scale and these can be rated discretely. The child version includes five specific domains, i.e. scholastic competence, social acceptance, athletic competence, physical appearance and behavioural conduct. A non-specific area, global self-worth, is also included. Note that in only two domains do the items directly measure competence; the rest involve self-adequacy rather than actual ability. The profile, which has 36 questions (six for each domain), is rated on a 4-point Likert format. Higher ratings correspond with higher self-perception. The SPPC was used for the following reasons:

- It has been administered successfully in previous studies of children with SLI. For example, Lindsay et al. (2002) followed up 7-8 year olds at 10-11 and 11-12 years, using this measure. It was also employed by Jerome et al. (2002) with both 6-9 year olds and 10-13 year olds. This evidence of prior use is important, since children with SLI might be expected to struggle with the wording of certain questionnaires standardised on populations with typical language development.
- The SPPC social measure taps social acceptance, not social skills. This important distinction was discussed in Chapter 2. However, the wording of the six social items implicitly recognises the connection between social acceptance, social participation and friendship (see Appendix 1 for the six social items). This makes the SPPC particularly suitable for addressing the three social position domains of the study.

- In Chapter 2, I noted that the possession of high-status abilities, particularly athleticism, may enhance the social position of children with SEN. Data on athletic competence was therefore important to the study, making the athletic domain in SPPC particularly valuable. Scholastic self-perception may also be relevant to social position. Harter (1985) reported moderate correlation between these two domains, although it was less marked as children approached adolescence.
- The SPPC has a condensed teacher version. Since teachers work so closely with children, their perceptions are important. Use of the teacher version allowed a further comparison to be made between the social ratings of pupils with and without SLI.

3.4.3.2 Revised Social Anxiety Scales for Children and Adolescents: description and rationale for use

The revised Social Anxiety Scales for Children (SASC-R) has 22 items, of which four are unrelated filler items, e.g. 'I like to read'. The rest of each scale is divided into three sub-domains: fear of negative evaluation from peers (FNE), social avoidance and distress in new social situations (SAD-New) and general social avoidance and distress in the company of peers (SAD-General). Rating is on a 3 or 5-point Likert format. The 5-point has higher reliability and is therefore preferred (La Greca & Stone, 1993). Higher scores correspond with higher social anxiety (see Appendix 1 for the 5-point version). There is a parent version which was not included in this study. The SASC-R was used for the following reasons:

- Unlike alternatives such as the Multidimensional Anxiety Scale for Children (March, 1997) and the Revised Children's Manifest Anxiety Scale (Reynolds & Richmond, 1985), SASC-R measures social anxiety only, not anxiety types that are outside the scope of the study.
- Administration takes approximately ten minutes. This is important for a population who may be challenged by the processing demands of a longer measure such as the Social Phobia and Anxiety Inventory for Children (Beidel, Turner & Morris, 1998).

- The measure has been designed for an appropriate age range, i.e. 6-13 year olds. The 5-point format can be used successfully from 7 years (La Greca, 1999). The child and adolescent versions are very similar, allowing flexibility of choice for pupils only just approaching adolescence. This similarity also allowed the same version (the child version in this case) to be used at both times. This avoided the potential confound of using non-identical measures at the two data collection times.
- SASC-R is suitable for research purposes (La Greca, 1999), whereas some measures suitable for the age group, such as the Liebowitz Social Anxiety Scale for Children and Adolescents (Masia-Warner, Storch, Pincus, Klein, Heimberg & Lieberwitz, 2003) are designed for clinical use only.
- Correlations between the measure and (unspecified) self-rated measures of social acceptance have been reported by Verhulst and van der Ende (2006) as moderately high (-.47)

3.4.4 Reliability, validity and recognition of bias

Reliability and validity are the terms commonly used when considering the trust that can be placed in quantitatively derived findings (Robson, 1993). The terms are related but distinct. Reliability refers to the consistency of results using a measure conducted, say, on separate occasions or by different administrators. Validity encompasses reliability, but is essentially determined by whether a tool measures what it purports to measure. This is known as construct validity. There is no single way of establishing construct validity, but Robson advocated 'intuitive reasonableness' rather than: '... an unhealthy concentration on this aspect of carrying out an enquiry.' (1993, p. 69)

Internal validity also needs to be considered. Internal validity refers not to the structure of a tool itself, but to situations that may affect measures derived from its use. Examples, based on those listed by Robson (1993), include inconsistent administrative procedures or life-changing events that influence a participant's responses. Longitudinal surveys are particularly vulnerable to selective attrition, which may lead to a biased sample on re-administration (Oppenheim, 1992).

For example, cases that withdraw during a longitudinal survey could be more anxious or disaffected than those remaining.

The recognition of bias is important. It has many guises and just three common examples are given here. Firstly, participant bias may occur (Robson, 1993). For example, pupils might respond to a survey questionnaire in a way likely to cast themselves in a favourable light. Secondly, there is the potential threat of researcher bias. Several situations can give rise to it, including a researcher's own professional positionality (Markham et al., 2009). Thirdly, there is the danger that arises from the use of non-randomised samples, since: '...all kinds of largely unspecifiable biases and influences are likely to influence who gets sampled.' (Robson, 1993, p.141)

Threats to reliability and validity, including bias, cannot always be prevented. Wherever possible, a researcher needs to identify any threats and take steps to remove them. If removal is not feasible, reflexivity will at least help to reduce their impact on the thesis (Markham et al., 2009). The reliability and validity of the quantitative tools used in the study are described next. Later in the section, I will outline the threats posed by their use in the study and the steps taken to limit the impact of these threats.

3.4.4.1 Self-Perception Profile for Children: reliability and validity

- The current version of the SPPC was standardised on four samples of American children of each gender. The sampling spanned the third to eighth school grades, i.e. ages approximately 8-13 years (Harter, 1985). Samples were drawn mainly from lower middle to upper middle class neighbourhoods in Colorado, USA, and were predominantly Caucasian. The standardisation was considered appropriate to the present study in terms of gender, age and ethnicity. However, non-standardisation for a British sample was recognised. In addition: 'The scale in its present form may not be appropriate for special groups of children.' (Harter, 1985, p. 21). Harter particularly referred here to children defined as 'mentally retarded', whereas I noted above that the scale has a proven track record with SLI samples. Nonetheless, since some participants in the

present study had severe receptive SLI, further steps were needed to reduce potential threats to validity (see 3.4.7.4).

- For each sample, the internal consistency reliabilities are acceptable. For the domains of interest, figures based on Cronbach's Alpha, are: Social Acceptance .75 to .80; Scholastic Competence .80 to .85; Athletic Competence .80 to .86 (Harter, 1985). Of these, note that the highest alphas in both the social and athletic domains were in Samples A and B, whose participants were of similar age to the participants of the present study. In the scholastic domain, the highest alpha was in Sample B.
- Factor patterns for the current version confirm that each specific subscale defines its own factor, with substantial subscale loadings, whereas: '... the range of average cross loadings across factors is between .04 and .08, very negligible.' (Harter, 1985, p.18). Of relevance, for Samples A and B, factor patterns were between .45 and .78 for Social Acceptance; between .52 and .73 for Scholastic Competence; and between .59 and .81 for Athletic Competence.
- Intercorrelations between the six subscales were reported as higher for the two youngest grades than in the fifth to eighth grades (Harter, 1985). However, of relevance to the study, it is worth noting that Social Acceptance and Athletic Competence were moderately intercorrelated for all ages in the sample (.31 to .53 across grades, .44 and .34 in the two oldest samples).
- Re-test reliabilities were found to be fairly consistent, as long as time between administrations is not excessive (Shevlin, Adamson and Collins, 2003). The SPPC was therefore considered reliable for the purposes of the present study, i.e. for re-testing within one year.

3.4.4.2 *Revised Social Anxiety Scales for Children: reliability and validity*

- SASC-R, was standardised on 587 American children of each gender. The sampling spanned the fourth to sixth school grades, i.e. ages approximately 9-11 years (La Greca, 1999). Participants were predominantly middle-class. The largest ethnic compositions were

Caucasian (approximately 60%) and Hispanic (approximately 30%). The standardisation was considered reasonably appropriate to the present study for gender and age, though somewhat less for ethnicity and social class. However, non-standardisation for a British sample was recognised and addressed (see below). Additionally, SASC-R is not standardised for special populations. As with SPPC (above), this posed potential challenges to validity. Sub-section 3.4.7.4 lists the steps taken to reduce validity problems in relation to the present SLI sample.

- Internal consistency reliabilities, based on the 5-point format, are acceptable and are higher for SASC-R than for the unrevised SASC (La Greca, 1999). Cronbach Alpha figures are: FNE .86; SAD-New .78; SAD-General .69, for unselected populations. The respective equivalents for clinical populations are: .90; .74 and .60.
- SASC-R has three factors, compared with the two factors (FNE and a single social avoidance and distress factor: SAD) of the unrevised SASC. For the revision: 'Confirmatory Factor Analysis supported this three factor model of social anxiety ..., with a Goodness of Fit Index of .86 (.82, adjusted) and a Coefficient of Determination of .903.' (La Greca, 1999, p. 4)
- 'Correlations among three subscales of the SASC-R ... indicate that the subscales are significantly related, but distinct.' (La Greca, 1999, p. 8). This allowed both the composite scale and the subscales to be used in the present study. Interscale correlations are between .45 and .59 on the 5-point format.
- Selected results of test-retest reliabilities using SASC-R are: total (composite) score .70; FNE .63; SAD-New .61; SAD-General .51 (all at $p < .001$). Note that retest was after four months. La Greca (1999), citing Vincent, Lopez and La Greca (1996), also noted lower but still significant retest reliabilities after six years, when using SASC-R followed by SAS-A. SASC-R was therefore considered reliable for the purposes of the present study, i.e. for re-testing within one year.

3.4.5 Participants

3.4.5.1 Descriptive statistics

Tables 3.3 to 3.8 summarise the descriptive statistics for pupil participants and the settings from which they were sampled. For pupil participants, these tables comprise data on SEN type and level, gender, socio-economic status, scholastic levels and non-verbal standardised scores. For participants with SLI, data on verbal (receptive language) standardised scores and school placement type are also provided.

3.4.5.2 Expansion of the tables

Table 3.3 Time 1 demographic data by group and combined

Group	Gender		Total	FSM*	Code of Practice stage		
	Male	Female			Statement	School Action Plus	School Action
SLI	23 (65.7%)	12 (34.3%)	35	8	12	22	1
TD	18 (51.4%)	17 (48.6%)	35	6	n/a	n/a	n/a
SpLD	5 (45.5%)	6 (54.5%)	11	0	0	4	7
Combined	46 (56.80%)	35 (43.20%)	81	14	12	26	8

* FSM denotes eligibility for free school meals

The 81 participants, aged 10-11 years when they were recruited, attended English primary schools. Primary refers here to schools with either junior (7-11 years) or full-age primary (4-11 years) designation. The participants individually represented one of three groups: receptive SLI, specific learning difficulties of dyslexic type (SpLD) and typical development (TD). The SLI group was the focus; the other groups served as comparisons for particular analyses. Tables 3.3 and 3.4 show comparative numbers and gender percentages at Time 1 and Time 2. Note that the SpLD group did not participate in the survey at Time 2 and data for these participants are therefore excluded from Table 3.4.

The participants' socio-economic backgrounds ranged from professional and managerial to those eligible for free school meals (FSM). Data for the latter are shown in Tables 3.3 and 3.4.

Tables 3.3 and 3.4 also show the numbers of participants at each stage of the SEN Code of Practice. At the time of writing, the three stages of Statement (indicating a particularly high level of need), School Action Plus and School Action remain current.

Table 3.4 Time 2 demographic data by group and combined

Group	Gender		Total	FSM*	SEN Code of Practice stage		
	Male	Female			Statement	School Action Plus	School Action
SLI (full)**	17 (60.70%)	11 (39.30%)	28	8	11	17	0
TD	12 (52.20%)	11 (47.80%)	23	4	n/a	n/a	n/a
Combined	29 (56.86%)	22 (43.14%)	51	12	11	17	0

* Denotes eligibility for free school meals ** Denotes full sample, not reduced sample for TD matching

At Time 1, all but two participants (one of each gender and both with SLI) were identified as White British. Of the two exceptions, the male was of unspecified White European background; the female was British, of unconfirmed ethnicity. At Time 2, the male did not participate. Since the SLI sample was highly homogeneous and the comparison samples were entirely White British, ethnic data are not included in the tables. All participants spoke English as a first or main language.

Table 3.5 Participant schools, local authorities (LAs) and pupils

Participant type	Time 1	Time 2
Schools	26	18
Local authorities	9	8
Pupils	81	51

The participants represented a wide range of geographical areas across southern, central and eastern England. These encompassed urban, mixed and rural localities, served by a variety of administrative models, including shire counties and unitary authorities. The participating schools ranged from very small village primaries to large city comprehensives. Table 3.5 shows the numbers of participating schools and local authorities (LAs) at Time 1 and Time 2. The much lower pupil numbers at Time 2 reflect both sample attrition and the exclusion of participants with SpLD from the Time 2 descriptive statistics.

Table 3.6 Mean verbal and non-verbal standardised scores and chronological age with standard deviations (SD), by group and combined

Group	N Time 1	N Time 2	Verbal scores	Non-verbal scores	Chronological age in months Time 1	Chronological age in months Time 2
SLI	35	28	68.03 (SD 7.93)	93.79 (SD 9.55) *	131.54 (SD 3.13)	142.79 (SD 3.89)
TD	35	23	n/a	96.71 (SD 8.83)	133.74 (SD 3.54)	146.05 (SD 3.47)
SpLD	11	n/a	n/a	94.43 (SD 13.13) **	136.33 (SD 3.64)	n/a
Combined	81	51	68.03 (SD 7.93)	95.21% (SD 9.55) ***	133.03 (SD 3.69)	144.42 (SD 3.68)

* based on $n = 33$ ** based on $n = 7$ *** based on $n = 75$

Table 3.6 includes verbal standardised scores for the SLI group only. These were obtained once only, no more than one term prior to recruitment. The comparison groups were not assessed on this measure. Note that Table 3.6 includes both non-verbal scores derived from standardised tests or dynamic assessment and proxy non-verbal scores based on National Curriculum levels in Maths and/or Science (see 3.4.6.4 for clarification of terms and procedures).

Table 3.7 Frequencies and percentages of pupils with SLI attending each school placement type at Time 1 and Time 2

School placement type	Time 1 number with percentages	Time 2 number with percentages
LRB	14 (40.00%)	9 (32.14%)
Other specialist provision	0 (0.00%)	2 (7.14%)
Unresourced mainstream	21 (60.00%)	17 (60.71%)
Totals	35 (100.00%)	28 (100.00%)

As noted, all the participants were enrolled in mainstream primary schools at Time 1, but of those with SLI, 12 attended an LRB full time and two had dual placements (Table 3.7). These two attended their local school for part of the week and an area LRB for the rest. The dual placements are subsumed into the LRB figures in Table 3.7. Note that changes in placement frequencies between Time 1 and Time 2 reflect both attrition within the sample and a few changes in placement type. To illustrate, the two part time LRB pupils transferred full time to mainstream secondary schools without LRBs ('unresourced mainstream'), one transferred from a mainstream primary placement to a secondary LRB and two transferred from primary LRBs to specialist schools for pupils with complex needs.

Table 3.8 Frequencies and percentages *of pupils at each National Curriculum (NC) level, by group and combined

Group	NC English levels				NC Mathematics levels			
	<3	3	4	5	<3	3	4	5
SLI	17 (48.57 %)	14 (40.00 %)	4 (11.43 %)	0 (0.00 %)	13 (37.14 %)	15 (42.86 %)	7 (20.00 %)	0 (0.00%)
TD	0 (0.00 %)	4 (11.43 %)	24 (68.57 %)	7 (20.00 %)	0 (0.00 %)	4 (11.43 %)	25 (71.43 %)	6 (17.14 %)
SpLD	0 (0.00 %)	5 (45.45 %)	4 (36.36 %)	2 (18.18 %)	0 (0.00 %)	6 (54.55 %)	4 (36.36 %)	1 (9.09%)
Combined	17 (20.99 %)	23 (28.40 %)	32 (39.51 %)	9 (11.11 %)	13 (16.06 %)	25 (30.86 %)	36 (44.44 %)	7 (8.64%)

- Group percentages are for that sample only. Combined percentages are for the sample as a whole.

At the time of recruitment, participants were working at a wide range of National Curriculum (NC) levels in English and Mathematics. These levels were reported from classteacher assessment. Table 3.8 provides data for NC Levels <3 -5, based on participants' subsequent attainments on the Key Stage 2 Standard Assessment Tasks (SATs). These national tests, for which Level 4 is considered an average attainment, took place in the summer term, approximately two months before the participants completed their primary schooling. Note that the data on NC levels below 3 were derived from classteacher assessment only, since pupils working at these lower levels did not participate in the SATs. This only applied to participants in the SLI group; in the other groups, there were no scores below Level 3. Additionally, data for one SLI participant who achieved Level 4 in both English and Mathematics were based on teacher assessment only in an area that boycotted the SATs in that school year. Science NC data are not included in the table, because Science

was no longer subject to SATs at the time of the study and very few schools confirmed their teacher assessment levels.

3.4.6 Sampling

3.4.6.1 Sampling strategies

Robson (1993) described probability sampling strategies, including systematic (selecting every *n*th case from a starting point) and stratified (drawing proportionately from groups representing certain characteristics). These are variants of randomisation, whereby cases are selected by (relative) chance, thus increasing the probability of the sample being representative of the population from which it is drawn. Robson also described convenience sampling, which is widely used but has limitations for generalising findings to the population of interest. For this survey, randomisation was not feasible, because of its fine-grained nature. In order to meet the criteria, participants needed to have receptive SLI, be in Year 6 and be placed in a mainstream primary school. This greatly restricted the number of potential participants. The sampling strategy was therefore convenience, although every attempt was made to maximise representation across geographical areas (see 3.4.6.3 for the SLI sampling criteria).

3.4.6.2 Purpose of the sampling strategy used

The primary purpose of the sampling strategy was to recruit participants for the longitudinal survey. Approximately 30-40 participants with receptive SLI were sought, along with similar numbers of TD and SpLD participants for comparison. The objective was to match these groups on the key variables of age, gender, socio-economic status and non-verbal scores, allowing social well-being measures from the survey to be compared statistically between the groups.

Cases with SpLD were sought as the second comparison, in order to discount the hypothesis that any differences in the measures between the SLI and TD groups were due to the SLI group's *scholastic* difficulties, rather than to their *language* difficulties. Other researchers, including Lindsay et al. (2002), Lindsay et al. (2008) and Tomblin (2008), have used comparison groups with general learning difficulties. For the present study, a group with general difficulties (GD)

was ruled out, since it would have been difficult to distinguish GD cases from lower-achieving TD cases without carrying out non-verbal assessments. This was impractical at the time of recruitment and the absence of non-verbal scores could have given rise to a serious confound. The role of *specific* SEN in social well-being was, in any case, considered more pertinent to the study than the role of general learning difficulties. Since both SLI and SpLD are specific forms of SEN, SpLD was the natural comparison. Unfortunately, the problems of recruiting a sizeable and well-matched SpLD group soon became apparent and the sampling purpose shifted towards finding a smaller SpLD sample for qualitative comparison only.

3.4.6.3 Sampling criteria

SLI criteria

In Chapter 2, I outlined the commonly used diagnostic criteria, notably the DSM-1V, ICD-10 and Stark and Tallal's taxonomy. I emphasised the complexity of defining and diagnosing SLI and the challenges that this poses for empirical researchers. Table 3.9 shows the criteria selected for the present study.

The table indicates how the discrepancy criteria for SLI were applied. A verbal/non-verbal discrepancy of 1 SD or more was felt to be a useful indicator of SLI. However, the discrepancy model was adapted to allow non-standardised or NC evidence to be used in certain circumstances. Note that the non-verbal cut-off for standardised scores was set at 80. The traditional cut-off of 85, i.e. 1 SD below normal distribution (Stark & Tallal, 1981) is still used (e.g. by Archibald & Gathercole, 2006a; Wadman et al., 2011a), although I noted in Chapter 2 that cut-offs as low as 70 (e.g. Clegg et al., 2005) have also been reported. However, 80 was considered a reasonable cut-off, since it has been used quite frequently in studies (see Table 3.9) and encompasses the range of ability commonly found in mainstream pupils with or without SEN. For illustration, non-verbal scores between 80 and 84 (inclusive) were found in four TD, seven SLI and three SpLD participants in the present study.

Table 3.9 Criteria and rationale for SLI sampling

Criteria	Rationale
Receptive language at least 1 standard deviation (SD) below age expected scores on one or more sub-tests of a standardised language test	A discrepancy of 1 SD between verbal standardised scores and chronological age is commonly used in empirical research of this kind (e.g. Durkin & Conti-Ramsden, 2007).
Clinical evidence of SLI from an SLT, e.g. profile has atypical features or receptive grammar is substantially weaker than vocabulary	Clinical presentation helps differentiate SLI from normal but delayed pattern that might be attributed elsewhere, e.g. to social disadvantage or mild GD
Standardised scores for receptive language at least 1 SD below scores on one or more standardised non-verbal tests. If discrepancy less than 1 SD, evidence required of the participant routinely performing less well on group administered tests than on individually administered tests or day to day classroom tasks.	A discrepancy of 1 SD between verbal and non-verbal standardised scores is specified by ICD-10 (1993). But pupils with SLI may experience slow visual processing (Lum et al., 2010) when carrying out non-verbal tests, or fail to understand the verbal instructions for such tests. In these cases, non-verbal scores may be lower than expected and discrepancy with verbal scores therefore less than 1 SD. In such cases, especially where the discrepancy is near the 1 SD borderline, it is reasonable to use other forms of evidence.
Non-verbal score at least 80 on a standardised test. If a standardised score is unavailable, alternative non-verbal evidence is required that non-verbal abilities are within permitted range, e.g. dynamic assessment (DA) by an educational psychologist. Exceptionally, proxy scores based on NC levels may provide evidence of meeting non-verbal criterion.	A cut-off standardised score of 80 is commonly used in empirical research of this kind (e.g. Fujiki et al., 1999; Jerome et al., 2002; Durkin & Conti-Ramsden, 2007; Botting & Conti-Ramsden, 2008; Redmond, 2011). But where learning or language difficulties exist, dynamic assessment can provide valuable alternative evidence (Hasson & Botting, 2010, citing Haywood & Lidz, 2007).
No frank additional forms of SEN, apart from those clearly derived from SLI, notably literacy difficulties and their impact on scholastic attainment	Other forms of SEN, e.g. autism, attention deficit hyperactivity disorder (ADHD) or severe behaviour problems (defined as physical or verbal aggression to peers and theft or destruction of work or belongings) needed to be excluded to avoid confounds.

TD criteria

In addition to matching the SLI sample on the key variables of age, gender, socio-economic status and non-verbal ability, TD participants were required to have no present or past SEN.

SpLD criteria

SpLD participants were not required to match fully the SLI group on the four key variables, because of their limited number. However, they were required to have no additional past or present SEN. It was particularly important to avoid recruiting pupils with co-existing or earlier speech and language impairments, in order to avoid overlaps with the SLI group. For recruitment purposes, reference was made to the criteria for SpLD listed in government guidelines to schools for the categorisation of SEN data (DfES, 2005). These guidelines specify three SpLD sub-types under a broader category of Cognition and Learning Needs; dyslexia (affecting literacy), dyscalculia (affecting mathematical development) and dyspraxia (affecting the organisation of movement). To meet these criteria on dyslexia, pupils would: ‘... have a marked and persistent difficulty in acquiring accuracy or fluency in learning to read, write and spell. Pupils may have poor reading comprehension, handwriting and punctuation. They may also have difficulties in concentration and organisation ...’ (p. 5)

For this study, pupils of primarily dyslexia sub-type were sought, since literacy problems would be likely to have the most pervasive impact on life in school. Limiting the SpLD sample to this sub-type would allow better exploration of the relationship between scholastic difficulties and social well-being in pupils participating in the SpLD case studies.

3.4.6.4 Sampling procedures

Procedures for SLI sampling

The SLI sampling was conducted in steps. At first, this was quite exploratory, because in most geographical areas the gatekeepers to suitable cases were not easy to identify beforehand.

The first step was to contact local authority services for SLI. Educational rather than health services were targeted at this stage on the basis that they might be more able to facilitate my access to local schools. One local authority was well known to me in my professional capacity. This was the best single source of suitable participants, due to my familiarity with its schools, the speech and language therapy service (SLTS) and the advisory teaching service for SLI. A global email was sent to all other local authorities in England, asking for contact details of key educational personnel for school aged children with SLI. Such personnel were then emailed or telephoned. Concurrently, three English-speaking authorities in Wales and a single authority in Northern Ireland were contacted via their educational websites, although neither contact resulted in successful recruitment. Scotland was excluded, due to the later age of secondary transition there.

The initial response from authorities was quite high (approximately 70%), but the contacts provided were not always appropriate for children with SLI. Since each authority had a different SEN provision structure, it was often difficult to identify the relevant services from these initial contacts. A second procedural step was therefore taken. A further email was sent to the English authorities, asking them to confirm whether they maintained LRBs and in which schools the LRBs were located. Several LRBs were identified in this way, leading to successful recruitment.

This second step required care. Firstly, it was important to establish whether each LRB operated an inclusive policy whereby children mainly attended mainstream classes, or an older style 'unit' policy in which children were registered in the LRB and spent most of their time there. Only LRBs of the former type were sampled, since children in the latter would possibly have a very different social experience and may be viewed more negatively by TD peers (Laws et al., 2012). This would compromise the validity of the research design. Secondly, it could not be assumed that all pupils placed in LRBs had SLI. Indeed, Archibald and Gathercole (2006a) noted that in an area of north-east England, only about 13% of children in LRBs had SLI (10% for mixed receptive and expressive impairment; 3% for expressive only). Admissions

criteria for each LRB, together with their inclusion policy, were therefore clarified when I first made contact.

The third procedural step was to approach speech and language therapy managers by email or phone. Six were contacted and three responded. Their service case databases were not cross-referenced to identify children with SLI, so each manager asked their team colleagues to scrutinise their caseloads for suitable children and to contact me directly.

Together, the three procedural steps led to the successful recruitment of 31 participants with receptive SLI, from 22 primary schools across eight local authorities. To increase this sample, four more participants were recruited. Two were from additional schools in an authority already sampled; the other two were from a single school within another authority. All four participants were recruited via integrated SLT and advisory teaching services known to me personally. The increase was achieved by 'staggering' the sampling and data collection into the following academic year. The second of the two authorities had responded positively to contact in the previous year, but was unable to help at that time, because their only Year 6 cases with receptive SLI had significant behavioural difficulties.

Once the full sample was obtained, additional checks were made that each case met the sampling criteria. Verbal and non-verbal data from SLTs, educational psychologists (EPs) and schools were scrutinised for evidence of this. Table 3.10 shows the standardised measures used as evidence. Note that two cases were assessed on more than one non-verbal measure.

I stated above that non-standardised evidence of non-verbal ability was sometimes accepted instead. This was either in lieu of missing non-verbal scores or for supplementary purposes. Such evidence was used in 12 cases. Of these, two had non-verbal standardised scores, but the verbal/non-verbal discrepancy was just below the borderline of 1 SD (see Appendix 2: case numbers 1 and 9). Another had a narrower discrepancy based on a group administered test (see Appendix 2: case number 4), but average non-verbal levels (actual scores were unspecified) on BAS-2 (Elliott, Smith & McCulloch, 1983).

Table 3.10 Verbal and non-verbal assessments used in SLI full sample, with number of cases assessed by each

Verbal test	N	Non-verbal test	N
Clinical Evaluation of Language Fundamentals – fourth edition (CELF-4)	28	Cognitive Abilities Test – third edition (CAT-3)	15
Test for Auditory Comprehension of Language – third edition (TACL-3)	1	Wechsler intelligence scale for children – fourth edition (WISC-4)	9
Assessment of Comprehension and Expression 6-11 (ACE)	5	British Ability Scales – second edition (BAS-2)	4
Test for Reception of Grammar (TROG) and British Picture Vocabulary Scale – second edition (BPVS-2) combined	1		

This was administered individually by an EP. The results of the BAS-2 were accepted as evidence, since the school SENCo confirmed that the pupil invariably performed much better in individually administered tests. She considered that the EP's findings reflected the pupil's ability better than the group test scores. This pupil was therefore included in the sample.

For the other nine cases, non-verbal standardised scores were unobtainable. Of these, four met the criteria via clinical presentation and dynamic assessment (DA) by an EP. DA differs from psychometric tests, because it evaluates potential for learning, rather than static performance at the time of assessment (Hasson & Botting, 2010). DA is based on the observation of strategies that the learner uses during scaffolded tasks, thus incorporating learner, assessor and task. The remaining five cases also met the criteria in terms of clinical presentation, but had no DA data. These cases were therefore given proxy non-verbal scores of 95 or 100, based on NC Mathematics and/or Science attainments that were within the average range, i.e. Level 4. English was not included in the proxy, because SLI very frequently interferes with the development of literacy. Average attainments in Mathematics and/or Science were therefore taken as some indicator that non-verbal ability was in the

required range. Of course, low attainments in these subjects did not necessarily indicate low ability, but pupils presenting low attainments could not be included in the sample in the absence of other non-verbal evidence.

The proxies were relatively crude non-verbal measures, but were considered adequate for including cases that had satisfactory clinical evidence. I do not claim that Key Stage 2 Mathematics and Science tests measure exactly the same things as non-verbal reasoning tests. However, Strand (2006) found significant intercorrelations (.64 for Mathematics and .56 for Science points scores) with the non-verbal component of CAT-3 (Lohman, Thorndike & Hagen, 2005).

The two cases (1 and 9) with a borderline verbal/non-verbal discrepancy were both in LRBs. Careful discussion took place with the respective SLTs and LRB teachers. The SLTs confirmed that the pupils' receptive language profiles continued to show atypical features, rather than an even profile of language delay. The teachers confirmed that the pupils usually became anxious or distracted in group-administered tests of any kind and had a history of under-performance in them. The discussions established that there was reasonable evidence that both cases met the SLI sampling criteria and they were therefore included.

Of final note, pupils' stage on the SEN Code of Practice did not influence sampling decisions for the SLI group, nor for the SpLD group. In other words, there was no attempt to include or exclude cases according to whether they had a statement of SEN or were supported at School Action Plus. Local authorities vary considerably in their statutory assessment rates and a statement of SEN has historically been required as a 'passport' to specialist provision such as LRBs. A pupil's SEN Code of Practice stage may not, in itself, differentiate severity of need. For example, if a local authority does not maintain specialist language provision, there may be no imperative to undertake full statutory assessment of a pupil as determined by the 1996 Education Act. At present, this is the route whereby pupils undergo a detailed multi-disciplinary investigation of their needs, which may result in the issuance of a statement of SEN. However, In the sample recruited for this study, the Code of Practice

stage did not clearly distinguish between pupils' receptive language profiles. That is to say that there were participants at School Action Plus whose language profiles closely resembled those of participants with statements of SEN.

TD sampling procedures

The majority of TD participants were recruited from the same schools as the SLI participants. However, this only applied to schools in which I carried out the Time 1 survey personally (i.e. 'visited schools'). 'Distance schools', i.e. the four which carried out the Time 1 survey themselves with nine participants, were not asked for TD comparisons. This was to avoid imposing an administrative burden on them that was incompatible with the British Educational Research Association (BERA) revised ethical guidelines (2004).

First of all, visited schools were asked to recruit a TD comparison for their own SLI case, based on the four matching variables detailed above. The last of these was initially problematic, because none of the TD pupils had undergone any non-verbal assessment in Year 6. Most were assessed by their schools early in Year 7, but I was unable to assess them earlier. Matching them with the SLI group on National Curriculum levels would clearly be unsatisfactory, since SLI often has a deleterious impact on these pupils' curricular attainments.

As an interim step, the Year 6 classteachers were therefore asked to discuss their perceptions of their chosen TD pupil's ability with at least two colleagues who had previously taught the pupil and to compare these with their perceptions of the SLI pupil's non-verbal ability. This consultation was also an opportunity for the current classteachers to check that the TD pupil had no earlier history of SEN of which they were unaware. The selection of TD matched cases by the current classteachers of the pupils with SLI was similar to the strategy used by Lindsay et al. (2002). However, to my knowledge, the further strategy of asking classteachers to consult colleagues who knew the children well has not been used in other studies.

TD comparisons for the SLI cases in distance schools were then sampled as follows. Firstly, data on the four matching variables were requested for the SLI

case(s) in each distance school, along with general demographic information on the area that the school served. Selected visited schools were then asked to recruit one or more additional TD participants, at least one of whom matched the variables of each distance SLI case. These schools were carefully selected to match the overall demographic characteristics of the distance school. Although this procedure meant that the TD sampling took place in a much smaller geographical area than the SLI sampling, it allowed reasonable case matching on three of the variables. In comparison, gender matching was less exact.

The TD cases were slightly over-recruited. This was done for two reasons. One was to protect against attrition effects at Time 2. The other was to maximise matching potential by creating a slightly larger pool of TD participants across a broad range of non-verbal ability. This over-recruitment would allow some retrospective re-matching, once the TD non-verbal scores were confirmed. In other words, if a child's non-verbal scores proved to be very different from their classteacher's estimate, a case that better matched the relevant SLI case could be substituted.

SpLD sampling procedures

I noted above that the SpLD sample was too small for its original purpose, i.e. statistical comparison of social well-being measures with those of the SLI and TD groups. This problem stemmed from time limitations. Broad geographical representation would have meant identifying several designated services for SpLD, a lengthy procedure, or prevailing on the distance schools with SLI cases to select additional pupils on their roll, i.e. those with SpLD. Neither course was realistic. Convenience sampling was therefore carried out over a narrower regional area within which I had some existing contacts and could carry out the survey myself.

Service managers for SpLD were asked to consult their colleagues about Year 6 pupils meeting the criteria outlined above. The services from whom I recruited only accepted referrals on pupils for whom there was clear evidence that difficulties were specific and not due to general learning difficulties, poor school attendance, or other factors. Schools that referred to these services were

required to demonstrate that appropriate diagnostic tests such as the Dyslexia Screening Test (Fawcett & Nicolson, 2004) had been carried out by a professional with qualifications in SpLD. The criteria for referral to the services were therefore stringent and were accepted as meeting the criteria for the SpLD sample of this study.

3.4.6.5 Issues arising from sampling

TD issues

Sampling of the TD group was relatively straightforward. However, non-verbal scores remained unavailable for eight of the 35 participants, because it was not the policy of their secondary schools to assess Year 7 pupils in this way. As with the SLI sample, the issue was addressed by allocating proxy scores. Scores between 90 and 105 were allocated on a similar basis to the SLI proxies, i.e. NC levels. Unlike the SLI proxies, the TD proxies included NC English at Level 4 or above, since these participants had no special needs that might adversely affect their literacy attainments.

SpLD issues

As noted, recruitment of the SpLD group was hampered by practical considerations. Unavoidably, the final SpLD sample was small and not fully matched with the other groups across all the variables; hence their exclusion from the statistical analysis.

SLI issues

Sampling of the SLI group was fairly complex. It was anticipated that local authority contacts such as SEN casework officers, EPs and advisory teachers might be well placed to identify suitable participants. However, this was not always the case.

Local authority casework teams hold databases on discrete categories of SEN, based on the Pupil Level Annual Schools Census (PLASC). I described this census in Chapter 2 and referred above to DfES guidance on the census categories for SpLD. I additionally noted in Chapter 2 that for pupils with a

primary need in speech, language or communication, the census sub-category was speech, language and communication needs (SLCN). Such pupils:

‘ ... may have difficulty in understanding and/or making others understand information conveyed through spoken language ... Their acquisition of speech and their oral language skills may be significantly behind their peers. They may use words incorrectly with inappropriate grammatical patterns, have a reduced vocabulary or find it hard to recall words and express ideas.’ (DfES, 2005, p. 8)

Recall from Chapter 2 that the SLCN sub-category includes children with SLI. However, the sub-category only confirms that SLCN, rather than autism, is a pupil’s primary need and it is not exclusive to SLI (Lindsay, 2011). As such, the sub-category had limited use for sampling purposes in this study, since the casework teams that I approached were unable to identify pupils with SLI from the PLASC data they held.

Some service professionals acted as intermediaries. For example, one EP facilitated the recruitment of several suitable cases from an LRB school with whom he worked closely. Surprisingly, sampling via advisory teaching teams was uneven. Most teams were designated for SLI, but many supported pupils with a more heterogeneous range of SLCN. Team leaders were well able to identify cases with a history of receptive language difficulties, but 23 of these cases (18 male and five female) proved unsuitable, due to language catch-up, additional SEN diagnoses since referral to the advisory team, or insufficient evidence that their receptive language difficulties were attributable to SLI. Recruitment via SLTs was much more straightforward, because they were able to make accurate clinical judgements about whether pupils had SLI. Moreover, SLTs only retained pupils with considerable *current* difficulties on their service caseloads, so they were fully conversant with pupils’ receptive language status and knew of any recent additional SEN diagnoses that would preclude their recruitment. In comparison, advisory teaching teams tended not to close pupil files completely, unless requests for team involvement had become extremely infrequent. Inevitably, some of these ‘dormant’ cases failed to meet the sampling criteria.

3.4.6.6 Considerations for analysis

All the cases within the definitive SLI sample were deemed suitable for analyses that did not involve verbal/non-verbal discrepancy. (Full details of the analyses conducted are given in Chapter 4.) However, much stricter sub-sampling criteria were applied for verbal/non-verbal discrepancy analyses. Only cases assessed on a common verbal measure and a common or highly correlated non-verbal measure were included in these analyses. Cases for whom non-verbal evidence was based on DA or NC proxy scores were excluded. Also excluded were cases whose verbal and non-verbal levels were based on different standardised measures that might be non-equivalent.

The accepted verbal measure was the Understanding Spoken Paragraphs sub-test of CELF-4 (Semel, Wiig & Secord, 2003). Since this sub-test taps both vocabulary and grammar, it was felt to be a suitable measure of 'real life' comprehension. The accepted non-verbal measures were the non-verbal reasoning scale of the above-mentioned CAT-3 (Lohman et al., 2005) or the Perceptual Reasoning Index of WISC-4 (Wechsler, 2003). Wright, Strand and Wonders (2005) reported a high correlation (.68) between the CAT-3 non-verbal reasoning scale and the WISC-3 performance intelligence quotient (PIQ). Further, the respective non-verbal sub-scales of WISC-3 and WISC-4 are well correlated. For instance, the Perceptual Organization Index (WISC-3) and the Perceptual Reasoning Index (the WISC-4 equivalent) intercorrelate at .72 (Flanagan & Kaufman, 2009). CAT-3 and WISC-4, the two most frequently used assessments in the sample, were therefore accepted as the only non-verbal measures for the discrepancy analyses.

3.4.7 Operational procedures

3.4.7.1 Preliminary procedures

Services which responded positively to initial contact were sent an information pack. This included further details of the research, the type of participant sought, a university ethics certificate and consent letters for parents. The service professionals (SLTs, EPs and advisory teachers) were then invited to identify pupils known to their service and to share the information pack with SENCos in these pupils' primary schools. At that stage, the professionals were

not asked for the names of either pupils or schools. Instead, they asked SENCOs who were willing to participate to contact me themselves or to confirm their willingness to hear from me. Following communication between the school and myself, SENCOs contacted parents and requested their signed consent. Once this was obtained, a school visit was arranged.

The preparatory procedures for distance schools were very similar, except that the survey materials were mailed. Distance schools were asked not to carry out or return the survey questionnaires to me until they had received signed parental consent. Consent slips were returned to me with the completed questionnaires.

Preparatory procedures for LRBs were also similar, but rather more direct. Since LRBs are publicly known to provide for pupils with language impairments, it was often possible for me to contact the teacher-in-charge myself, rather than via a facilitating professional.

3.4.7.2 Pilot study

Purpose and description

A small pilot study was carried out in a single primary school with an LRB. This school also provided cases for the main study. The primary school pilot was carried out to evaluate the suitability of the SASC-R pupil questionnaires. I noted earlier that neither SPPC nor SASC-R was standardised for non-typical populations, but that SPPC has been used successfully in SLI studies with same age or younger children. SPPC was not therefore piloted. However, to the best of my knowledge, the use of SASC-R in SLI studies has not been reported. Given that several of the participants in the present study had severe receptive language difficulties, an evaluation of suitability was crucial.

The pilot explored two areas of potential difficulty. One was comprehension of the SASC-R items. The other was the rating format. This involved reading or listening to each item and then choosing a number from the 1-5 scale at the top of the sheet (Appendix 1). There is no firm evidence that pupils with language impairments would be confused by this, but since many pupils with SLI experience literacy difficulties, they would be less practised than others in

scanning written material at speed. This might reduce their ability to move competently between the items and the rating scale, even with adult support.

Pilot procedures

The primary pilot was carried out in the term before the main study. The participating school selected two male and one female LRB pupils with severe receptive SLI. These were Year 5 pupils, aged 9-10 years. This slightly younger age group was purposively sampled on the basis that if the questionnaires proved linguistically and conceptually manageable for them, they should also be manageable for older pupils with comparable or less severe receptive difficulties. The LRB teacher was given an amended version of the parental consent letter and checked that the pupils themselves were happy to participate.

The SASC-R questionnaire was administered individually, within the LRB. I explained to each participant that they would be helping me with a project and checked that they were still happy to do this. I further explained that they could discontinue at any time, ask for clarification, or refrain from responding to any particular items. They could also amend their responses at any stage. Confidentiality was stressed. All participants asked me to read the questionnaire items aloud for them, but chose to circle the ratings themselves.

Issues raised and post-pilot modifications

All three participants completed the questionnaire. American terminology was anglicised where appropriate (e.g. 'vacation' to 'holiday' on the first practice item). Otherwise, the original wording was used. Participants sometimes asked for repetition of an item, but apart from the word 'spinach' on a practice item, and the term 'anxiety', which was explained, no comprehension difficulties arose. The wording of the questionnaire was therefore deemed suitable for the main study participants. In contrast, each pilot participant found the ratings difficult. All were novice readers who struggled to remember each item for long enough to select a suitable rating. In other words, memory and the logistics of using the rating format were problematic, whereas comprehension of the questionnaire items was not.

The pilot findings allowed the rating format to be modified before the main study. A more visual format was created (Appendix 3). This consisted of emoticons denoting 'Anxious' and 'OK', together with 'Yes/No' and number cards. It was anticipated that such visual modifications would simplify rating procedures for participants in the main study. Emoticons were used because they are easily understood and are ubiquitous in materials for all ages, so would not be demeaning to the participants (see 3.4.7.3 for details of administration).

Summary of pilot

This pilot successfully evaluated the suitability of SASC-R as a tool for measuring social anxiety in 10-12 year olds with receptive SLI. The pilot sample was very small, but sufficient to identify aspects of the tool that required modification for the main study sample.

3.4.7.3 Main study

Main study procedures

The same versions of the survey questionnaires were administered at Time 1 and Time 2. Recall that these were: the SPPC pupil and teacher questionnaires (social, scholastic and athletic sub-scales only) and all three sub-scales of the SASC-R pupil questionnaire. 'Pupil questionnaire' refers to self-rated versions. The SASC parent version was not used, since the author claimed it has less validity with adolescents than with younger children (La Greca, 1999). All the questionnaires were administered in pupils' schools. At Time 1, the two participants with SLI who attended an LRB part-time were seen there, since my contact had been exclusively with the LRB professionals. SENCos or LRB teachers gave the SPPC teacher questionnaire and instructions to pupils' classteachers at Time 1 and to their form tutors at Time 2. The completed teacher questionnaires were returned to me during the visit or by post.

Administration at Time 1 and Time 2 was very similar to the pilot. Participants were seen in a familiar room and allowed to choose their seating. Participants with SLI or SpLD were each seen individually, because of the need to read out and/or explain the questionnaires without causing them embarrassment in front of peers. TD pupils were seen individually or in pairs/small groups and worked

independently after the practice items were modelled for them. Participants who were in groups were allowed to spread out around the room to protect their privacy. Participants seen individually were invited to choose an open or closed door and the presence of a familiar adult, although none requested the latter.

The visual support for the SASC-R rating was used as follows. The emoticons were displayed, with the 'Yes' card under the 'Anxious' face and the 'No' card under the 'OK' face. The number cards 1 and 2 were then placed under 'OK' and the number cards 3-5 under 'Anxious'. In response to each item, participants were asked *first* to decide whether 'Yes' or 'No' was their preferred response and *only then* to select a number (Appendix 3). To avoid confusion, the emoticons were removed for unrelated filler items. Although the modifications were primarily for SLI and SpLD participants, they were equally available to TD participants.

The Time 1 survey was mainly carried out between February and June of participants' Year 6. The SLI and TD participants were not seen in any particular order; survey administration simply depended on how quickly schools received parental consent and when they could host my visit or carry out the questionnaires themselves. However, the SpLD participants were generally seen later, due to the later sampling of this group.

Before the Time 2 survey, contact was made with each participant's secondary school. In some cases, the participant's primary SENCo or LRB teacher had, at my request, already liaised with their secondary SEN colleagues about the study. The secondary schools received the same study information pack and a follow-up consent letter for parents. The Time 2 survey was not commenced until well into November of participants' Year 7, to ensure that participants had settled and were familiar with their new peer group. The Time 2 survey only included the SLI and TD groups, for the reasons given above.

3.4.7.4 Addressing threats to reliability and validity

I have alluded to the threats posed by using the survey questionnaires with participants with poor receptive language. Compensatory verbal strategies, i.e. repeating items, simplifying them and anglicising American terms, were

therefore planned and these were discussed by email with the authors of the two measures. Simplification of wording requires particular care, since it can change meaning and compromise validity (Wadman et al., 2011a). The proposed visual support for the SASC-R rating was also emailed and described in detail to the author. The authors of both measures acknowledged the issues involved in using a tool unstandardised for SLI and both approved the proposed compensatory strategies.

The threats to the study design were increased by the wide geographical sampling. Almost one quarter of the SLI participants at Time 1 were surveyed by distance schools. This provided a larger and more representative sample. However, it also created threats in terms of fidelity to the measures. To address these, it was essential to ensure that each administrator used the measures and the visual support materials as consistently as possible. Administrators also needed a full understanding of SLI to ensure that any explanation of terms was comprehensible to the participant, but did not distort the meaning of the item or unwittingly prompt a particular response. These threats to validity could not be eliminated entirely, but they were reduced via the following strategies:

- Administration was confined to myself, SLTs and LRB or advisory teachers with specialist qualifications in language impairment. No questionnaires were administered by SENCOs or other SEN personnel without such qualifications, even if they knew pupils well and were directly involved with their SEN provision.
- Written guidelines were sent to each administrator with the questionnaires and the visual support materials (Appendix 4). The order of administration (SPPC, then SASC-R) was specified. There was no particular reason for this order, but administrative consistency was preferable.
- Administrators were asked to avoid carrying out the questionnaires when pupils were ill, upset or unusually worried. This was to reduce the danger of the questionnaires measuring very transient perceptions of social well-being, rather than more typical ones.

3.5 Ethics (1): quantitative study

3.5.1 General considerations

This study adhered to the above-mentioned revised guidelines of the British Educational Research Association (BERA) and met the standards of the University of Exeter ethics panel. Consideration was particularly given throughout the study to the following BERA guidelines: voluntary informed consent (Sections 10 and 11), the right to withdraw (Section 13), freedom from distress (Section 18), the limitation of bureaucratic burden on participants (Section 19), confidentiality and anonymity (Section 23) and disclosure (Sections 27 and 28). Of these, consent and confidentiality required the most comprehensive procedures. These are described below.

3.5.2 Considerations for specific groups

There are additional ethical considerations for certain groups. Children are potentially vulnerable by virtue of their age (see Birkbeck and Drummond, 2007, on research interviews with children). Children and young people with SLI or other barriers to communication should be considered additionally vulnerable, since they may not understand what they are consenting to, or the questions that are asked (see Lewis and Porter, 2004, on children and young people with learning disabilities). They may also be unable to signal their wish to withhold participation in particular aspects of the research or to withdraw from it completely. Section 16 of the BERA guidelines notes that when vulnerable groups experience circumstances that: ‘... may limit the extent to which they can be expected to understand or agree voluntarily to undertake their role, researchers must fully explore alternative ways in which they can be enabled to make authentic responses.’ (p.7)

3.5.3 Ethical procedures undertaken

3.5.3.1 Voluntary informed consent

As I noted earlier, parents and guardians were asked for signed consent at both Time 1 and Time 2 of the survey. SEN staff were asked to explain clearly to the parents of TD pupils why such pupils were required to participate in a study of

SLI and to stress that parents were welcome to contact me by email for any further clarification. Failure to specify this may have led to misunderstanding, e.g. the parents erroneously concluding that their child had language difficulties of which they were unaware and becoming distressed. The two consent letters were very similar, the second being a follow-up to the first (see Appendix 5 for the Time 2 version). Consent was requested at these two separate stages, because although the survey was identical at both times, it would have been unethical to hold parents to an agreement to their child's participation made a year in advance of the second survey.

Additional ethical procedures were put in place to ensure that the parents of participants with SEN were fully informed before giving their consent. For example, it was recognised that some parents of such pupils might have language or literacy difficulties themselves. LRB teachers or SENCOs were therefore asked to use their professional judgement about discussing the study and the letter with parents in person. Ethically, it was particularly important that parents understood the limits of the study in terms of direct benefit to their child, and were conversely reassured that declining or withdrawing consent would have no negative impact on their child's educational provision or progress.

The informed consent of the participants themselves was then obtained, firstly by SEN staff and then, in the case of visited schools, by myself. I explained to each participant that they could simply raise a hand at any time to signal a wish to discontinue or to have a break.

3.5.3.2 Confidentiality and anonymity

Pupil participants were assured that nobody apart from myself and the questionnaire administrator (if different) would see their survey responses without their consent. Similarly, it was confirmed that teacher versions of the SPPC questionnaire would only be viewed by myself. For this reason, respondents were provided with an envelope for their completed questionnaire. Participants and staff were also assured of anonymity. No pupils, parents, professionals, schools, services or local authorities would be named in the thesis or in any published material drawn from it. Participants and staff were also assured that all identifying data would be kept on premises locked in my

absence and that electronic storage would be on a password-protected computer to which I had sole access. Arrangements to shred all hard copy data and to delete all confidential electronic data at the end of the study were likewise confirmed.

3.5.4 Issues arising from the procedures

3.5.4.1 Anticipated issues

It was anticipated that parents might request feedback on their child's survey responses. This could pose an ethical dilemma in terms of breaching participant confidentiality, or dealing with parental distress if the survey responses suggested poor social well-being. In fact, only two such requests were made, both for participants with SLI. Each participant had already stated willingness for their parents to have feedback and both had reported a fair self-perception of social well-being. However, I asked each SENCo to confirm the pupil's consent again. On that basis, I emailed general feedback to the parents, rather than copying the questionnaires. This provided an overview and allowed parents to reply easily if any points needed clarifying. Had the survey responses indicated poor social well-being, I would have arranged to meet or telephone the parents instead, to ensure that they had an opportunity to share any feelings of upset. Section 18 of the BERA guidelines states: 'Researchers must recognize that participants may experience distress or discomfort ... and must take all necessary steps to reduce the sense of intrusion and to put them at their ease. They must desist immediately from any actions ... that cause emotional or other harm.' (p. 7-8)

It was also felt that staff might be unaware of a participant's poor social well-being and that in some cases their awareness would be in participants' best interests. This happened in two cases. One was a male pupil with SLI; the other was a female TD pupil. Each of these two participants told me spontaneously that they were unhappy and worried about their peer relationships in school. I asked them if staff knew and they confirmed that they did not. I then asked them if they felt that staff should know. They both responded affirmatively, but indicated that they did not want to tell staff themselves, nor ask their parents to do so. I asked them if they would like me to let the SENCo know of their feelings

and they confirmed that they would. There was therefore no dilemma of confidentiality.

Since the TD participants compiled their questionnaires independently and usually in groups, I anticipated that it would be difficult to monitor their responses as they made them. To avoid ethical dilemmas later, I assured the participants of their right to confidentiality, but told them in advance that if they had queries or concerns that they wanted to raise with me, I would see them individually afterwards. In this way, I was made aware of the TD participant's worries immediately and was able to confirm her preferred course of action before she left the room.

Lastly, most participating schools and services expressed interest in the research findings and an interim summary was therefore emailed to them. Since global mailing would have compromised anonymity by displaying email addresses, each school or service was contacted as an independent 'cell'. The only exception was where a service and a school had participated jointly in the research.

3.5.4.2 Unanticipated issues

Over the time-span of the study, child protection protocols in schools became more stringent in relation to outside professionals. Most participating schools accepted a Criminal Records Bureau (CRB) advanced disclosure certificate as an adequate safeguard. However, the policy of one school specified that a staff member should be present throughout all work conducted by outside professionals with individual pupils. Again, this posed a potential ethical breach in terms of participant confidentiality. Since I had been unaware of the policy before the visit, it was agreed in situ that the teaching assistant directly involved in the pupil's provision could attend the session, but strictly subject to parental and pupil consent (the former was obtained by phone) and to the assistant agreeing to observe full confidentiality.

3.5.5 Interim summary

The quantitative phase of the study raised a number of ethical considerations, including those particular to groups that are vulnerable due to age or SEN

status. Most issues were anticipated and were relatively easy to address. Nonetheless, it was helpful to maintain an ethical log throughout the two survey data collection stages. This allowed anticipated issues to be reflected on and unanticipated ones to be discussed at supervision. It is worth noting that university ethics certificates are typically issued before fieldwork begins. Often, research departs from its original plans and this can give rise to ethical issues that are not covered by the certificate. However, in this study, the changes in operational procedures were relatively minor and did not warrant the issuance of a fresh ethics certificate.

3.6 Research design (2): qualitative study

It was noted earlier that the qualitative study addressed the fifth and sixth of the research questions. These are:

Question 5. What factors interrelate with social well-being in pupils with receptive SLI over the transition period?

Question 6. Do these factors interrelate similarly in pupils with SpLD?

3.6.1 Strategy, methods and tools

3.6.1.1 Case study: description and rationale

This phase of the research was undertaken during participants' Year 7. Case study is a valuable way of investigating phenomena in context, particularly when the boundaries between the two are not clearly understood (Yin, 1994). To define the term: 'A case study is an intensive description of a single person, group, institution, social movement, or event. The usual purpose is to furnish a multifaceted, individualized understanding of the people or objects to be studied.' (Murray Thomas, 1998, p. 9)

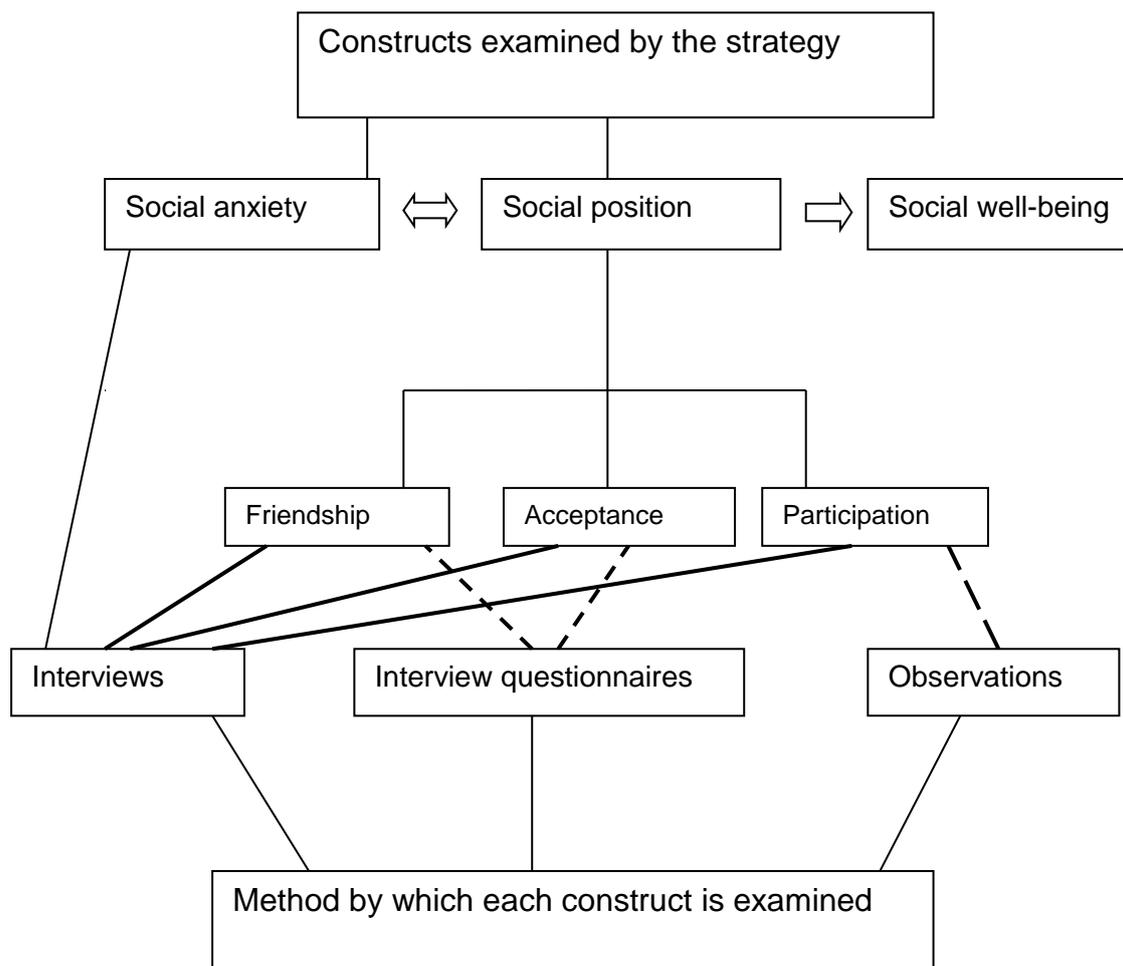
I noted earlier that the term 'case study' is defined in my research as a strategy, not as a method (Robson, 1993). Cresswell (2007) viewed case study as a methodology, encompassing multiple data sources. However, I prefer the term 'strategy', since it makes a clearer distinction between the overall approach and the individual methods that contribute to it.

Cresswell (2007) conceptualised case studies as explanatory, exploratory or descriptive. The present design was both explanatory and exploratory, since it explored factors that might help explain variations in social well-being. Case studies can also be single or multiple (Yin, 1994). This design was multiple, although I favour the term 'linked', because that emphasises the relationship between the cases. Specifically, the strategy was chosen for its compatibility with the ecological dimension of the research, since: '... it permits a researcher to reveal the way a multiplicity of factors have interacted to produce the unique character of the entity that is the subject of study.' (Murray Thomas, 1998, p. 82)

The case study strategy provided a framework for exploring both the individual and the shared factors relating to social well-being in these participants during the post-transition period. Figure 3.2 shows its structure. Using this structure, individual and environmental factors could be examined, both discretely and in terms of their ecological relationship. For this reason, I am defining the case study's unit of analysis as 'the participant in social context'. 'Social context' refers here to settings in which participants regularly engage in enterprise alongside their peers. School is the most obvious setting and the case study strategy was operationalised in schools only. Despite this, data on social opportunities and experiences out of school were also collected, since, as noted, this is an under-researched area (Hymel et al., 2002; Howe, 2010). For this reason, I have defined the context of analysis as 'social', rather than 'educational'.

As stated, the purpose of the case study strategy was not simply to triangulate the 'how much' findings of the survey method. Rather, its purpose was to develop these findings by identifying the 'what' and 'how' of factor interrelationships with social well-being. In other words, whilst the survey would provide comparative findings between groups, it would not explain whether any group differences related primarily to SLI participants' language difficulties, to associated scholastic difficulties, or to other factors. Of particular interest, therefore, was the way in which ecological relationships might be experienced by pupils with SLI and those with SpLD.

Figure 3.2 Structure of the case study strategy



3.6.1.2 Pupil and parent interviews

Rationale and description

An interview can be perceived as a purposeful form of conversation (Kvale, 1996). Interviews can have empirical or theoretical purpose. Gillham (2005) noted that of the three main designs, i.e. unstructured (narrative), semi-structured and structured, the semi-structured is not a preliminary method, since it anticipates analysis. The pupil and parent interviews in the present study were semi-structured, based on hierarchical focusing (Tomlinson, 1989). Tomlinson's framework was chosen as highly suited to the interview purpose, which was to pursue issues informed by the literature, but interpreted from the words of pupils and parents themselves. It provides 'conceptual-contextual focuses' (Tomlinson, p.162). Hierarchical focusing thus allows the researcher's agenda

to be covered, whilst preserving: ‘ ... access to interviewees’ construals ...’
 (Tomlinson, p.162)

Pupils’ perceptions of the factors associated with their social well-being were of key importance, since they were informed by direct experience and because it was noted earlier that interviews with children and young people experiencing language difficulties have not been sufficiently used. Likewise, parents’ perceptions were important. since they knew their children best and were particularly well-placed to comment on how they fared socially out of school. Additionally, Parke et al. (2002) maintained that despite increasing peer influence: ‘Parents continue to play an important regulatory role as gatekeeper and monitor of children’s social choices and social contacts throughout middle childhood and into adolescence.’ (p.163). Parental interviews also provided parents’ perspectives for the first time in the study; recall that they were not included in the survey questionnaires.

Table 3.11 Framework summary for interviews

What	An investigation of the personal and environmental factors interrelating with social well-being within an ecological systems framework (Bronfenbrenner, 1942; 1979; 2005)
Why	To examine factor similarities and differences between pupils with SLI and those with SpLD
Who	Eight Year 7 pupils with SLI and their parent(s) Six Year 7 pupils with SpLD and their parent(s)
How	Semi-structured interviews, based on hierarchical focusing (Tomlinson, 1989)

Tomlinson’s hierarchical focusing framework was chosen for another reason. Dockrell (2004) stressed the importance of cognitive and linguistic considerations when designing, carrying out and analysing interviews with special populations. For children with receptive SLI, listening and speaking at length could be particularly arduous, even with visual support. It was therefore important to keep the interviews short and clear. Hierarchical focusing provides

a useful scaffold, because it allows questions to be answered incidentally, under a broad category, or addressed more specifically under a subordinate category. This structure helps the researcher to monitor the course of the interview, avoiding redundant questions whilst 'picking up' on missed ones or on unclear responses. By streamlining the study interviews in this way, key areas were addressed with each pupil within 30 minutes. Parent interviews lasted approximately 45 minutes.

The pupil and parent interviews were designed to elicit perspectives on any of the domains of interest, i.e. social anxiety, social acceptance, social participation and friendship (see Appendix 6 for the pupil interview schedule). They focused mainly on the pupil's current situation in Year 7. However, they also invited reflection on any changes in social well-being since the transition from primary school and on the factors associated with such changes. The interview schedule was designed via the following routes:

- Scrutiny of the literature. For example, Howe (2010) cited Kurdek and Lillie (1985) on the tendency for socially neglected 9-13 year olds to have younger neighbourhood friends. A related question was therefore included in the interview schedules.
- The Delphi Technique, whereby the researcher identifies the interview topic to others, but does not reveal the questions he/she has already formulated (Gillham, 2005). The researcher asks these others to design questions, which are then compared with the original questions, grouped and sequenced logically.
- Scrutiny of case study participants' Time 1 survey questionnaires. Particularly good, poor or counterintuitive levels of social well-being were noted, so that the factors associated with them could be explored.

3.6.1.3 Classroom observations

Rationale and description

Observational research is a useful and direct way of collecting data on what people actually say or do in particular situations, rather than what they feel and think (Robson, 1993). Indeed: '... the language of people, and other behaviours

associated with language, are often of crucial interest and importance in any enquiry.’ (Robson, p.191)

Table 3.12 Framework summary for observations

What	An investigation of classroom interactions between study participants and TD peers
Why	To examine interactive similarities and differences between participants with SLI and those with SpLD
Who	Eight Year 7 pupils with SLI Six Year 7 pupils with SpLD
How	Non-participant single observations within practical lessons

The relevance of this to the present study speaks for itself. As with other methods, there are fundamentally different approaches to observation. At the extremes lie participant observation, essentially an anthropological approach involving the researcher becoming a member of the observed group and structured, non-participant observation, whereby the researcher remains a detached onlooker. The decision on which approach or approaches to use should rest on: ‘... the particular needs and possibilities in the situation you are enquiring into ...’ (Robson, p.190). Again, this is compatible with the focus of the study as a whole, i.e. that each approach would be guided primarily by the research questions.

The purpose of conducting observations was to gain further insight into one aspect of social participation: interaction with TD peers in the classroom. Interviews and interview questionnaires provided multiple perspectives on social participation, but only direct observation could reveal how well it played out in the classroom. Interaction partly depends on the ability to understand and use structural language, but also on pragmatics, which may include non-verbal communication such as eye gaze and gesture. Pragmatics has been defined in a number of ways (McTear & Conti-Ramsden, 1992; Mey, 1993), but is generally understood as a term describing language or non-verbal

communication in context. Stated simply, pragmatics is about communicative use and includes knowledge of what might appropriately be said or done in a particular social situation. The implications are considerable: 'Positive interactions with peers draw upon a variety of pragmatic aspects ... such as being able to initiate communication with others, to enter conversations appropriately, and to negotiate turns within an on-going conversation.' (Stanton-Chapman et al., 2007, p. 98)

The literature to which I referred in Chapter 2 suggested that pupils with SLI are less adept in these pragmatic aspects. However, there appears to be limited evidence of the influence of TD peers or the shared environment on the social participation of such pupils. The observational element therefore aimed to fill this gap, informed by Bronfenbrenner's aforementioned theory that personal and environmental characteristics are bioecologically interconnected. Based on that premise, the observations were designed to collect data on participants, their peers and the interactive environment.

The observations were in classrooms only, since it was impractical to observe other settings. Ideally, a range of school environments would have been observed, including outdoor leisure spaces or dining rooms, since: '... no matter where in school children experience their peers, they are exposed to socially relevant data.' (Howe, 2010, p. 92). Unfortunately, time precluded this, so I decided to observe in lessons with a strong practical element, such as Food Technology. The rationale was threefold. Firstly, peer talk during such lessons would generally be allowed by teachers, whereas it might be discouraged in more formal lessons. Secondly, pupils are accustomed to having adult observers in class, so their presence is less likely to affect normal peer interactions and introduce a form of bias (Miles & Huberman, 1994). Thirdly, more naturalistic social settings are often very impractical to observe (Avramidis, 2010).

The observation type was predominantly non-participant. Participant observation might have encouraged pupils to interact with me rather than with each other, undermining the purpose of the observation and hampering data collection (see 3.6.5.3 for operational details).

3.6.1.4 Interview questionnaires

Rationale and description

The rationale for including interview questionnaires was as follows. It was anticipated that SEN staff would know participants better than most subject teachers and would add a valuable perspective on these pupils' social position across a range of contexts in school. Specifically, the interview questionnaire focused on the number, closeness and quality of their friendships, and on the extent to which they were accepted by TD peers as social participants within class (Appendix 7). Additionally, SEN staff were knowledgeable about organisational features of the school, including subject setting and the delivery of SEN provision. This was potentially important. For instance, setting by ability may influence the type of peers with whom friendship is forged. Like the interviews and observations, the method was carried out during participants' Year 7. The label 'interview questionnaire' is used, because the format was designed to be filled in either by myself during a brief face to face interview, or by the respondent as a mailed questionnaire. Respondents were SENCOs, LRB teachers, or teaching assistants (TAs).

3.6.2 Trustworthiness

In qualitative research, notions of credibility differ from those of quantitative research. Terms such as 'validity' and 'reliability' were discussed in the quantitative section, since they are associated with assumptions of measurability. They are also linked to the related notions of generalisability and replicability. These assumptions do not apply to qualitative research in the same way and many qualitative researchers reject the term 'validity' on these grounds.

Rejecting quantitative terminology does not exonerate researchers from the responsibility to carry out work in a thorough and defensible manner. Rather, it calls for different manifestations of quality, using different terms. For example, Seidman (1998) cited Lincoln and Guba (1985) on 'trustworthiness' and Kvale (1996) on 'quality of craftsmanship'. Of course, in a mixed method design such

as this, it is arguable that these terms should be rejected too, in favour of a notion such as 'quality inference' (Teddlie & Tashakkori, 2003), which explicitly recognises the mix of methods. Despite the logic of such an argument, I have chosen not to follow it too slavishly. I used the terms 'validity' and 'reliability' in the quantitative section, for the sake of clarity. By the same token, I will use 'trustworthiness' in this qualitative section, although 'quality inference' will inform the overall discussion of findings in Chapter 5. In essence, I believe that credibility does not lie in the choice of terminology, but in the ability to demonstrate that each part of the study has been clearly conceptualised, rigorously investigated and transparently reported. The trustworthiness of the qualitative methods and tools used is considered next.

3.6.2.1 Trustworthiness of methods and tools

To maximise trustworthiness, I invited two professional colleagues to assist with the interview and observation schedules. One colleague was a doctoral student highly experienced in teaching Year 7 pupils with language or learning difficulties. The other was a specialist advisory teacher for children with SLI.

Interviews

Trustworthiness can be a particular problem when carrying out interviews with children or young people who have SLI (Simkin & Conti-Ramsden, 2009) or other language limiting conditions. The interviewer is using a language-dominant method in a language-compromised situation. As discussed in Chapter 2, children with SLI often have processing and memory difficulties, so they may give answers based on words they recognise or remember. To illustrate, in response to a forced choice question such as 'Do your best friends come to school by car or in the minibus with you?', the child may answer 'minibus' simply because the word is more salient than what has gone before. This does not make interview an untrustworthy method with such children, but it does call for the utmost rigour of design and administration to ensure that the interview *tool* is trustworthy. The following reliability procedures were carried out.

First, I drafted my own questions, then gave both colleagues the interview topic and the following broad headings:

- Friendship in school
- Membership of social groups in school
- Participation in class group activities
- Out of school socialisation

The colleagues wrote their own questions under these headings. I then compared them with my own. All three lists were extremely similar in content, although the wording varied. For example, under the fourth heading, the following were listed: 'What activities do you belong to?'; 'What activities do you join in most frequently?'; 'Do you attend clubs/groups or other activities?' The first colleague included a question on social technology. This was not on the other two lists, but since the use of such technology is increasingly a part of young people's lives (Durkin, Conti-Ramsden, Walker & Simkin, 2009, citing Durkin & Barber, 2002), I added the question to the schedule and retained the common questions. We chose the simplest wording for each question, but checked that simplification did not distort meaning. I then ordered the questions via hierarchical focusing. Finally, picture symbols representing the key vocabulary were produced (Appendix 8), since visual support can help elicit responses with children or those with linguistic constraints (Johnson & Weller, 2001).

Observations

Trustworthiness may also be threatened in observational research. Even when observers are non-participant and take great pains to be inconspicuous, they cannot know beyond all doubt whether their presence has influenced participants' behaviour. Biases may also intrude in the form of selective attention, encoding of data or memory of what has been observed, hence the desirability of having more than one observer (Robson, 1993). Robson also noted the threat of 'observer drift', whereby increased familiarity with a data

collection tool produces subtle changes in its use. The following reliability procedures were carried out.

Having drafted the observation tool, I asked the second colleague to scrutinise it for oversights. None were noted at this stage. The colleague confirmed her willingness to re-code interaction data recorded on this tool. A 20% sample of the main study interactions was subsequently sent to her. She was blind to my own codings, but was provided with the function headings that I used. The colleague re-coded the utterances by function (see Appendix 10 for a 50% sample of these re-codings) and I compared her results with mine. Since there was virtually 100% concordance (the only difference being where the colleague allocated two functions to an utterance as opposed to my single one), the tool was considered reasonably trustworthy in terms of encoding bias.

3.6.2.2 Acknowledgement and reduction of bias

Despite the steps taken to maximise trustworthiness, I recognise that bias was not eliminated entirely. For a start, interviews carry the danger of participant acquiescence. Inevitably, there is a power imbalance between child participants and adult researchers, which may lead to the child giving the 'right' answer. To some extent, this can be overcome by reframing a question later to probe what the child really thinks (Markham et al., 2009) and this was duly done on several occasions. When interviewing, researchers also need to guard against unwittingly interpreting the interviewee's meaning to accord with their assumptions. This is particularly risky in more structured interviews like those of the present study, because they are informed by existing theories or empirical findings. In this situation, researchers do not start with a tabula rasa and underawareness of the influence of their assumptions may compromise the interpretation of what interviewees say (Markham et al., 2009). Notably: 'Unacknowledged bias may entirely invalidate the results of an interview inquiry. A recognized bias or subjective perspective, may, however, come to highlight specific aspects of the phenomena investigated ... contributing to a multiperspectival construction of knowledge.' (Kvale, 1996, p. 286)

It can be helpful to show interview transcripts to participants. This allows participants' intended meaning to be checked and offers some protection

against researcher bias. Unfortunately, in the present study, checking transcripts with participants was not feasible. There was an additional danger in the study: that of cross-interview question bias. In other words, pupil responses might have 'contaminated' the questions that I subsequently asked parents, or vice versa, by allowing subtle leads to be introduced to the schedule. The threat of such bias could not be eliminated entirely. However, in cases where a digital voice recorder (DVR) was used, the interviews were replayed before they were transcribed. The recordings and the transcripts were examined reflexively for data that could be vulnerable to a biased interpretation. This was done iteratively before and during the analysis.

For the observations, the lack of co-observers or video recordings meant that it was impossible to remove the threat of selectivity biases entirely, despite the assistance of the second colleague.

3.6.3 Case study participants

Originally, the participants were nine pupils with SLI and six with SpLD. Data were very sparse for one pupil with SLI and this pupil was removed from the sample before analysis. All the case study participants attended mainstream secondary schools. Of the participants with SLI, two had statements of SEN and attended LRBs within their school. The other six were at School Action Plus and were in unresourced placements. Of those with SpLD, none were statemented, three were at School Action Plus and three were at School Action. Further descriptive statistics are given below in Table 3.13.

3.6.4 Sampling

3.6.4.1 Sampling strategies

As for all methods, sampling for qualitative case studies needs to reflect a clear purpose. Unlike sampling for quantitative designs, this purpose is not typically to derive findings that can be generalised to a wider population, although multiple case studies may be generalisable analytically (Robson, 1993), or to theory (Yin, 1994; Miles & Huberman, 1994). In smaller case studies, purposive sampling is often used, rather than any form of randomised sampling: 'The principle of selection in purposive sampling is the researcher's judgement as to

typicality or interest.’ (Robson, 1993, p.141). Researchers therefore need to be clear about their core areas of conceptual interest before using a purposive strategy.

Table 3.13 Gender frequencies and percentages, mean chronological age and mean non-verbal standardised scores of case study participants, by group and combined

Group	N	Male	Female	Mean chronological age in months with standard deviations (SD)	Mean non-verbal score with standard deviations (SD)
SLI	8	6 (75.00%)	2 (25.00%)	142.88 (SD 2.59)	92.38 (SD 6.59)
SpLD	6	3 (50.00%)	3 (50.00%)	143.67 (SD 4.41)	96.67 (SD 12.83)
Combined	14	9 (64.29%)	5 (35.71%)	143.21 (SD 3.36)	94.21 (SD 9.57)

3.6.4.2 Purpose of the sampling strategy

The purpose of the present strategy was to select approximately equal numbers of participants with receptive SLI or SpLD. The cases were linked by the shared phenomenon of transition to mainstream secondary schooling as a pupil with a specific form of SEN. An overall sample number of 10-16 was considered adequate to explore the areas of interest. Essentially, these were factors that related to individuals, but which might be experienced differently by the two participant types, allowing some degree of analytic generalisation. Sampling was therefore informed by the premise that: ‘...the value of the “study of the singular” should not blind us to those features of the study which limit the singularity. All situations are unique in some aspects, not in others.’ (Pring, 2004, p. 42)

3.6.4.3 Sampling procedures

The case study participants were recruited from the Time 1 survey sample. They were purposively sampled to represent a broad range of personal and

environmental characteristics, in order to explore fully the possible associations with social well-being. The key characteristics were: the severity of SLI or SpLD, non-verbal ability, scholastic level, pragmatics and disposition, family and neighbourhood, and the type of school previously and currently attended. However, participants were not specifically pair-matched on these characteristics across the two SEN types. For procedural ease, sampling of both SEN types took place over a smaller region than the survey.

Firstly, the characteristics of all SLI and SpLD Time 1 survey cases within the reduced geographical area were scrutinised. Seventeen of these, almost equally divided between the two SEN types, were identified as representing the required range of characteristics. At this stage, individual survey responses were not examined, since they would be of interest later, but were not part of the case study sampling criteria.

The SENCO or LRB teacher in each pupil's secondary school was approached by phone or email with details of the case study research. All agreed to participate. However, parental consent was not forthcoming for two of the SpLD cases.

3.6.4.4. Issues arising from sampling

The nine SLI case study participants (subsequently reduced to eight) represented the required range of key characteristics. The six SpLD participants also reflected a good range of non-verbal ability and school characteristics. However, in terms of the severity of their SEN, they were not fully representative of SpLD, since none were working below National Curriculum Level 3 in English. In contrast, the two cases whose parents withheld consent were functioning within Level 2 and were considered to have severe SpLD. The enforced exclusion of these pupils changed the balance of the SpLD sample, making it less than ideal for exploring the severity of SpLD as a possible factor in social well-being. Unfortunately, time constraints precluded further sampling. This is discussed further in Chapter 5.

3.6.5 Operational procedures

3.6.5.1 Preparatory procedures

Firstly, each participating secondary school was provided with consent letters and further information for parents. This was separate from the Time 1 and Time 2 survey letters. Since the case studies involved several procedures, parents were asked to tick separate boxes for observation, pupil interview and parent interview (Appendix 11). I anticipated that some parents would agree to their children's participation in this next stage of the research, but would be unwilling or unable to be interviewed themselves. In such cases, they might withhold consent altogether if there was no way to opt out of the parent interview. The same consent letter and information was provided for the pilot and the main case studies.

3.6.5.2 Pilot study

Purpose and description

The purpose of the case study pilot was to evaluate the use of the main tools. Specifically, these tools were the pupil and parent interview schedules and the observation schedules. The interview questionnaire was not piloted, because it was a subsidiary method, introduced late in the procedures.

Interviews

Four aspects of the interview schedules were evaluated in the pilot. Firstly, were the length and wording of the pupil interviews. Whilst every attempt had been made to ensure these were short and straightforward, difficulties could not be ruled out. It was important to minimise the danger of frustration or boredom, since this could cause distress and also affect the quality of data and subsequent analysis. Secondly, was the use of symbols. It was anticipated that symbols would help pupils to understand and remember questions, reducing responses based on 'last word heard' salience. However, it was also possible that symbols would prove distracting. Thirdly, was the use of a DVR. Although a DVR allows interviews to be transcribed verbatim, it might also distract or intimidate. Fourthly, was the content of parent interviews. These covered the same broad areas as the pupil interviews, but were less tightly scripted, to

reflect adults' greater maturity and more advanced linguistic levels. However, it was predicted that parents might have insufficient knowledge to answer certain questions about their child's life in school and that some adaptations would be required.

Observation

Two aspects of the observation schedule were evaluated in the pilot. Firstly, was the observation data collection tool, which was designed to record social participation under the following headings:

- Frequency and function of the participant's verbal initiations and responses;
- Frequency and function of the participant's non-verbal initiations and responses;
- Frequency and function of peer verbal responses to the participant;
- Frequency and function of non-verbal peer responses to the participant.

Note that a non-verbal category was included, since children with poor language skills might need to interact via gesture or other physical action, rather than in words. Note also that the term 'function' refers here to the interactive purpose of the social participatory act, rather than just the words or actions employed. Broadly, 'function' equates to the pragmatic concept of 'speech act': 'Put simply, a speech act is the social action that is accomplished through the use of language. For example, in performing a particular utterance in a certain way and in a certain context we may be making a promise, issuing a threat, asking a question, paying a compliment, and so on.' (McTear & Conti-Ramsden, 1992, p.10)

I have used the term 'function' rather than 'speech act', to allow for non-verbal data collection. Focusing on functions was important, because it allows interactions to be evaluated in terms of social participation, rather than just in terms of their grammatical or lexical quality or how often they occur. In contrast, simply counting conversational behaviours tells us little about interactional processes (McTear & Conti-Ramsden, 1992). The observation tool therefore

needed to record data on both the content (what was actually said or done) and the function (the intended purpose) of each act of social participation. Codes for six common functions plus 'Other' were attached to the observation tool. These codes were: 'Assist', 'Praise', 'Inform', 'Request assistance', 'Seek clarification' and 'Express opinion'.

The pilot evaluated the suitability of the tool for obtaining good quality data. It also evaluated the feasibility of recording pupil interactions via the DVR. As with the interviews, digital recording had the potential to capture full data, but might present practical or ethical obstacles.

Pilot procedures

I carried out all pilot observations and interviews personally. One male and two female Year 7 pupils with receptive language difficulties were selected as participants for the pilots. These were pupils who had been identified as potential cases for the Time 1 SLI sample, but who were not included in that sample, because evidence of SLI was somewhat inconclusive. However, they each had School Action Plus funding under the SLCN category. Since the purpose of piloting the pupil interview schedule and symbols was to assess their suitability for pupils with poor comprehension, the lack of an SLI diagnosis was not a barrier to participation in the pilot. No pupils with SpLD were included in the pilot, since it was reasoned that if the schedules proved suitable for pupils with poor comprehension, they would also be suitable for those with SpLD. Each pupil participant was observed and interviewed only once and parents were also interviewed once.

All pupil interviews were carried out before the pupil observations. This was not the preferred order, since pre-interview observations can help create rapport (Eder & Fingerson, 2001). I explained during each pupil interview that I would later observe a lesson attended by the pupil, but would not work with them individually.

Each pilot pupil interview was carried out in a quiet, familiar room. As during the survey, pupils could decide their seating and privacy levels. I explained I was interested in hearing about their friendships and other social experiences in

Year 7 and confirmed their consent to the interview and to use of the DVR. The symbols were then spread out in semantic groups denoting schools, hobbies, people etc. and I pointed to these as they were referred to in questions.

The mothers of the two female pupils were both interviewed in school. These interviews followed the pupil interviews, the order being dictated by school timetables and by what best suited the parents.

Two of the pilot pupil observations took place in Food Technology and the other was in Design Technology. Each lasted about one hour. Having confirmed that each teacher was happy with my use of the DVR in their lesson, I introduced myself to the participant's table group and explained my 'interest in pupils' group work in Year 7'. I asked pupils to 'carry on as normal' and assured them of anonymity and confidentiality. The DVR was placed unobtrusively and manual data recording was conducted from a seat just outside the group. The distance was sufficient to discourage conversational attempts by pupils and to preserve privacy of manual recording.

Issues raised and post-pilot modifications

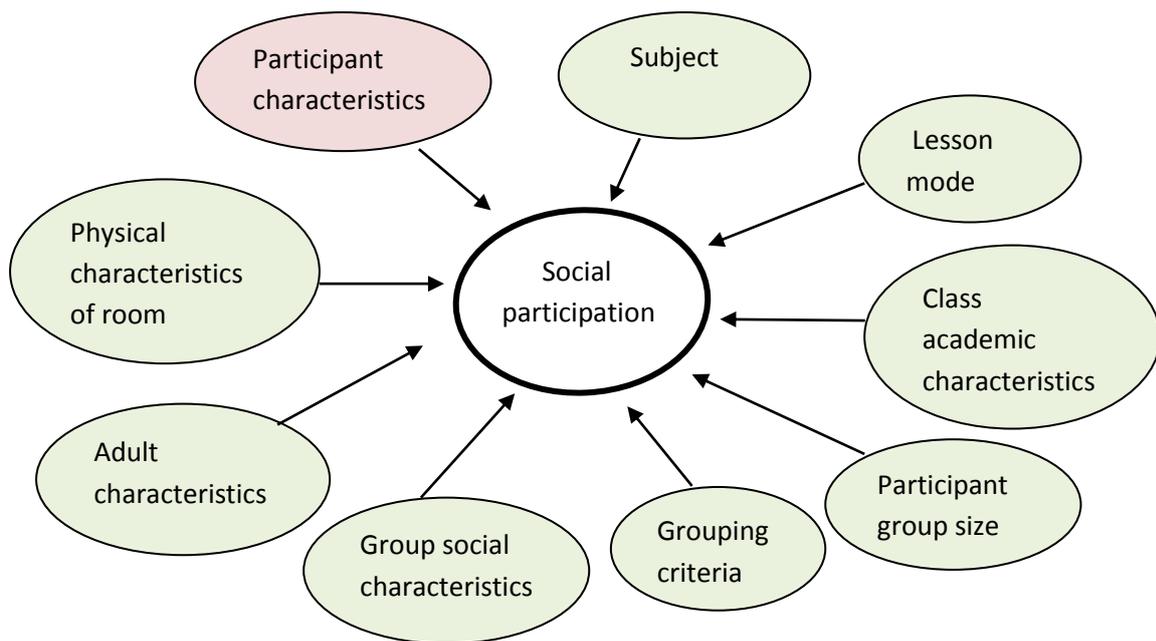
Observations

Several issues arose from the pilot observations. The DVR failed to capture good quality data, due to the movement of pupils and ambient noise levels. This proved unavoidable in all the lessons observed. A solution would have been to choose quieter, more sedentary lessons, which still allowed pupils to interact freely. However, this would have meant observing SEN withdrawal sessions. Since interaction with typical peers was key, a decision was made to observe similar settings in the main study, but to dispense with the DVR. An alternative would have been video recording. That would also present difficulties. The equipment could cause distraction, affecting pupils' normal interactions and interfering with classroom management. Moreover, parental consent would have to be obtained for each pupil appearing in the video. This would create substantial organisational problems. For example, it would mean confirming participants' working groups well in advance of the lesson and asking teachers not to make any changes on the day.

Table 3.14 Learning environment checklist

Subject	Maths	Science	Art	Home Economics	Technology	Drama	ICT
Lesson orientation	Theoretical	Practical	Mixed				
Lesson mode	Performance	Cooperative	Mixed				
Academic features of class	Top set	Middle set	Lower set	Upper band	Lower band	Mixed ability	Other
Group size	Solo	Dyad	Triad	4 +	Mixed		
Grouping criteria	Ability	Behaviour	Random	Friendship	Gender	Mixed	Other
By whom grouping determined	Teacher	Assistant	Pupils				
Interactive features of group	Mainly harmonious	Mainly antagonistic	Mainly neutral	Mixed			
Source of additional support	Teacher	Assistant	Peers	Visual cues	Mixed	Other	None
Location of lesson	Classroom	Suite	Kitchen/other practical area	Hall	Mixed	Other	
Observed pupil's working space	Row of seats	Multi - person table	One or two - person table	Work station	Hall/ other non-demarcated area	Mixed	Other

Figure 3.3 A model of social participation in the learning environment



The piloted observation tool also proved unwieldy and required major modification for the main study. The following limitations of the tool were identified during the pilot:

- Making separate entries for verbal and non-verbal initiations and responses was cumbersome.
- Not enough functions were listed, resulting in too many participations being coded as 'Other'.
- There was nowhere to record the success level of the observed pupil's participation, i.e. how positively it was received by peers and how well it generated further interaction.
- The tool included headings for the number, gender and SEN status of group peers, and for the teaching subject, but it provided no easy way to record other peer and environmental characteristics.

Following the pilot observations, the observation tool was streamlined (see Appendix 9 for the revised version and key). I preserved the content and

function categories, but dispensed with the discrete verbal and non-verbal categories. All the content that had been function coded as 'Other' was examined. This information was used to extend the range of functions in the modified tool. A 'contribution to the interaction' column was also added to rate the social success of the participation as positive, negative, neutral or mixed. Further, an environmental checklist (Table 3.14) and spidergram (Figure 3.3) were created, along with a box to record further fieldnotes within 24 hours of the observation. Lastly, in all three pilot observations, it was noted that the participant was supported individually by a teaching assistant (TA). This appeared to restrict peer interactions, since each TA spent much time repeating the teacher's instructions and directing the participant's work. Several studies (Meyer, 2001; Egilson & Traustadottir, 2009; see also Giangreco, 2010, for an overview of studies) suggest that individually focused TA support can be detrimental to pupils' social participation in class. For this reason, the modified tool included a box in which to record TA support.

Interviews

The pilot interview procedures required less modification than the observation procedures. Each pupil completed the full interview schedule. All were happy with the use of the DVR and they were not distracted by it. There were no requests to terminate the interview and no question avoidance. Generally, comprehension difficulties were overcome by the repetition or slight re-phrasing of questions. In contrast, all three pupils struggled with descriptions of themselves and their friends. This was facilitated by offering them simple choices, such as 'kind', 'funny', 'helps me', 'looks after me'.

Overall, the length and structure of the interview schedule were judged satisfactory for the main study, but some content required alteration. For example, each pupil in the pilot gave unsolicited information about cross-gender and mixed-age friendships out of school. Questions on these topics were therefore added to the modified schedule. The symbols proved to be particularly useful for the pupil with the poorest receptive language, so they were retained in the main study. Another pupil got side-tracked by the symbol cards and shuffled them into piles, which made them difficult to access for specific questions. I

therefore decided to keep the symbols together on a single sheet for participants in the main study. After some reflection, personal characteristic symbols were not added. This is because simpler terms such as 'kind' and 'funny' would already be understood and more complex ones, such as 'protective' or 'loyal' are very hard to convey pictorially. Symbols could mislead participants rather than assist them and lead to issues of trustworthiness. I therefore decided to use the verbal prompts of the pilot instead of providing additional symbols.

The parent interview schedule also required minor modifications. As predicted, both of the parent interviewees were unsure about certain aspects of their child's daily life and social participation in school. Of particular note were: seating plans in lessons, how the child initiated social interactions with peers and whether they always 'hung out' with the same peers during breaks. In the modified interview schedule, the emphasis on these areas was therefore reduced. In contrast, more emphasis was placed on friendship changes since Year 6 and on social experiences outside school, these being areas in which the two parents were clearly knowledgeable.

Summary of pilot

The pilot was carried out to evaluate the workability of the observation and interview procedures. The pilot particularly focused on the data collection tools; these were the observation schedule and the pupil and parent interview schedules. Due to time constraints and the limited availability of suitable cases, the pilot was very small and a larger sample might have led to more extensive improvements in the procedures. Nevertheless, the pilot provided valuable information. It confirmed that many procedural aspects were satisfactory, particularly in relation to the interviews. It also revealed important weaknesses in the observation tool, allowing substantial modifications to be made before the main study.

3.6.5.3 Main study

Introduction

Operationalisation of the main study was very similar to the pilot. Again, I conducted all observations, pupil interviews and parent interviews in person.

School SENCos or LRB teachers were approached in the same way as those in the pilot schools. For the observations, a practically oriented lesson was requested. Food (or other) Technology, Art or Science were preferred subjects, since these would tend to generate group interaction, but PE was excluded from the subject list. This seems counterintuitive, given the study's interest in athleticism as a possible factor in the social position of pupils with SEN. The decision was based on SEN staff being unable to confirm whether PE would be indoors or outdoors on the day of the visit. Indoor work would undoubtedly have provided valuable data, but collecting data outdoors could have been challenging. Pupils' athletic performance would have been observable, but capturing pupil interactions may have been difficult.

By the end of the case study procedures, full data were available for 10 participants. For each of the remaining four, there was one missing data source (see Appendix 12).

Timing of procedures

All case study procedures were carried out between late November and February of the participants' Year 7. Each visit was arranged at the convenience of schools and parents, but none were booked in the first half of the autumn term. This ensured that participants were familiar with their new social environment in secondary school. For the participants with SLI, who would later take part in the Time 2 survey, timings also took account of survey re-administration. A gap of at least two months between case study and survey data collections was considered desirable, since carrying out observation and interview shortly before Time 2 survey would establish rapport that might influence participants' responses in the survey questionnaires. This could undermine the validity of the survey measures. A gap also ensured that participants were not overloaded with visits in close succession.

The observation and interviewing of each pupil took place within a fortnight. Schools were asked to timetable the observations first, for reasons given above. However, the logistics of subject timetabling did not always allow this to happen. There was no strongly preferred order for the pupil and parent interviews, although interviewing the pupil first did raise potential ethical dilemmas (see 3.7). For each procedure, staff were asked to ensure that the pupil would not miss favourite lessons, breaks, or special activities.

Administration of observations

At the time of observation, two pupils, both with SLI, had already been interviewed and greeted me on my arrival in class. I answered their greetings, but for ethical reasons did not refer to our previous meeting and introduced myself to the group as a whole. In these situations, the whole observation was non-participant. I thanked the group at the end and said goodbye to pupils collectively. In the case of pupils not yet interviewed, I ceased data collection ten minutes earlier and joined the group. This allowed a little rapport to be built with the future interviewee. However, I made no mention of our next meeting and took leave of the group as a whole, to ensure that the case study participant was not embarrassed.

The environmental checklist (Table 3.14) and spidergram (Figure 3.3) were used in situ to note features of the classroom. As previously stated, the modified observation schedule had a box for recording one-to-one TA involvement with the observed pupil. In the event, this was not used, since none of the participants in the main study were supported individually during the observations.

Administration of pupil interviews

These took place in quiet rooms with comfortable seating and a small table on which the DVR and symbol sheet were placed. Consent to the procedure and to DVR recording (or manual recording if appropriate) was re-confirmed in each case. Before their interviews, the participants were assured of confidentiality within the boundaries of child protection (see 3.7.2) and of their right to full or partial discontinuation of the procedure at any time. I also confirmed that we

would stop as soon as it was break or lunch time, even if the interview was incomplete. I showed them the interview schedule and the symbols, explaining that the symbols would help me to keep track of the things we had talked about and of the questions I still needed to ask. They were assured that they would not be asked to read or write anything themselves. The symbol sheet and the DVR (where used) were then placed between us.

The order in which questions were asked broadly followed the schedule. However, as noted earlier, hierarchically focused interviews allow flexibility, and some questions not fully covered at the superordinate level were answered later at a subordinate level. Questions were repeated if participants forgot what I had asked and were explained if they did not understand. This rarely happened. Forced choice questions were also paraphrased later, if I suspected that the participant had simply repeated the last option heard, was giving a socially desirable response or had answered impulsively before I finished asking the question.

Various verbal elicitation strategies were used. Each new category was introduced with a statement, followed by open and closed question types or sentence completion techniques . Examples are: 'Tell me about your friends this year'; 'How many friends have you got?'; 'I wonder if these are your best friends, or ...?' Since pupils with SLI sometimes answer questions rather sparsely, it was reasoned that the mixed format would allow topics to be adequately probed, but without the interview feeling like an interrogation.

Administration of parent interviews

Four parent interviews were conducted in school in the same room as the pupil interviews. Of the four parent interviewees, three were unaccompanied mothers. In the fourth case, both parents were interviewed together. All but one of these interviews were recorded by DVR, with participant consent. The exception was recorded by fieldnotes only, at the request of the participant. All the participants expressed their willingness to be quoted anonymously on matters that were uncontroversial and which would not identify their child or any person or place connected with the research.

Seven parent interviews were conducted on the phone, at the request of the interviewees. Of these interviewees, six were mothers. In the seventh case, the interview was also carried out with the mother, but the father was with her throughout the phone call and was consulted by her on some of the interview questions. All phone interviews were recorded by fieldnotes. No interviews were conducted or recorded via other technologies such as Skype or instant messaging.

Administration of interview questionnaires

This subsidiary method was added during the case study procedures, so it was not covered by the parental consent letter. Since the parents of the participants with SLI would shortly receive a further letter about the Time 2 survey, it was felt that an additional one would be excessive. Instead, SENCos and LRB teachers were asked to telephone parents and confirm their consent to this extra procedure. The interview questionnaire was first discussed with each of these SEN professionals, to ensure that they were comfortable with it themselves. They were assured that the rules of anonymity and confidentiality were as stringent as those governing the other study procedures.

Of the 14 interview questionnaires, ten were conducted with the SENCo, LRB teacher or a TA who knew the pupil well. The questions were read aloud and the respondent's answers were written in situ. Most of these face-to-face interview questionnaires were carried out with a single respondent. In two cases, the respondent conferred with a TA colleague who had already seen the questionnaire and agreed to add their perspective. For completion of the social position rating, the interview questionnaire was handed to the respondent, so that they could see and reflect on the options before making their selection. The four interview questionnaires returned postally were filled in by SENCos, who indicated whether TA colleagues had contributed to the process.

Issues raised by main study procedures

This section describes logistical issues rather than ethical ones. The latter are addressed in section 3.7.

In the case of interviews recorded by hand, there were implications for data collection and analysis. Inevitably, full data could not be captured and reliance was wholly placed on fieldnotes. The danger is that notes soon become difficult to interpret and data that are not written down are readily forgotten. To reduce such 'data fading', all key answers and short quotes were written during the interview, along with aides-memoire for particularly salient or longer pieces of data. All these were written up in extended form within 24 hours of the interview, together with initial impressions of the content. This was important, since not even verbatim notes reveal intonational markers of mood, fatigue or other states that might have implications for analysis. The interviews recorded on DVR were played back before being fully transcribed onto a computer. This gave me an overall sense of their meaning. The re-play also allowed notes to be added. Although the data were clearly much fuller than those obtained by manual recording only, the digital recordings did not always capture environmental features such as visual and auditory distractions, which could be important. The written notes also allowed particular responses to be commented on, in preparation for analysis.

No issues arose from the conduct of parental interviews, apart from one parent wishing to discuss scholastic provision and behaviour problems at home. To ensure that the interview schedule was fully covered in the available time, we agreed to discuss these other issues at the end. They were not recorded.

The conduct of the interview questionnaires was generally straightforward. A single issue arose in one respondent's social position rating of a pupil. In this respondent's school, there was no policy on classroom seating plans. The respondent, a TA, decided that peer attitudes to this pupil would be 'neutral' if they were directed to work with him by a teacher, but that he would be 'ignored' by peers if they were allowed to choose their own seating. Since this distinction was important in its own right, the TA was asked to tick both boxes, but to highlight the rating that more typically described this pupil's situation.

Summary of main study procedures

This section described the operationalisation of the methods used in the qualitative main study. It specified timing considerations, full details of

administration and logistical issues arising from the procedures. Readers were referred to the later section on ethics for fuller discussion of these issues.

3.6.6 Preparation for analysis

The computer software package, NVivo 9 (QSR, 2008) was used as a thematic management tool for interview and interview questionnaire data. A separate file was opened in NVivo 9 for each case. However, A2 paper and pencil were also used in the earliest stages of preparation, because they allowed full data on an individual case to be seen in one place. This was helpful while the development of themes was still tentative.

The first thematic stage focused on potential factors in social well-being. Background information on personal and environmental characteristics was recorded on each A2 case sheet. This included the severity of SLI or SpLD, the size and location of present and previous school and membership of clubs or other leisure time groups. Data sources were noted alongside these and each source was then examined for further detail. From this, the first-stage themes were developed (see Chapter 4).

The second thematic stage focused on social well-being itself. Again, key data and sources were noted on the A2 case sheets. From these, the second-stage themes were developed (see Chapter 4). The first and second-stage themes were then entered as programme 'nodes' in each NVivo 9 file, in preparation for data entry.

Observational data were not entered in NVivo, because it was essential to analyse each interaction in context. Simply entering what participants said under the social participation or social acceptance nodes would have been mechanistic (Shenton, 2004) and would have ignored peer characteristics and classroom setting – the very factors of interest. Observation data were therefore prepared for thematic analysis via the following steps:

1. Interactions were scrutinised for patterns in the functions expressed.
2. The interaction data for each case were re-examined in the light of the environmental context (see Table 3.14 and Figure 3.3)

Collectively, the above steps prepared all qualitative data for analysis (see Chapter 4).

3.6.7 Framework for analysis

I drew strongly on the framework of Miles and Huberman (1994). This is particularly attractive to the study, because it is sympathetic to the analysis of qualitative data within the pragmatic approach to research that I described earlier in this chapter. As such, it is not paradigmatically prescriptive and does not reject structure in ways that would sit uncomfortably with a mixed method study of this kind. Miles and Huberman stated: 'Readers looking at the methods in this sourcebook will find them to be orderly ones, with a good degree of formalization ... We have opted for thoroughness and explicitness, not just because it suits us, but because vague descriptions are of little practical use to others.' (p. 5)

Thus, the framework encourages the researcher to be specific about analytic method and to avoid passing directly from bulky raw data to conclusions, a tendency in some qualitative research that has attracted criticism (Shenton, 2004). Instead, Miles and Huberman maintain that the analytic process should be transparent, iterating between data reduction, data display and drawing/verifying conclusions. Essentially, their framework advocates both flexibility and clarity of analytic method and this is the approach taken here.

3.6.8 Data display

3.6.8.1 Function and display types

A set of data diagrams was developed, reflecting the study's methodology. These are displayed in Chapter 4. The diagrams constitute a thorough, systematic and manageable display of information, not from arbitrary prioritisation of cases, but from:

' ... the full range of persons, events, and processes under study ... Most important, the chances of drawing and verifying valid conclusions are much greater than for extended text, because the display is arranged coherently to permit careful comparisons, detection of differences, noting of patterns and themes, seeing trends, and so on.' (Miles & Huberman, 1994, p. 92)

In keeping with this spirit, the displays were designed to preserve as much individual data as possible for the reader, whilst ensuring that sheer quantity in the main text did not obscure the intelligibility of findings. As such, reference to the displays is made throughout the thematic analysis in Chapter 4.

The displays guide the analytic flow from individually experienced factors in social well-being to those that were shared and from discrete factors to factor interrelationships. They categorise in several different ways. They demonstrate how each perspective, including my own, contributed to the interpretation of data and highlight both convergent and divergent findings. They show how factors and factor interrelationships are revealed across the two specific types of SEN. Together, they allow analytic tactics to be applied and conclusions to be drawn.

The displays comprise both matrices and network diagrams. In simple terms, the former have rows and columns and therefore constitute tables, whereas the latter are less 'regimented' formats, often involving lines and boxes that connect different ideas or a progression of events. These are labelled as figures. Miles and Huberman demonstrated that both matrices and network diagrams can be used for a multitude of analytic purposes, many of which are too sophisticated for the needs of this study. Usefully, they suggested that matrices are suitable for analysing single or small groups of variables and networks are preferable for larger groups and processes. In accordance with this, the matrices in this study present cross-case data in categories (Miles and Huberman's 'variables'), whereas the network displays present relationships between constructs, factors, or data sources (Miles and Huberman's 'processes').

Unlike qualitative analysis which generates theory, the analysis presented in Chapter 4 was underpinned by existing theory and by prior empirical findings. The displays reflect this. Specifically: 'As we showed earlier ... it is perfectly legitimate, and often desirable, to work from the top down - from a conceptual framework to the collection of information testing its validity.' (Miles & Huberman, 1994, p. 262). Again, this is congruent with the study's methodology.

3.7 Ethics (2): qualitative study

3.7.1 General considerations

These are as stated above for the quantitative phase.

3.7.2 Considerations for specific groups

These too are mainly as stated for the quantitative phase. For example, it was noted that children with SEN may be less able to give informed consent to participation in research than typically developing peers and to signal a wish to withdraw from it. However, qualitative methods, particularly interviews, may result in a higher likelihood that certain ethical dilemmas will arise. As illustration, an interview opens the way to more freedom of expression than filling in a survey questionnaire. As such, there is a greater chance that the child will confide information that may warrant disclosure to third parties.

In some cases, this will not threaten confidentiality. For instance, if a child confides that a staff member is treating them unfairly or that they are being bullied by peers, the researcher can encourage the child to talk to their parents or to school staff themselves. However, if the researcher suspects or confirms a serious issue, especially one relating to child protection, disclosure may be warranted, despite it being at odds with participant confidentiality. Section 27 of the BERA guidelines highlights this duty:

‘Researchers who judge that the effect of the agreements they have made with participants ... will allow the continuation of illegal behaviour ... must carefully consider making disclosure to the appropriate authorities. If the behaviour is likely to be harmful to the participants or to others, the researchers must also consider disclosure.’ (p. 9)

Clearly, this poses an ethical dilemma, but it is one for which researchers need to be prepared.

3.7.3 Ethical procedures undertaken

3.7.3.1 Voluntary informed consent

Rigorous steps were taken to ensure that pupil participants, parents and SEN staff all gave fully informed consent to each aspect and stage of the procedures. Additionally, subject teachers consented verbally to the observations taking place in their classes. This consent was given firstly to the SENCo and then to

me on arrival in class. As noted earlier, no video recordings were used in the observations. Parents may have strong reasons for requesting the exclusion of their children from video recordings. It would clearly have been unethical to include any pupil in the video, even unwittingly, without checking parental consent, or to place the subject teacher in the position of tacitly consenting to such recording. Of course, the written recording of group interactions also included pupils' verbal contributions. However, since the recordings were entirely non-identifying, it was felt that pupils could personally agree to be recorded or to refuse, and they were informed of this right before the observation began. Had one or more pupils objected or shown discomfort, the procedure would have been discontinued.

3.7.3.2 Confidentiality and anonymity

Before pupil interviews commenced, I outlined the topics that would be covered. I then told participants that confidentiality would be strictly upheld unless they disclosed matters that were clearly incompatible with their safety or that of other vulnerable people. This was expressed as: 'persons hurting you or hurting other children or grown-ups who can't speak up for themselves.' I explained that should that occur, we would stop the interview and discuss the appropriate course of action.

During observations, care was taken not to display the name or initials of the participant on the observation schedule, nor to single out the participant for special attention. For the report of interview and observation findings, participants were given pseudonyms. Pseudonyms are much more reader-friendly than identifiers such as 'Child A' or 'Boy C'. However, great care was taken to avoid transparent substitutions such as 'Emma' for 'Emily', or 'Mick' for 'Mike'. Any other information likely to identify the participant was excluded or heavily disguised for reporting purposes.

3.7.4 Issues arising from the procedures

3.7.4.1 Anticipated issues

I anticipated that some parents or staff might request feedback from pupil observations or interviews. In that case, I would have reminded them of the

confidentiality issue. In the event, no such requests were made. No other dilemmas arose in relation to disclosure and confidentiality. However, one pupil interviewee with SLI was clearly very unhappy and anxious about his social position in school. This was not the pupil who had raised social concerns during the survey procedures. I felt that staff should know about the issues and urged him to inform them. He was not keen to do so and asked me to talk to them on his behalf. I agreed to this, but asked him to nominate the person with whom I should speak and to state the limits of what he was happy for me to discuss.

I also predicted that during observations, TD pupils might deduce my interest in the target pupil, since visiting professionals frequently observe pupils with SEN in the classroom. This did occur. During two observations, the participant, whom I had already interviewed, indicated that we had met and other pupils asked how the participant already knew me. Since neither participant answered this question for themselves, I explained to the group that the study involved me working with lots of pupils individually in Year 6 and Year 7, to find out about friendship and other peer experiences at this time of great change. No reference was therefore made to the participants' SEN status or to the specific SEN focus of the study. Clearly, this meant withholding some key information about the research. However, I felt that it was a reasonable compromise which did not involve a misrepresentation of the facts and which meanwhile protected the confidentiality of the participants.

3.7.4.2 Unanticipated issues

One unanticipated issue arose. Two TAs in separate schools gave me their unsolicited perceptions of a participant's social well-being. These occurred as the TAs escorted me to the observation classroom. However, each TA was called away before I could confirm whether they would be willing for their perspectives to be added to the interview questionnaire. Since it would have been unethical to use adventitious data of this kind without consent, the data were not included in the analysis or report. In the same way, occasional comments by parents 'off the record', i.e. when the interview was over and recording had ceased, were excluded from the analysis.

Lastly, two parents unexpectedly raised issues of a sensitive nature during interview. Although the issues were relevant to the inquiry, these parents did not wish the data to be used and I guaranteed that they would not be transcribed or reported in any form.

3.7.5 Summary of ethical matters

This section has detailed general and particular ethical considerations and shown how they were addressed in the qualitative phase of the research. Since the pupil participants were a sub-sample of the participants involved in the Time 1 quantitative phase, many of the same ethical considerations and safeguards applied. It was noted, though, that the qualitative methods of the case study strategy raised additional ethical issues. An example was the potential threat to pupil confidentiality, either during observations, or where disclosure during interviews raised child protection issues. Of additional note was the ethical duty to avoid using data obtained adventitiously, if consent could not be confirmed.

3.8 Chapter summary

Chapter 3 has addressed some theoretical aspects of methodology and described the practical methods of the study. The chapter provided the background to using mixed designs and outlined the controversies that they have attracted. This served to contextualise the study, to provide terms of reference and to justify the use of a mixed method design in research of this kind.

The quantitative and qualitative sections followed a similar structure. Each section described in detail the chosen method or methods, including the tools used for implementing them. This included a rationale for their use. Quality issues of reliability and validity were addressed in the quantitative section and of trustworthiness in the qualitative section, along with the recognition and reduction of threats. Participants and sampling strategies were then outlined, followed by pilot and main study operational procedures. Preparation for analysis was also included. Each section specified ethical considerations and how these were addressed in the relevant phase of the study. Some ethical

issues and dilemmas were relevant to both phases, but others were more method specific.

Lastly, some procedural difficulties arose in both the quantitative and the qualitative phases. These were described briefly in this chapter, since they were relevant to the methodology and to the subsequent analysis. In particular, I noted the sampling problems. The implications of these issues are discussed in Chapter 5.

CHAPTER 4: ANALYSIS

4.1 Introduction to the chapter

Chapter 4 reports on the analyses conducted for the entire study. These are presented separately for the quantitative and qualitative phases of the research, in two substantial main sections. The quantitative findings are presented first, to reflect the order of method implementation and for consistency with Chapter 3. The findings from each phase are summarised in the relevant section. A brief sub-section unites the findings and concludes the chapter.

4.2 Data analysis (1): quantitative study

4.2.1 Introduction to the quantitative analysis

This section reports on the quantitative analysis and findings of the study. The quantitative analysis relates to research questions 1-4, which were listed in section 3.4.1. The hypotheses, variables and the statistical tests used were listed in section 3.4.2 (see Table 3.2). However, the hypotheses and questions will be re-stated in the present chapter, in sections 4.2.5 and 4.2.6 respectively. This is to facilitate readers' understanding of the connection between them and the analysis. Sampling and sub-sampling procedures for particular analyses are explained in this section, followed by the analyses themselves and the results. The results are then linked directly to the hypotheses and to the research questions.

4.2.2 The use of samples and sub-samples

The full SLI samples (N = 35 at Time 1; N = 28 at Time 2) were analysed in relation to the following hypotheses (H1 to H7) and times: H1 at Time 1; H2 at Time 1; H4 and H5, comparing Time 1 and Time 2; H6 at Time 1 and Time 2. SLI sub-samples were used for the following: H1 at Time 2 (n = 23); H2 at Time 2 (n = 23); H3 at Time 1 (n = 24) and Time 2 (n = 19) ; H7 at Time 1 (n = 24) and Time 2 (n = 19).

An SLI sub-sample for H1 and H2 was used at Time 2 because of considerable attrition in the TD group (to N = 23). Examination of mean non-verbal data confirmed that the full Time 2 SLI sample (N = 28) was no longer well-matched with the Time 2 TD sample (SLI mean 92.81, SD 9.928; TD mean 101.43, SD

10.067, $p = .004$; t -value -3.016 ; df 47). Five cases were therefore removed from the SLI group to reduce differences between the mean non-verbal scores of the two groups to a non-significant level (see 4.2.4.2). The SLI sub-samples for H3 and H7 only included cases assessed on the accepted verbal and non-verbal measures described in Chapter 3, because verbal/non-verbal discrepancy was a variable in these analyses. Recall that these measures were the Understanding Spoken Paragraphs sub-test of CELF-4, and CAT-3 or the Perceptual Reasoning Index of WISC-4. At each time, these analyses for H3 and H7 were conducted twice, once including the two borderline verbal/non-verbal discrepancy cases described in Chapter 3 ($n = 24$ at Time 1; $n = 19$ at Time 2) and once excluding them ($n = 22$ at Time 1; $n = 17$ at Time 2).

4.2.3 Preparation for analysis: matching of groups on non-verbal standardised scores and data normality checks

4.2.3.1 Time 1

Prior to Time 1 analysis, checks were made on non-verbal matching between the SLI and TD groups. The slight over-recruitment of TD cases meant that the initial TD sample was larger than the SLI sample, i.e. $N = 40$. An independent samples t -test confirmed significant differences between the groups' mean non-verbal standardised scores (SLI mean 93.79, SD 9.548; TD mean 98.65, SD 9.836, $p = .037$; t -value -2.130 ; df 71). The TD sample was therefore reduced to $N = 35$, by removing five cases whose non-verbal scores were particularly high. However, care was taken to ensure that matching on the other variables was not adversely affected. A further t -test confirmed that there were no significant differences in mean non-verbal scores once the TD group was reduced in this way (SLI mean 93.79, SD 9.548; TD mean 96.71, SD 8.827, $p = .194$; t -value -1.313 ; df 66). These two equally sized SLI and TD groups constituted the definitive full samples for Time 1 analysis.

After screening for errors, univariate normality checks on Time 1 data distribution were carried out, using SPSS Explore. These determined whether parametric or non-parametric statistics should be used for each analysis. Note that in the case of social anxiety data, normality checks were conducted on the SASC-R composite measures and on its three sub-scale measures. This is

because the composite was used to test H1, H2, H4, H5 and H6, whereas the sub-scales were preferred for H3 and H7, in order to provide a finer-grained analysis. These checks were carried out on the full samples and again on the SLI sub-samples, $n = 24$ and $n = 22$. Recall that $n = 24$ and $n = 22$ comprised the cases with prior assessment on CELF-4 and CAT-3 ($n = 15$) or CELF-4 and WISC-4 ($n = 9$), which were used for the verbal/non-verbal discrepancy analyses.

Univariate normality checks confirmed that most of the Time 1 data were normally distributed. However, the following showed non-normal distribution:

- SPPC teacher social acceptance data for both groups: SLI: skewness .340; kurtosis -.592; Kolmogorov-Smirnov .010; TD: skewness -1.653; kurtosis 2.002; Kolmogorov-Smirnov .000. The data were therefore withheld from MANOVA and tested non-parametrically, using Mann-Whitney U .
- SPPC pupil athletic performance data for TD group: skewness -.480; kurtosis -.939; Kolmogorov-Smirnov .004. The TD group was therefore excluded from the regression analysis for H6.
- The SASC-R sub-test, SAD-General data for SLI sub-groups: $n = 24$: skewness 0.868; kurtosis -.142; Kolmogorov-Smirnov .017; $n = 22$ skewness .957; kurtosis -.046; Kolmogorov-Smirnov .031. Having also checked the assumptions of linearity and homoscedasticity in relation to H3, a decision was made to use Pearson r for all covariables *except* SAD-General and Spearman's ρ for all covariables *including* SAD-General. Note that the normal Time 1 social anxiety (composite) and pupil social acceptance data also meant that an additional 'standalone' Pearson r , using just these two covariables, could be conducted. This was an opportunity to use the full SLI sample and to compare the coefficients with those of the full TD sample.
- Note that receptive language level was included in the multivariable correlations for H3, but since no significant associations with outcome measures were found, this variable was excluded from the multiple

regressions for H7. Overall, the checks suggested that there was no serious violation of assumptions for standard multiple regression.

Prior to MANOVA, checks on linearity, homogeneity of variance/covariance matrices, multicollinearity and multivariate outliers were conducted in relation to the two DVs. MANOVA is particularly sensitive to outliers (Pallant, 2007). No multivariate outliers were identified. Overall, the checks suggested that there was no serious violation of assumptions for MANOVA.

4.2.3.2 Time 2

For comparisons with the TD group at Time 2, 23 cases with SLI were selected from the available 28 to ensure a reasonable non-verbal match (SLI mean 95.71, SD 8.770; TD mean 101.43, SD 10.067, $p = .052$; t -value -2.001; df 42).

The data screening procedures carried out at Time 1 were repeated at Time 2, followed by full univariate and multivariate checks of the sample and sub-sample data. Unlike Time 1, SAD-General data were normal at Time 2. This variable was therefore included in the Time 2 Pearson r for H3 and the Time 2 standard multiple regression for H7. Univariate normality checks confirmed that all Time 2 data distributions were normal, apart from the following:

- SPPC pupil social acceptance for TD group: (see Appendix 13A for skewness, kurtosis and Kolmogorov-Smirnov statistics), with implications for testing H1 and H2 by MANOVA at Time 2 and H6 by standard multiple regression at Time 2. The TD pupil social acceptance output was therefore examined carefully, to decide on the exclusion of one or more TD cases from the Time 2 analyses. Excluding extreme scores needed to be balanced against preserving the TD sample, which was now small. In fact, the 5% trimmed mean score (19.52) was similar to the untrimmed mean score (19.61) on this TD measure. Additionally, the outlier scores were not too different from the rest, since the scores as a whole were not very widely distributed (Appendix 13B). A decision was therefore made to keep the TD sample intact for the analysis of H1 and H2 at Time 2, but to exercise particular caution in the interpretation of

findings based on these data. However, the TD group was excluded from the regression analysis for H6.

4.2.4 Results

Table 4.1 Comparison of group social measures at Time 1 and Time 2

Variable	Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	95% CI	Effect size	
							<i>Cohen's d</i>	<i>PE</i> ²
T1 sascTo	SLI	35	49.94	15.30		[45.33, 54.55]	.488	.058
	TD	35	43.26	11.80		[38.65, 47.87]		
T2 sascTo	SLI	23	50.48	16.08		[44.93, 56.03]	.872	.185
	TD	23	38.17	11.80		[32.62, 43.73]		
T1socT	SLI	32			6.00			
	TD	35			12.00			
T1 socP	SLI	35	16.40	4.45		[15.03, 17.77]	.463	.052
	TD	35	18.29	3.66		[16.91, 19.66]		
T2 socP	SLI	23	15.74	4.32		[14.35, 17.13]	1.171	.264
	TD	23	19.61	1.78		[18.22, 20.00]		

Note. CI = confidence interval with upper and lower limits in parentheses; *PE*² = partial eta squared statistic; T1 = Time 1, T2 = Time 2; sascTo = social anxiety composite; socT = teacher rated social acceptance; socP = self-rated social acceptance.

One-way between-group MANOVAs analysed group differences in composite social anxiety and self-rated social acceptance at each time (see Table 4.1). At Time 1, there was no significant difference between groups on the combined dependent variables, $F(2.664)$, $p = .077$, Wilks' Lambda = .926, partial eta squared = .074. When the results for the two dependent variables were considered separately, group differences in social anxiety reached significance at alpha level .05, $F(4.190)$, $p = .045$. The partial eta squared statistic and Cohen's *d* indicated a borderline small/medium effect size (see Table 4.1). Mean scores confirmed that the SLI group showed higher levels of social

anxiety than TD comparisons. Group differences in self-rated social acceptance failed to reach significance, $F(3.753)$, $p = .057$. The partial eta squared statistic and Cohen's d indicated a fairly small effect size (see Table 4.1).

At Time 2, there was a significant difference between the groups on the combined dependent variables, $F(8.356)$, $p = .001$ Wilks' Lambda = .720, partial eta squared = .280. When the results for the two dependent variables were considered separately, group differences in social anxiety reached significance at alpha level .05, $F(9.973)$, $p = .003$. The partial eta squared statistic and Cohen's d indicated a large effect size (see Table 4.1). Again, mean scores confirmed that the SLI group showed higher levels of social anxiety than TD comparisons. Self-rated social acceptance also reached significance at alpha level .05, $F(15.787)$, $p = < .001$. The partial eta squared statistic and Cohen's d indicated a large effect size (see Table 4.1). Mean scores confirmed that the SLI group showed lower levels of self-rated social acceptance than TD comparisons.

At Time 1, a Mann-Whitney U test analysed group differences in teacher rated social acceptance (see Table 4.1). The test revealed significant differences between the SLI and TD groups ($U = 98.000$, $z = -5.904$, $p = < .001$). Median scores confirmed that the SLI group showed lower levels of teacher rated social acceptance than TD comparisons.

Table 4.2 Time 1 correlation coefficients between social anxiety composite and self-rated social acceptance, by group

Covariables	Group	Social anxiety	Social acceptance
Social anxiety	SLI ($n = 35$)	--	-.515**
	TD ($n = 35$)	--	-.401*
Social acceptance	SLI ($n = 35$)	-.515**	--
	TD ($n = 35$)	-.401*	--

Note. *Correlation is significant at $p < .05$ (2-tailed) ** Correlation is significant at $p < .01$ level (2-tailed)

At Time 1 only, Pearson r analysed relationships for each group in turn (see Table 4.2). For SLI, there was a moderately strong negative correlation, $p = .002$. Higher self-ratings of social anxiety were associated with lower self-ratings of social acceptance. For TD, there was a more moderate negative correlation, $p = .017$. Values of r converted to z_{obs} (.58) lay between -1.96 and + 1.96 and did not therefore show significant differences between the groups.

Table 4.3 Time 1 and Time 2 correlation coefficients between verbal/non-verbal discrepancy, social anxiety composite and sub-scales and self-rated social acceptance (SLI)

Variables	1	2	3	4	5	6
1. Disc	—		.447* [.475*]			-.529** [-.620**] -.514* [-.508*]
2. SAnx		---				-.588* [-.584*] -.590* [-.562*]
3. Fne	.447* [.475*]		---			-.587** [-.584**] -.584* [-.558*]
4. New				---		-.644** [-.622**]
5. Gen					---	-.483* [-.462*]
6. SAcc	-.529** [-.620**] -.514* [-.508*]	-.588* [-.584*] -.590* [-.562*]	-.587** [-.584**] -.584* [-.558*]	-.644** [-.622**]	-.483* [-.462*]	---

Note. Values outside parentheses refer to $n = 24$ and $n = 19$ samples, in parentheses to $n = 22$ and $n = 17$ reduced samples; values in italics are for Time 2; Disc = verbal/non-verbal discrepancy, SAnx = composite social anxiety, Fne = fear of negative evaluation by peers, New = social avoidance and distress in new situations, Gen = general social avoidance and distress, SAcc = self-rated social acceptance. *Correlation is significant at $p < .05$ (two-tailed). ** Correlation is significant at $p < .01$ (two-tailed).

At Time 1, Pearson r analysed the relationships for SLI between receptive language level, verbal/non-verbal discrepancy, social anxiety (composite and

sub-scales except general social avoidance and distress) and self-rated social acceptance. Table 4.3 shows the associations. For full and reduced samples, there was a moderately strong negative correlation between social acceptance and social anxiety composite: $n = 24, p = .002$ [$n = 22, p = .026$] and fear of negative evaluation: $n = 24, p = .003$ [$n = 22, p = .004$] and between social acceptance and verbal/non-verbal discrepancy: $n = 24, p = .008$ [$n = 22, p = .002$]. There was a more moderate positive correlation between fear of negative evaluation and verbal/non-verbal discrepancy: $n = 24, p = .029$ [$n = 22, p = .026$]. Spearman's *rho* analysed the relationships with general social avoidance and distress. There was a moderate negative correlation between this variable and social acceptance: $n = 24, p = .017$ [$n = 22, p = .030$].

At Time 2, Pearson *r* re-analysed the relationships for SLI between receptive language level, verbal/non-verbal discrepancy, social anxiety (composite and all sub-scales) and self-rated social acceptance. Table 4.3 shows the associations. For full and reduced samples, there was a moderately strong negative correlation between social acceptance and composite social anxiety: $n = 19, p = .008$ [$n = 17, p = .019$], fear of negative evaluation: $n = 19, p = .009$ [$n = 17, p = .020$] and social avoidance and distress in new situations: $n = 19, p = .003$ [$n = 17, p = .008$] and between social acceptance and verbal/non-verbal discrepancy: $n = 19, p = .024$ [$n = 17, p = .037$].

Table 4.4 Group changes in self-rated social acceptance and composite social anxiety

Measures by group	<u>Time 1</u>			<u>Time 2</u>			<u>95% CI</u>	
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>LL</i>	<i>UL</i>
<i>SLI</i>								
Social acceptance	35	16.40	4.45	28	16.39	4.73	-1.577	1.648
Social anxiety	35	49.94	15.30	28	50.18	17.64	-5.310	6.382
<i>TD</i>								
Social acceptance	35	18.29	3.66	23	19.61	1.78	-3.155	-.062
Social anxiety	35	43.26	11.80	23	38.17	9.52	-.828	8.828

Note. 95% CI is confidence interval of mean differences between Time 1 and Time 2; *LL* = lower limit; *UL* = upper limit.

Paired-sample t-tests analysed changes in each group's measures from Time 1 to Time 2 (see Table 4.4). At alpha level .05, there were no significant changes for SLI in self-rated social acceptance ($t .045$, $df 27$, $p = .964$ two-tailed), nor in composite social anxiety ($t .188$, $df 27$, $p = .852$ two-tailed). The eta squared statistics (.000 for self-rated social acceptance and .001 for composite social anxiety) indicated a minimal effect size. At alpha level .05, there were significant changes for TD in social acceptance ($t -2.157$, $df 22$, $p = .042$ two-tailed), but no significant changes in composite social anxiety ($t 1.718$, $df 22$, $p = .100$ two-tailed). The eta squared statistics for self-rated social acceptance (.164) indicated a fairly large effect size and for composite social anxiety (.118) a medium effect size.

Table 4.5 Prediction of composite social anxiety at Time 1 and Time 2 from combined scholastic, social and athletic measures (SLI)

Variable	Beta	<i>t</i>	<i>p</i>	Part <i>r</i>	% variance	B unstandardized	SE for B
<u>Time 1</u>							
(constant)		7.304	.000			82.169	11.249
Scholastic	-.156	-.854	.400	-.130	1.69	-.643	.753
Social	-.452	-2.208	.035	-.335	11.22	-1.557	.705
Athletic	.045	.256	.800	.039	<1	.148	.580
Model comb			.015		21.50		
	<i>R</i> ² .284						
	<i>R</i> ² a .215						
<u>Time 2</u>							
(constant)		8.260	.000			95.463	11.558
Scholastic	-.148	-.750	.461	-.114	1.29	-.751	1.001
Social	-.529	-2.253	.034	-.342	11.69	-1.976	.877
Athletic	-.052	-.257	.799	-.039	<1	-.171	.666
Model comb			.002		37.70		
	<i>R</i> ² .447						
	<i>R</i> ² a .377						

Note. Time 1 *n* = 35, Time 2 *n* = 28; *R*² a = *R* squared adjusted for small sample; % variance = percentage of variance explained, calculated from *R*² a; Model comb = combined regression model.

Significance is at *p* < .05.

Table 4.5 shows the results of standard regression analysis into which all predictors were entered simultaneously. At Time 1, the combined model of self-rated scholastic performance, social acceptance and athletic performance predicted 21.50% of the total variance in relation to composite social anxiety, $F(4.105)$, $p = .015$. Only social acceptance was a significant unique predictor, explaining 11.22% of the total variance. Table 4.5 shows the percentage contribution of each variable at Time 1, indicating that the scholastic and athletic variables respectively explained a very small and a minimal amount of the total variance. At Time 2, the combined model total predicted 37.70% of the total variance, $F(6.457)$, $p = .002$. Again, only social acceptance was a significant unique predictor, explaining 11.69% of the total variance. Table 4.5 shows the percentage contribution of each variable at Time 2. As at Time 1, the scholastic and athletic variables respectively explained a very small and a minimal amount of the total variance.

Table 4.6 Prediction of self-rated social acceptance at Time 1 from combined verbal/non-verbal discrepancy and two social anxiety sub-scale measures (SLI)

Variable	Beta	<i>t</i>	<i>p</i>	Part <i>r</i>	% variance	B unstandardized	SE for B
(constant)		9.286	.000			24.368	2.624
		<i>9.110</i>	<i>.000</i>			<i>25.277</i>	<i>2.775</i>
Fne	-482	-1.832	.082	-.308	9.48	-.235	.128
	<i>-.414</i>	<i>-1.542</i>	<i>.141</i>	<i>-.259</i>	<i>6.70</i>	<i>-.199</i>	<i>.129</i>
New	.059	.242	.811	.041	<1	.043	.176
	<i>.052</i>	<i>.212</i>	<i>.834</i>	<i>.036</i>	<i><1</i>	<i>.038</i>	<i>.179</i>
Disc	-.328	-1.735	.098	-.292	8.52	-.117	.068
	<i>-.436</i>	<i>-2.263</i>	<i>.036</i>	<i>-.380</i>	<i>14.44</i>	<i>-.165</i>	<i>.073</i>
Model <i>comb</i>			.009		35.00		
			<i>.006</i>		<i>40.90</i>		
R ²	.435						
<i>R²</i>	<i>.494</i>						
R ² <i>a</i>	.350						
<i>R² <i>a</i></i>	<i>.409</i>						

Note. R² *a* = R squared adjusted for small sample; % variance = percentage of variance explained, calculated from R² *a*; values not italicized refer to *n* = 24, values italicized to *n* = 22; Fne = fear of negative evaluation by peers, New = social avoidance and distress in new situations, Disc = verbal/non-verbal discrepancy; Model *comb* = combined regression model. Significance is at *p* < .05.

Table 4.7 Prediction of self-rated social acceptance at Time 2 from combined verbal/non-verbal discrepancy and three social anxiety sub-scale measures (SLI)

Variable	Beta	<i>t</i>	<i>p</i>	Part <i>r</i>	% variance	B unstandardized	SE for B
(constant)		9.009	.000			28.827	3.200
		<i>7.812</i>	<i>.000</i>			<i>29.239</i>	<i>3.743</i>
Fne	-.049	-.134	.895	-.024	<1	-.027	.203
	<i>-.039</i>	<i>-.102</i>	<i>.921</i>	<i>-.020</i>	<i><1</i>	<i>-.022</i>	<i>.218</i>
New	-.472	-1.152	.269	-.208	4.32	-.376	.327
	<i>-.477</i>	<i>-1.100</i>	<i>.293</i>	<i>-.218</i>	<i>4.75</i>	<i>-.385</i>	<i>.350</i>
Gen	-.057	-.229	.822	-.041	<1	-.086	.375
	<i>-.042</i>	<i>-.158</i>	<i>.877</i>	<i>-.031</i>	<i><1</i>	<i>-.065</i>	<i>.409</i>
Disc	-.359	-1.852	.085	-.334	11.15	-.149	.080
	<i>-.378</i>	<i>-1.791</i>	<i>.099</i>	<i>-.354</i>	<i>12.53</i>	<i>-.166</i>	<i>.092</i>
Model comb			.019		41.60		
			<i>.045</i>		<i>37.40</i>		
	R ²	.545					
	<i>R²</i>	<i>.530</i>					
	R ² a	.416					
	<i>R² a</i>	<i>.374</i>					

Note. R² a = R squared adjusted for small sample; % variance = percentage of variance explained, calculated from R² a; values not italicized refer to *n* = 19, values italicized to *n* = 17; Fne = fear of negative evaluation by peers, New = social avoidance and distress in new situations, Gen = general social avoidance and distress, Disc = verbal/non-verbal discrepancy; Model comb = combined regression model. Significance is at *p* < .05.

Tables 4.6 and 4.7 show the results of multiple regression analysis, into which all the predictors were entered simultaneously. At Time 1, in the full sample, the combined model of fear of negative evaluation by peers, social avoidance and distress in new situations and verbal/non-verbal discrepancy predicted 35.00%

of the total variance in relation to self-rated social acceptance, $F(5.124)$, $p = .009$ (see Table 4.6). For the reduced sample, the combined model predicted 40.90% of the total variance, $F(5.850)$, $p = .006$. Verbal/non-verbal discrepancy (reduced sample only) was the only significant unique predictor of self-rated social acceptance, explaining 14.44% of the total variance. Table 4.6 shows the percentage contribution of each variable at Time 1. In the full samples, fear of negative evaluation by peers and verbal/non-verbal discrepancy made similar contributions. In the full and reduced samples, social avoidance and distress in new situations made a minimal contribution.

At Time 2, general social avoidance and distress was added to the combined model of fear of negative evaluation by peers, social avoidance and distress in new situations and verbal/non-verbal discrepancy (see Table 4.7). At Time 2, in the full sample, the combined model predicted 41.60% of the total variance in relation to self-rated social acceptance, $F(4.199)$, $p = .019$. For the reduced sample, the combined model predicted 37.40% of the total variance, $F(3.386)$, $p = .045$. Neither the full nor the reduced sample showed a significant unique predictor of self-rated social acceptance. Table 4.7 shows the percentage contribution of each variable at Time 2. The highest contribution was by verbal/non-verbal discrepancy (reduced sample). In the full and reduced samples, fear of negative evaluation by peers and general social avoidance and distress made minimal contributions.

4.2.5 Linking results to the hypotheses

H1. Measures of social acceptance will be lower at Time 1 and Time 2 in SLI participants than in TD comparisons.

H2. Measures of social anxiety will be higher at Time 1 and Time 2 in SLI participants than in TD comparisons.

At Time 1, the SLI group had significantly lower social acceptance than the TD group on teacher ratings, but not on self-ratings. H1 was therefore upheld at Time 1 on teacher ratings, but the null hypothesis was upheld in relation to self-ratings. At Time 1, the SLI group also had significantly higher social anxiety

than the TD group. H2 was therefore upheld at Time 1 and the null hypothesis rejected.

At Time 2, unlike Time 1, the SLI group had significantly lower social acceptance than the TD group on self-ratings. Teacher ratings were unavailable. H1 was therefore upheld at Time 2 on self-ratings and the null hypothesis rejected. At Time 2, the SLI group again had significantly higher social anxiety than the TD group. H2 was therefore upheld at Time 2 and the null hypothesis rejected.

H3. There will be a relationship between social acceptance (self-ratings), social anxiety, receptive language level and verbal/non-verbal discrepancy in SLI participants.

At Time 1, there were significant associations between self-rated social acceptance and social anxiety composite and sub-scales, between self-rated social acceptance and verbal/non-verbal discrepancy and between fear of negative evaluation and verbal/non-verbal discrepancy. For these variables, H3 was therefore upheld at Time 1 and the null hypothesis rejected. However, no significant associations were found for receptive language level. For this variable, H3 was therefore rejected at Time 1 and the null hypothesis upheld.

At Time 2, there were again significant associations between self-rated social acceptance and social anxiety composite and sub-scales and between self-rated social acceptance and verbal/non-verbal discrepancy. For these variables, H3 was therefore upheld at Time 2 and the null hypothesis rejected. However, no significant associations were found for receptive language level, nor between any social anxiety measure and verbal/non-verbal discrepancy. For these variables, H3 was therefore rejected at Time 2 and the null hypothesis upheld.

H4. Measures of social acceptance (self-ratings) will change in SLI participants between Time 1 and Time 2.

H5. Measures of social anxiety will change in SLI participants between Time 1 and Time 2.

From Time 1 to Time 2, there were no significant changes on either social acceptance or social anxiety for the SLI group. This finding was common to both $n = 28$ (the full Time 2 sample) and $n = 23$ (the Time 2 sub-sample, matched to the TD sample). H4 and H5 were therefore rejected and the null hypotheses upheld.

H6. Social anxiety at Time 1 and Time 2 will be predicted from combined social, scholastic and athletic measures (self-ratings) in SLI participants.

At both Time 1 and Time 2, social anxiety in the full SLI samples was predicted from combined data on social, scholastic and athletic self-ratings. H6 was therefore upheld at both Time 1 and Time 2 and the null hypothesis rejected. Additionally, at both times, social acceptance was a unique predictor.

H7. Social acceptance (self-ratings) at Time 1 and Time 2 will be predicted from combined verbal/non-verbal discrepancy and social anxiety sub-scale measures in SLI participants.

At both Time 1 and Time 2, self-rated social acceptance in the reduced SLI samples was predicted from combined data on SAD-New, fear of negative evaluation, verbal/non-verbal discrepancy and, at Time 2, for the added SAD-General variable. H7 was therefore upheld at both Time 1 and Time 2 and the null hypothesis was rejected. Additionally, at Time 1, verbal/non-verbal discrepancy was a unique predictor in the smaller sub-sample. At Time 2, there was no unique predictor.

4.2.6 Linking findings to the research questions

Question 1. Does the level of social well-being in pupils with receptive SLI differ from that of their typically developing peers around the time of secondary transition?

At Time 1, the participants with SLI were more socially anxious than their TD peers, but they did not present lower self-ratings of social acceptance. However, classteachers' social acceptance ratings at Time 1 were significantly

higher for the TD group than the SLI group and on that measure, group differences are clearly discernible at Time 1.

Group differences at Time 2 resembled those at Time 1 for social anxiety, but not for self-rated social acceptance. In other words, the SLI group showed both higher anxiety *and* lower self-rated social acceptance at Time 2 than their TD peers. However, recall that Time 2 findings are less instructive than those at Time 1, due to the considerably reduced TD sample size and apparent violations of MANOVA assumptions on the TD self-rated social acceptance measures (see Appendix 13A and 13B). It was not possible to analyse teacher ratings of social acceptance at Time 2, since very few teachers completed the measure.

Question 2. Are there associations between social acceptance, social anxiety and the severity of receptive SLI?

The association between self-rated social acceptance and social anxiety in the SLI group was consistent and moderately strong. It was evident in the full and the reduced samples and at both times. This association was also apparent for the TD group at Time 1. Although weaker, the association for the TD group was not significantly different from that of the SLI group. In contrast, no link was found between SLI participants' receptive language scores and either social acceptance self-ratings or any social anxiety measure, but a consistent association was found between self-rated social acceptance and verbal/non-verbal discrepancy. An association was also found at Time 1 between one social anxiety sub-scale, fear of negative evaluation, and verbal/non-verbal discrepancy, but this association was no longer apparent at Time 2. Moreover, the association with verbal/non-verbal discrepancy did not extend to the *composite* social anxiety measure at either Time 1 or Time 2.

Overall, the results show that self-rated social acceptance has a stronger relationship with verbal/non-verbal discrepancy than with receptive language scores themselves. The results also demonstrate a tentative link between verbal/non-verbal discrepancy and a fear of negative evaluation by peers, but they do not provide evidence of an association between verbal/non-verbal discrepancy and social anxiety as a whole.

Question 3. Do changes in social well-being occur between the end of primary education (Year 6) and the start of secondary education (Year 7)?

There was no change in the SLI mean scores on either variable over the two time points (see Appendix 13C and 13D). In fact, the scores were remarkably similar, particularly for self-rated social acceptance. However, there was notable heterogeneity, with some cases showing virtually static scores from Time 1 to Time 2 and others showing marked change. Teacher ratings of social acceptance would have been compared between Time 1 and Time 2, had the latter been available.

Question 4. What variables can predict social anxiety and social acceptance over the transition period?

For the SLI full samples, self-rated social acceptance was a unique predictor of social anxiety at both Time 1 and Time 2, whereas self-rated scholastic and athletic performance were not. As noted earlier, the model could not be compared with TD at either time, due to the non-normal distribution of some of the TD data. For the SLI smaller sub-sample, verbal/non-verbal discrepancy was a unique predictor of self-rated social acceptance at Time 1 only, whereas the social anxiety sub-scales were not unique predictors at either time.

The two regressions allowed the predictive direction to be examined for the outcome variables. Self-rated social acceptance was the strongest predictor of social anxiety across the transition period, whereas verbal/non-verbal discrepancy was the strongest predictor of social acceptance, but only at Time 1.

4.2.7 Summary of findings

This quantitative analysis focused on four specific questions. Seven hypotheses were tested and the results have shed light on the research questions.

Summing up across the questions, some differences in social well-being were found between the SLI group and their TD peers. Specifically, these were in social acceptance teacher ratings in Year 6, which were markedly higher for TD participants, social anxiety composite scores in both Year 6 and Year 7, and, subject to cautious interpretation, social acceptance self-ratings in Year 7. For

the SLI group, the association between social acceptance and social anxiety and between social acceptance and verbal/non-verbal discrepancy was longitudinally robust, with the latter being of particular interest to the study. However, the group did not show any significant changes in self-rated social acceptance or social anxiety between Year 6 and Year 7.

4.3 Data analysis (2): qualitative study

4.3.1 Introduction to the qualitative analysis

This section analyses the qualitative data and reports on the findings. The findings relate to research questions 5 and 6, which were addressed by the case study methods. The questions are:

Question 5. What factors interrelate with social well-being in pupils with receptive SLI over the secondary transition period?

Question 6. Do these factors interrelate similarly in pupils with SpLD?

The analysis starts with data reduction. Next, there is a description of the diagrams that display and make sense of the data. A full thematic analysis follows, answering each of the research questions in turn. This analysis constitutes the heart of the process. It analyses the data under single factor and factor interrelationship themes, drawing on the multiple sources and comparing issues for participants with SLI with those who have SpLD. The overall findings are summarised after the thematic analysis.

4.3.2 Data reduction

Data reduction involves the organisation of unanalysed material into manageably grouped units or themes from which meaning can be interpreted. This is commonly known as coding. For Miles and Huberman (1994), codes can be descriptive or interpretive, but are essentially *part* of analysis, not just a prerequisite methodological step. For this reason, I described preparation for coding in Chapter 3, but I am detailing here the themes under which the data were subsequently coded.

Table 4.8 First stage themes

Personal enablers	Personal barriers
School enablers	School barriers
Out of school enablers	Out of school barriers
Factor interrelationships	Other points of interest

The last theme, 'Other points of interest', was included as a repository for noteworthy data that lay outside the themes or were ambiguous. For example, it was anticipated that a school may have both enablers (e.g. suitable after-school clubs for pupils with SEN) and barriers (pupils unable to attend these clubs, due to transport issues) and that some single factors may constitute both an enabler and a barrier. An example was lunchtime bases for pupils experiencing social difficulties. These bases were seen as safe havens by such pupils (an enabler), but they also reduced the pupils' contact with socially successful peers (a barrier). 'Other points of interest' was also used to code data that were counterintuitive or clearly divergent from other source material. An example was the participant with SpLD for whom interviews and observation all suggested good social participation and acceptance in class, but who received somewhat negative ratings on the SEN staff interview questionnaire. The repository helped later with verifying tactics, since it reduced the danger of ignoring evidence that did not fit neat patterns.

The sub-categories of friendship were included as second stage themes (Table 4.9), since the literature and initial data scrutiny suggested they were important. The last of these, 'frames of friendship' refers to the work of Meyer (2001, citing Meyer, Minondo et al., 1998), in which friendship falls into six categories. These are: 'best friend', 'regular friend', 'just another child', 'I'll help', 'inclusion child' and 'ghost or guest'. The categories describe the continuum from intimate and less intimate friendship to being just one of a crowd, to being tolerated as one different and in need of non-reciprocal help, and finally to being virtually 'invisible' to classroom peers. The implication for Meyer was that pupils with

SEN tend to experience the closer friendship categories less frequently than their peers.

Table 4.9 Second stage themes

Social anxiety	Social acceptance	Social participation
<p>Friendship</p> <ul style="list-style-type: none"> • basis of friendship • ease and importance of making friends • number of friends • quality of friendship • frames of friendship 		

4.3.2.1 Network displays

Conceptual networks were needed to link the potential enablers and barriers with social well-being. Figure 4.1 provides the link. Figure 4.2 extends this by breaking down enablers and barriers into a set of discrete factors. 'Other' was included, because at this stage it was reasonable to suppose that participants may have characteristics not accounted for by the other factors. This did not prove to be the case and 'Other' was therefore not included in the matrices.

Figure 4.3 demonstrates the varying contribution of data sources and perspectives to the four discrete domains of social well-being. For example, pupil and parent interviews contributed in varying degrees to all domains, whereas teacher data did not contribute to social anxiety and my observations were mainly limited to social participation.

Figures 4.4 and 4.5 show discrete factors and factor interrelationships for each case. For these complex relationships, the three broader categories of social

well-being of Table 4.16 were considered inadequate, but using the seven categories of Tables 4.14 and 4.15 would have resulted in a cumbersome display. The seven were therefore combined into four: 'Poor', 'Fair', 'Quite good/Good' and 'Very good'. It involved collapsing the three 'Poor' categories into one, whilst setting two 'Good' categories and maintaining 'Fair' as discrete. This preserved a reasonable balance across the levels of well-being.

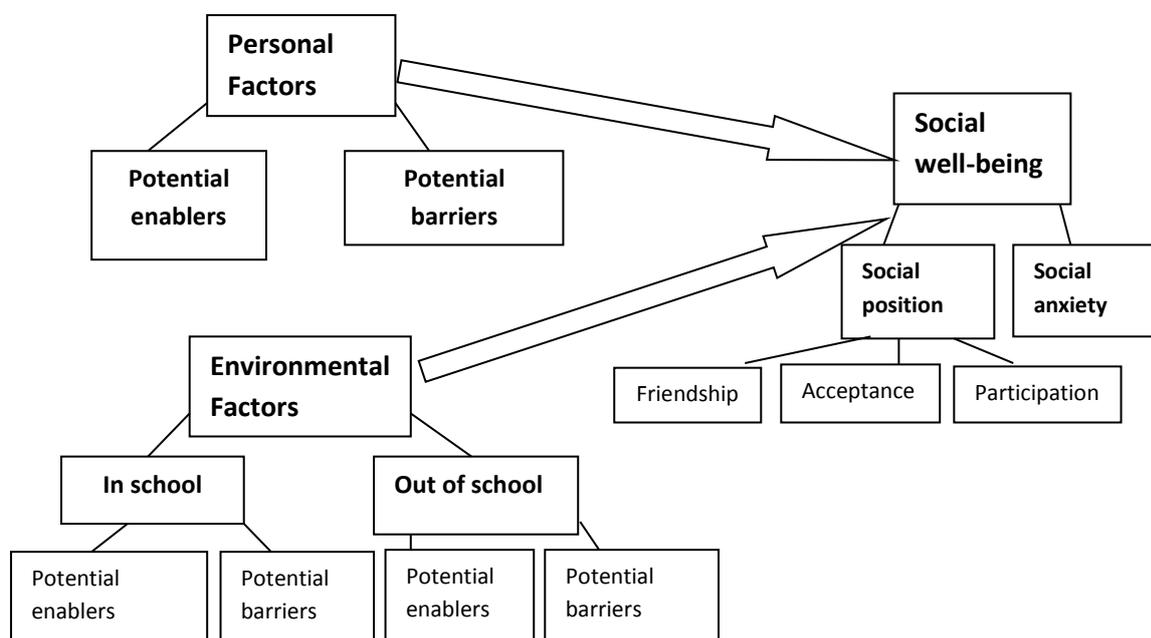
4.3.2.2 Matrix displays

Tables 4.10 and 4.11 are very rich data sources, because they display within each SEN group all the factors for individual participants and specify the role of the person or persons who provided the evidence. Tables 4.12 and 4.13 (see Additional materials section) were devised similarly, again providing rich cross-case data, this time on each social well-being domain. These tables specify data type as well as role source. The tables include some direct quotes, but where editing demands would risk misrepresentation of the speaker's intended meaning, a brief resume is provided instead. Together, these large matrices provided core data for the smaller ones, i.e. Tables 4.14 and 4.15 and Table 4.16.

Tables 4.14 and 4.15 were devised as follows. First, the categorised factors from Tables 4.10 and 4.11 were totalled for each case. Based on the sum of evidence in Table 4.12 or Table 4.13, each case was then allocated one of seven composite social well-being ratings. These were: 'Very good', 'Good', 'Quite good', 'Fair', 'Quite poor', 'Poor' and 'Very poor'. The composite ratings applied to well-being in Year 7, but the pre-transition data also helped to inform them, providing useful comparisons between the primary and secondary phases. The seven rating categories were used at this stage, because it was felt that they would allow a more thorough synthesis of multiple data sources.

Table 4.16 groups participants under the following social well-being headings: 'Good', 'Fair' and 'Poor'. Under these, the overall balance between enabler, barrier and mixed factors are easily compared between individuals and across the two SEN types. For this reason, the data are displayed on a single matrix, rather than separated by SEN type.

Figure 4.1 Factors associated with social well-being in Year 7 pupils with receptive SLI or SpLD



4.3.2.3 Analytic function of the displays

Tables 4.10 and 4.11 are essentially descriptive. However, they go beyond description by categorising the factors case by case. As such, they also fulfil an analytic role. Tables 4.12 and 4.13 are also partly descriptive, but their final column distils and compares multifaceted data across the transition period, thus serving an analytic function too.

Tables 4.14 and 4.15 move the analysis into a more overtly explanatory phase, whereby the total number of enabler, barrier and mixed factors for each case can be seen alongside ratings of their overall social well-being. Table 4.16 furthers this by showing how the factor balance operates for different levels of social well-being.

Figures 4.4 and 4.5 move the analytic process beyond the link between discrete factors and social well-being ratings to the ecological relationship between personal and environmental factors and between the environmental factors

themselves. In other words, these twin network displays illustrate the synergy of factors which are explored in the thematic analysis.

4.3.3 Thematic analysis

4.3.3.1 Introduction

The thematic analysis now addresses the fifth and sixth research questions, examining the evidence from the displays searchingly. For each question in turn, it starts with the overall number of factors and the balance between enablers and barriers, linking this balance with levels of social well-being across cases. It then focuses on the importance of discrete factors, progressing to the ecological relationship between them. Data not directly or fully displayed in the matrices are included, particularly interview quotes and observational material. Interim summaries are provided, for ease of reference. An overall summary of findings follows the thematic analysis. This allows the threads to be drawn together across the two research questions. For economy of expression, the abbreviations P-SLI and P-SpLD are used in this analysis to denote 'participant(s) with SLI' and 'participant(s) with SpLD'. Where such distinction is superfluous, terms such as 'cases', 'pupils' or 'young people' are used instead.

Figure 4.2 Personal and environmental factors as potential social enablers and barriers

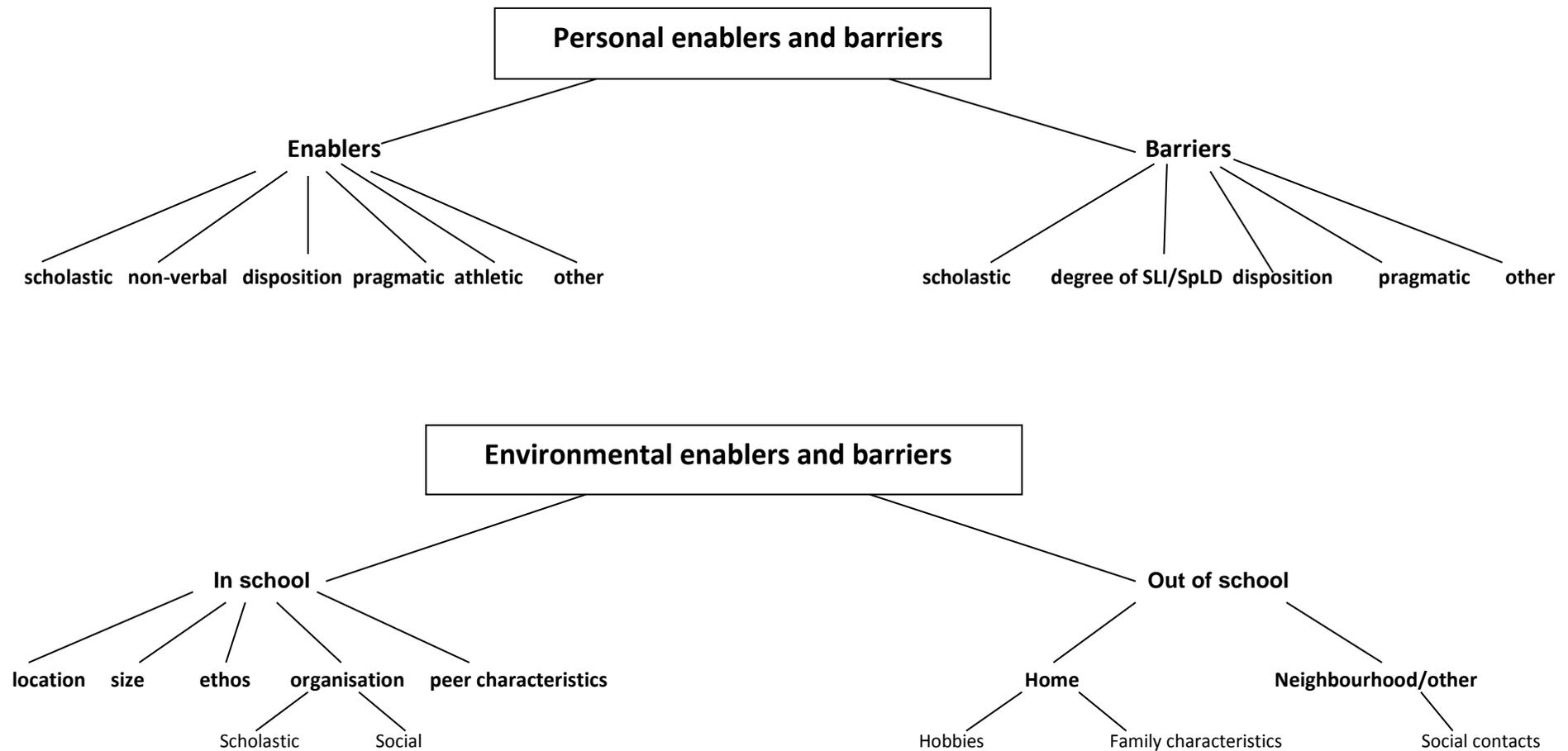
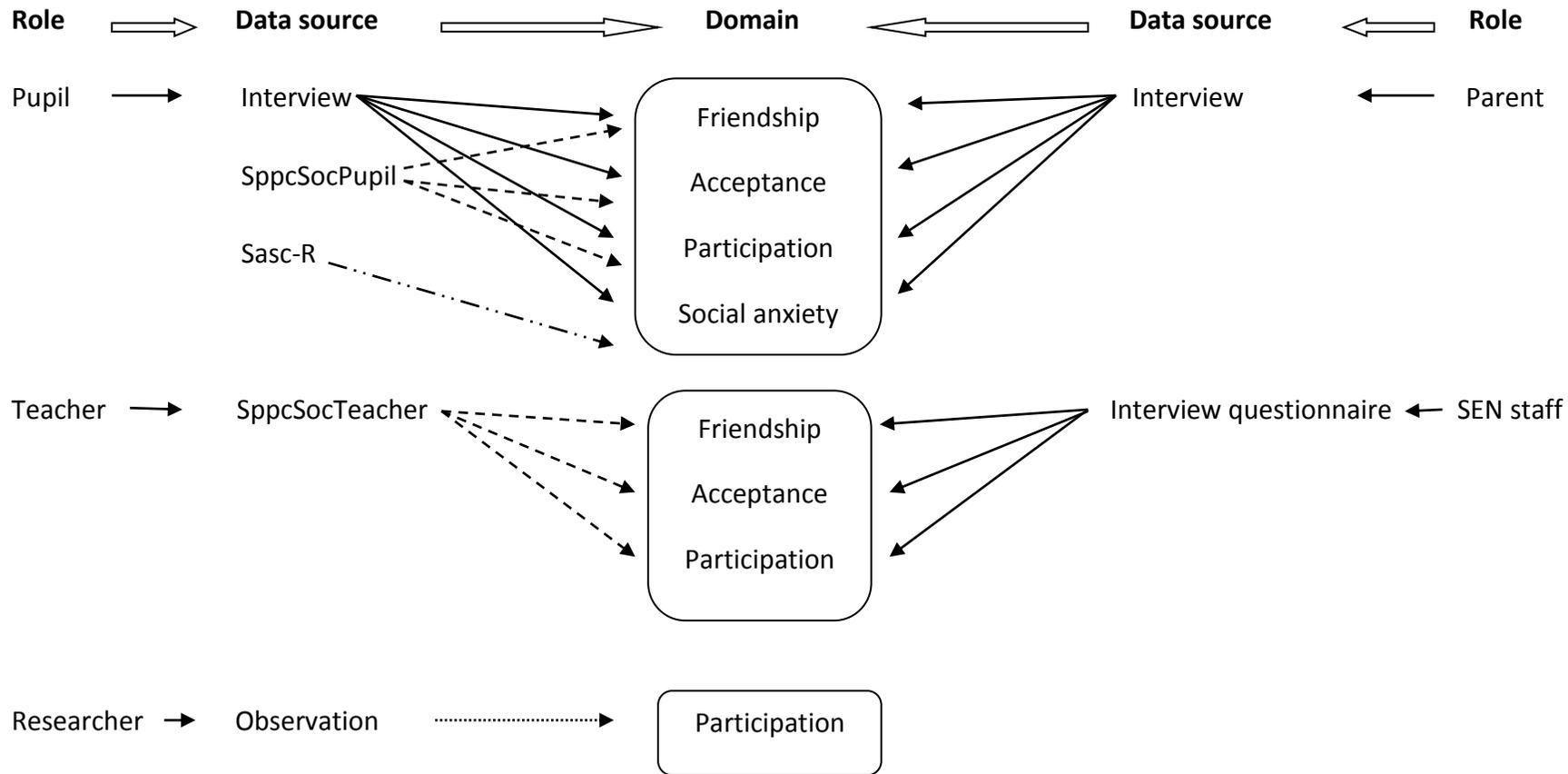


Figure 4.3 Linking role perspectives and data sources with discrete social well-being domains across the transition



Key: SppcSocPupil = Self-perception Profile for Children (social) pupil questionnaire SppcSocTeacher = Self-perception Profile for Children (social) teacher questionnaire
 Sasc-R = Social Anxiety Scales for Children and Adolescents (revised) pupil questionnaire

Figure 4.4 Factor interrelationships and composite social well-being in Year 7 by case (SLI)

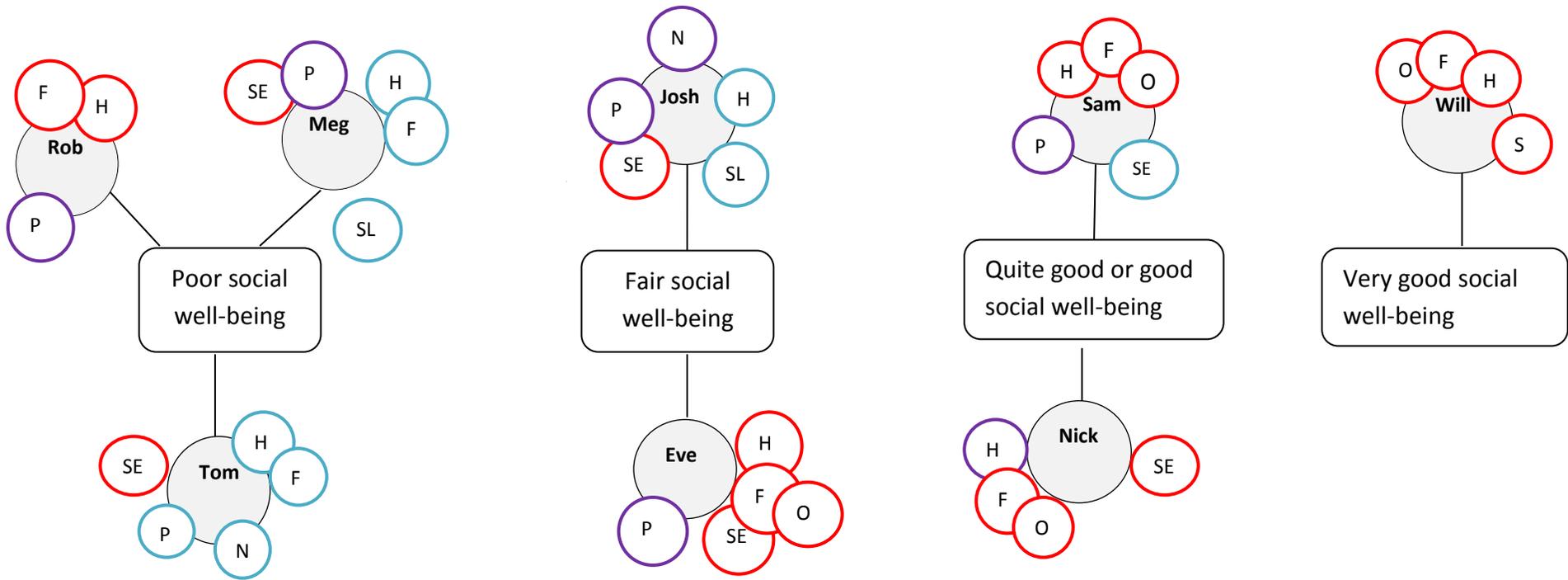
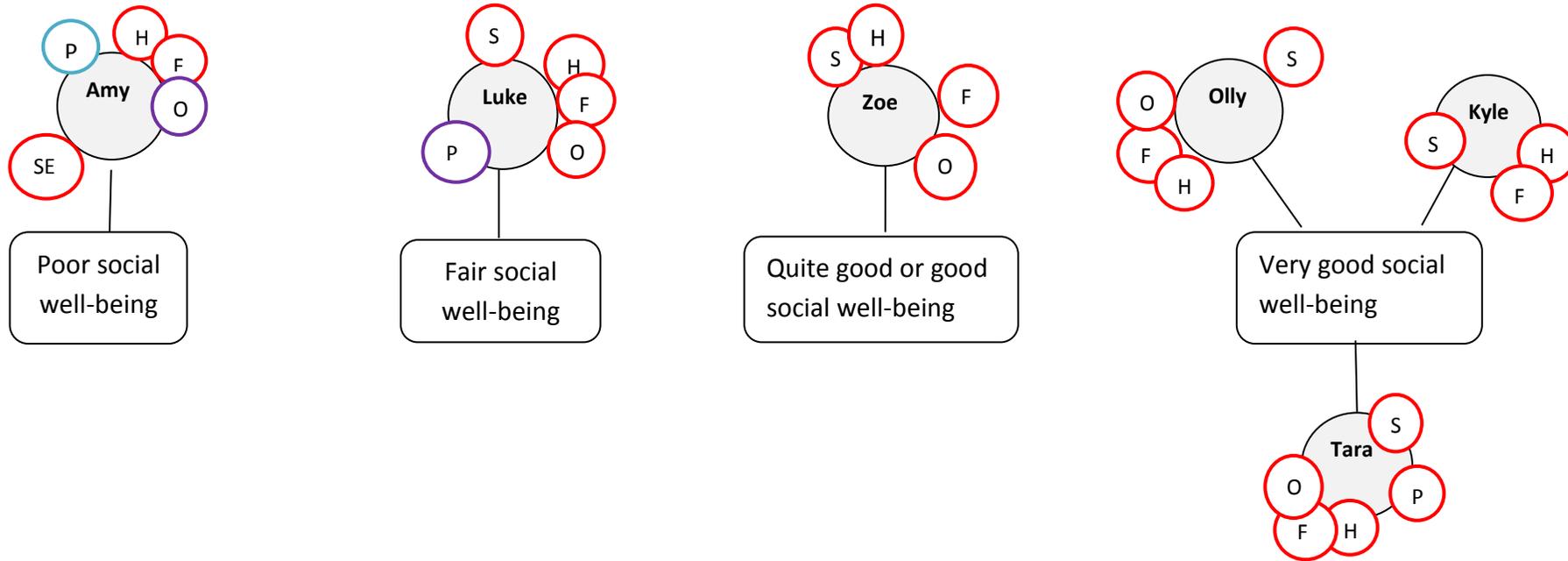


Figure 4.5 Factor interrelationships and composite social well-being in Year 7 by case (SpLD)



Key to Figures 4.4 and 4.5: 1. Red = enabler, blue = barrier, purple = mixed. 2. F = family circumstances, H = hobbies, P = peer attitudes, N = neighbourhood social opportunities, O= other out of school socialisation, SE = school ethos, SL = school location, S = school (two or more aspects, e.g. size and ethos)

Table 4.10 Cross-case matrix (SLI): summary of personal and environmental factors in social well-being in Year 7

Case	Personal factors (coded E = Enabler B = Barrier N = Neutral U = Unclear M = Mixed)					Environmental factors (coded E = Enabler B = Barrier N = Neutral U = Unclear M = Mixed)			
	Scholastic	Non-verbal	Degree of SLI/SpLD	Disposition/pragmatics	Athletic	School characteristics	Hobbies	Family characteristics	Other out of school social contacts
Rob	Fairly low/low (FT) (SNCoth). <i>B</i>	(93) Mid range in SLI group (R) (SNCoth). <i>N</i>	Moderate. 'Weak auditory memory affecting comprehension' (S). <i>B</i>	Caring with very young (P) (PT) <i>E</i> , but negative with peers (R). Exasperates peers (PT). Misinterprets language of teasing as bullying (TA). <i>B</i>	Not good (FT) (PT). Self-perception fair (P). <i>N</i>	Local, high need. Ma/En/Sci set Y7 (SNCoth). Mixed peer attitudes (P) (TA) (R). <i>M</i>	Sea cadets (P) (PT). <i>E</i>	Highly involved with leisure activities (PT). <i>E</i>	Rare, casual. Often short-lived (P) (PT). Local but other schools (P) (PT). MUST (P) (PT). <i>N</i>
Meg	Fairly low (TA) (SNCoth) <i>B</i>	(93) Mid range in SLI group (R) (SNCoth). <i>N</i>	'Significant, as language memory < 1 st centile' (S) <i>B</i>	Tries to help/be friendly (SNCoth). <i>E</i> But weak initiation strategies (TA) (R). <i>B</i>	Self-perception fair (P). No (FT) rating. <i>N</i>	Not local. Y7 LRB pupils access support via low sets (SNCoth). Mainstream socialisation highly encouraged (TA). Some peers reject (P)(TA) or ignore (R). <i>M</i>	None (P). <i>B</i>	Social lifestyle unknown. <i>U</i> Transport difficulties isolate (P). <i>B</i>	Few and rare. Local but other school (P). No other role sources. MUST (P). <i>N</i>
Josh	Very low (SNCoth). <i>B</i>	(80) Low range in SLI group (R) (SNCoth). <i>B</i>	'Significantly severe SLI. ' (S). <i>B</i>	Amiable (R). 'Highly sociable' (SNCoth) Liked by LRB peers (TA). <i>E</i> Impulsive, garrulous, poor verbal turn-taking (R). <i>B</i>	Very good (P) (PT) (TA). No (FT) rating. <i>E</i>	As case above (SNCoth). Good tutor-home links (PT). Peer rejection (P) and support (TA). <i>M</i>	None out of school (P). Less self-assured outside school (PT). <i>B</i>	Local extended family (PT). Other social lifestyle unknown. <i>U</i>	One frequent. Local but other school (P) (PT). Prone to fall-outs (PT). MUST (PT). <i>M</i>
Sam	Fairly low (SNCoth) (FT). <i>B</i>	(89) Mid range in SLI group (R) (SNCoth). <i>N</i>	Significant. Weak abstract processing (S). <i>B</i>	Polite, gentle (TA). <i>E</i> Worries a lot and seeks reassurance (SNCoth) (PT). Good social skills (S) (R). <i>E</i>	Excellent (P) (PT) (TA) (FT). <i>E</i>	Local, low need. Ma set Y7 (SNCoth). Club times unclear to pupil (PT). Some peer teasing, but some support (P) (PT). <i>M</i>	Regional level sport (PT). <i>E</i>	Highly support leisure/social outlets (P) (PT). <i>E</i>	Two older local - same school (PT). Own age local school friends (SNCoth) (P). UNUST. <i>E</i>

Case	Scholastic	Non-verbal	Degree of SLI/SpLD	Disposition/pragmatics	Athletic	School characteristics	Hobbies	Family characteristics	Other out of school social contacts
Nick	Mainly average (SNCoth). E	(100) High range in SLI group (R) (SNCoth). E	Moderate (S). B	Humorous, loyal and 'very affable' (TA). E Good compensatory skills (P) (PT). E	Fairly good (PT) (P) (FT). E	Local, high need. Ma/En/Sci set Y7 (SNCoth). Peers/staff mostly supportive (PT). E	Gang Show and Scouts (PT). M	As case above (P) (PT). E	None local. Nor school friends (as non-local). Mixed age Gang Show friends in town (PT). SUST (PT). M
Will	All average (SNCoth). E	(101) High range in SLI group (R) (SNCoth). E	Significant in grammar, not in vocabulary (S). B	Outgoing (SNCoth) Jolly (TA) Easygoing (PT). E Very good pragmatic and compensatory skills (P) (R). E	Very good (PT) (P) (FT) (TA). E	Small, local, mixed intake. Ma/Sci bands Y7 (SNCoth). Peers friendly. More peers in Y7 seen as benefit (P) (PT). E	Football training and other outdoor pursuits (P) (PT). E	Outdoor, sociable, highly support leisure/social outlets (PT). E	Many, regular. Most school/hobby friends are local (P) (PT). SUST (PT). E
Eve	Low (SNCoth). B	(90) Mid range in SLI group (R) (SNCoth). N	Some moderate comprehension scores but severe language memory problems (S). B	Now socially more assertive (PT). E But over-worries about disputes (PT). Low use of clarification requests (R). B	Fair (FT). Y7 (P) rating low. U	Local, mixed intake (SNCoth) and peer attitudes (P) (PT) (SNCoth). Ma/En/Sci set Y7 (TA). Staff supportive (PT). M	Gymnastics and Guides (PT). E	Highly proactive in nurturing socialisation (PT). E	Intermittent with one local school friend (P) (PT). Some fall-outs with this friend when out of school (PT). UUST (P) (PT). M
Tom	Fairly low/low (SNCoth). B	(93) Mid range in SLI group (R) (SNCoth). N	Significant, but masked by garrulous manner (S). B	Prefers own/adult company (PT) (TA). B Over-dramatic and loud (R). Annoys peers as interferes (TA). B	Poor (P). No (FT) rating. U	Small, local, very high need. Full setting Y7. Many clubs: staff highly encourage SEN pupil talent (SNCoth). Most peers neutral (TA) or rejecting (P). M	Solitary computer games (PT). B	Socially quite isolated. Own choice to play alone at home (PT). B	Rare. Local but mainly other schools. Usually unsuccessful (PT) MUST (PT). B

Key for role sources: (P) = Pupil (PT) = Parent (FT) = Form Tutor (S) = Speech and Language Therapist (SNCoth) = Senco/Other SEN Teacher (TA) = Teaching Assistant (R) = Researcher **Key for use of social technology (final column):** MUST = minimal or limited use SUST = some use FUST = frequent use UUST = unsuccessful use UNUST = unclear use Note: Social technology refers to mobile phones and on-line social networks only.

Table 4.11 Cross-case matrix (SpLD): summary of personal and environmental factors in social well-being in Year 7

Personal factors (coded E = Enabler B = Barrier N = Neutral U = Unclear M = Mixed)						Environmental factors (coded E = Enabler B = Barrier N = Neutral U = Unclear M = Mixed)			
Case	Scholastic	Non-verbal	Degree of SLI/SpLD	Disposition/pragmatics	Athletic	School characteristics	Hobbies	Family characteristics	Other out of school social contacts
Luke	Mostly average test scores, but functions lower in class (SNCoth). <i>U</i>	(81) Low range in SpLD group (R) (SNCoth). <i>B</i>	Moderate (reading, spelling/task organisation) (SNCoth). <i>B</i>	Cheerful, engaging (R). Workwise a nervous lad (SNCoth). Kind, loyal, mixes well (PT). <i>E</i> Pragmatic awareness good (R), but can antagonise peers (TA). <i>M</i>	Fair (P) (PT). No (FT) rating. <i>U</i>	Local, mixed intake (SNCoth). Peers mainly friendly (R) or neutral (TA). Ma/En/Sci set Y7 (TA). More peers in Y7 seen as benefit (P). <i>M</i>	Youth clubs, swimming and Scouts (P). <i>E</i>	Involved with church/ youth club and support all social outlets (P) (PT). <i>E</i>	School/former school local friends at home, youth club or in town. Some other ages (P) (PT). FUST (P). <i>E</i>
Amy	Low average or just below (SNCoth). <i>B</i>	(104) High range in SpLD group (R) (SNCoth). <i>E</i>	Mild (reading). Moderate (spelling, task organisation) (SNCoth). <i>B</i>	Prefers adults. Work worries (R). <i>B</i> Poor pragmatics (R). Helpful, but overbearing (TA). <i>B</i>	Fairly good (SNCoth). No (FT) rating. <i>N</i>	Local, mixed intake. SpLD kitemark status. Ma/En/PE set Y7 (SNCoth). Some peers ignore (R) or reject (TA). <i>M</i>	Sea Cadets (P) (PT). <i>E</i>	Actively facilitate leisure activities and all friendships (P) (PT). <i>E</i>	None very local. Two school friends from wider rural catchment, one very recently for reciprocal sleepovers, but some fallouts. (PT). UUST (P) (PT). <i>M</i>
Ollly	Average <i>E</i>	(107) High range for SpLD group (R) (SNCoth). <i>E</i>	Mild (reading). Severe (spelling, task organisation, memory) (SNCoth). <i>B</i>	Work worries, but friendly/articulate (R). Pleasant personality (TA). <i>E</i> Very good pragmatics (R). <i>E</i>	Fairly good (P). No (FT) rating. <i>N</i>	Not local, nor catchment. Mixed intake. SpLD kitemark status. Ma/En/PE set Y7 (SNCoth). Peers supportive (P) (TA). More peers in Y7 seen as benefit (P). <i>E</i>	Horse-riding (P). <i>E</i>	Encourage riding as social outlet (P). <i>E</i>	School/other friends (some older) at frequent equestrian activities. A few sleepovers. SUST (P). <i>E</i>

Case	Scholastic	Non-verbal	Degree of SLI/SpLD	Disposition/pragmatics	Athletic	School characteristics	Hobbies	Family characteristics	Other out of school social contacts
Kyle	Average except En <i>U</i>	(108) High range for SpLD group (R) (SNCoth). <i>E</i>	Moderate (literacy only) (SNCoth). <i>B</i>	Outgoing, comical (R) (TA). Gets on very well with TD and SEN peers (TA). <i>E</i> Good peer pragmatics (R). <i>E</i>	Very good (PT) (P). No (FT). <i>E</i>	Small, local, very high need. Full setting Y7 (SNCoth). Peers very positive. Many clubs: staff highly encourage SEN pupil talent. More peers in Y7 seen as benefit (P). <i>E</i>	Rugby, badminton football, drama/singing, free running, (P)(PT). <i>E</i>	Actively support all social activities (P) (PT). Cousins Y7-Y10 at same school (P) (PT). <i>E</i>	No local casual friends, but cousins in town. Mixed age friends (own/other schools) seen at hobbies only. (P)(PT). MUST (PT). <i>E</i>
Zoe	Low average scores (Ma below), but functions lower (SNCoth). <i>U</i>	(100) Mid range in SpLD group (R) (SNCoth). <i>E</i>	Moderate (all literacy). More severe maths (SNCoth). <i>B</i>	Quietly friendly, polite (R). Prefers small groups (P). <i>E</i> Sustains friendships much better in Y7 (TA) (P). Good peer conversational skills (R). <i>E</i>	No (FT) rating. <i>N</i>	Large, local, mixed intake – big contrast with primary. Ma/Sci set Y7 (SNCoth). Peers friendly (R). More peers in Y7 seen as benefit (P). <i>E</i>	Dance and sewing (P). <i>E</i>	Encourage social activities and reassuring about transition (P). <i>E</i>	Local school friends, often at home or in town. Reciprocal invitations. SUST (P). <i>E</i>
Tara	Fairly low (SNCoth). <i>B</i>	(80) Low range in SpLD group (R) (SNCoth). <i>B</i>	Moderate to severe (all literacy and numeracy). (SNCoth). <i>B</i>	Warm, eager (R). Does not crave ‘life and soul’ status (SNCoth). <i>E</i> Very good peer pragmatics (R). Diplomatic and kind (PT). <i>E</i>	Excellent (PT) (P). No (FT) rating. <i>E</i>	Local, low need. Ma set Y7 (SNCoth). Clubs accessible (P). Peers very positive (P) (TA) (R). More peers in Y7 seen as benefit (P). <i>E</i>	Regional level sport; drama and hockey (P)(PT). <i>E</i>	Highly encourage all leisure activities and are socially and academically very supportive (P)(PT). Older brother with SpLD a very good role model. <i>E</i>	Many very local friends from own/other schools. Frequent reciprocal casual visits (P). MUST (PT). <i>E</i>

Key for role sources: (P) = Pupil (PT) = Parent (FT) = Form Tutor (S) = Speech and Language Therapist (SNCoth) = Senco/Other SEN Teacher (TA) = Teaching Assistant (R) = Researcher **Key for use of social technology (final column):** MUST = minimal or limited use SUST = some use FUST = frequent use UUST = unsuccessful use UNUST = unclear use Note: Social technology refers to mobile phones and on-line social networks only.

Table 4.14 Cross-case matrix (SLI): categorised factors from Table 4.10, with composite social well-being in Year 7

Case	Enabler factors	Barrier factors additional to SLI or SplD	Mixed factors	Composite social well-being
Rob	Disposition, Hobbies, Family Total: 3	Scholastic, Pragmatics Total: 2	School: peer characteristics Total: 1	Poor
Meg	Disposition Total: 1	Scholastic, Pragmatics, Hobbies, Family Total: 4	School : location (barrier), peer characteristics (enabler and barrier), ethos (enabler) Total: 1	Quite poor
Josh	Disposition, Athletic Total: 2	Scholastic, Non-verbal, Pragmatics, Hobbies Total: 4	School: location (barrier), peer characteristics (enabler and barrier), ethos (enabler). Other out of school (enabler and barrier) Total: 2	Fair
Sam	Disposition, Pragmatics, Athletic, Hobbies, Family, Other out of school Total: 6	Scholastic Total: 1	School: peer characteristics (enabler and barrier), social organisation (barrier) Total: 1	Quite good
Nick	Scholastic, Non-verbal, Disposition, Pragmatics, Athletic, School, Family Total: 7	Total: 0	Hobbies: Scouts (barrier), variety show (enabler). Other out of school (enabler and barrier) Total: 2	Quite good
Will	Scholastic, Non-verbal, Disposition, Pragmatics, Athletic, School, Hobbies, Family, Other out of school Total: 9	Total: 0	Total: 0	Very good
Eve	Disposition, Hobbies, Family Total: 3	Scholastic, Pragmatics Total: 2	School: peer characteristics (enabler and barrier), ethos (enabler). Other out of school (enabler and barrier) Total: 2	Fair
Tom	Total: 0	Scholastic, Disposition, Pragmatics, Hobbies, Family, Other out of school Total: 6	School : ethos (enabler), peer characteristics (barrier) Total: 1	Very poor

Table 4.15 Cross-case matrix (SpLD): categorised factors from Table 4.11, with composite social well-being in Year 7

Case	Enabler factors	Barrier factors additional to SLI or SpLD	Mixed factors	Composite social well-being
Luke	Pragmatics, Hobbies, Family, Other out of school Total: 4	Non-verbal Total: 1	Disposition (enabler and barrier). School: size (enabler), peer characteristics (enabler and barrier) Total: 2	Fair
Amy	Non-verbal, Hobbies, Family Total: 3	Scholastic, Disposition, Pragmatics Total: 3	School: ethos (enabler), peer characteristics (barrier). Other out of school (enabler and barrier) Total: 2	Poor
Olly	Scholastic, Non-verbal, Disposition, Pragmatics, School, Hobbies, Family, Other out of school Total: 8	Total: 0	Total: 0	Very good
Kyle	Non-verbal, Disposition, Pragmatics, Athletic, School, Hobbies, Family, Other out of school Total: 8	Total: 0	Total: 0	Very good
Zoe	Non-verbal, Disposition, Pragmatics, School, Hobbies, Family, Other out of school Total: 7	Total: 0	Total: 0	Good
Tara	Disposition, Pragmatics, Athletic, School, Hobbies, Family, Other out of school Total: 7	Scholastic Non-verbal Total: 2	Total: 0	Very good

Notes for Table 4.14 and Table 4.15 Note 1: Composite social well-being is derived from multiple evidence across the social position and social anxiety domains, taking account of levels in and out of school. Note 2: 'Scholastic' is categorised as enabler if attainments in subjects other than literacy are average or above and as barrier if most or all subject attainments are below average. Otherwise, it is not categorised. Note 3: 'Non-verbal' is categorised as enabler if standardised score is 100 or over and as barrier if below 85. Otherwise, it is not categorised.

Table 4.16 Cross-case matrix (SLI and SpLD): comparison of factor balance across three social well-being levels

Factor	Good well-being (<u>Sam</u> , <u>Nick</u> , <u>Will</u> , Olly, Kyle, Zoe and Tara)	Fair well-being (<u>Josh</u> , <u>Eve</u> and Luke)	Poor well-being (<u>Rob</u> , <u>Meg</u> , <u>Tom</u> and Amy)
Pragmatics	Enabler in all cases	Enabler in one case (Luke); barrier in two cases (<u>Josh</u> and <u>Eve</u>)	Barrier in all cases
Disposition	Enabler in all cases	Enabler in two cases (<u>Josh</u> and <u>Eve</u>); mixed in one case (Luke)	Enabler in two cases (<u>Rob</u> and <u>Meg</u>); barrier in two cases (<u>Tom</u> and Amy)
Athletic	Enabler in five cases (<u>Sam</u> , <u>Nick</u> , <u>Will</u> , Kyle and Tara); uncategorised in two cases (Olly and Zoe)	Enabler in one case (<u>Josh</u>); uncategorised in two cases (Luke and <u>Eve</u>)	Uncategorised in all cases
Non-verbal	Enabler in five cases (<u>Nick</u> , <u>Will</u> , Olly, Kyle and Zoe); barrier in one case (Tara)	Barrier in two cases (<u>Josh</u> and Luke)	Enabler in one case (Amy); uncategorised in three cases (<u>Rob</u> , <u>Meg</u> and <u>Tom</u>)
Scholastic	Enabler in three cases (<u>Nick</u> , <u>Will</u> and Olly); barrier in two cases (<u>Sam</u> and Tara); uncategorised in two cases (Kyle and Zoe)	Barrier in two cases (<u>Josh</u> and <u>Eve</u>); uncategorised in one case (Luke)	Barrier in all cases
School	Enabler in six cases (<u>Nick</u> , <u>Will</u> , Olly, Kyle, Zoe and Tara); mixed in one case (<u>Sam</u>)	Mixed in all cases	Mixed in all cases

Factor	Good well-being (<u>Sam</u> , <u>Nick</u> , <u>Will</u> , Olly, Kyle, Zoe and Tara)	Fair well-being (<u>Josh</u> , <u>Eve</u> and Luke)	Poor well-being (<u>Rob</u> , <u>Meg</u> , <u>Tom</u> and Amy)
Family	Enabler in all cases	Enabler in two cases (Luke and <u>Eve</u>); uncategorised in one case (<u>Josh</u>)	Enabler in two cases (<u>Rob</u> and Amy); a barrier in two cases (<u>Tom</u> and <u>Meg</u>)
Hobbies	Enabler in six cases (<u>Sam</u> , <u>Will</u> , Kyle, Olly, Zoe and Tara); mixed in one case (<u>Nick</u>)	Enabler in two cases (Luke and <u>Eve</u>); barrier in one case (<u>Josh</u>)	Enabler in two cases (<u>Rob</u> and Amy); barrier in two cases (<u>Meg</u> and <u>Tom</u>)
Neighbourhood/other out of school	Enabler in six cases (<u>Sam</u> , <u>Will</u> , Kyle, Olly, Zoe and Tara); mixed in one case (<u>Nick</u>)	Enabler in one case (Luke); mixed in two cases (<u>Eve</u> and <u>Josh</u>)	Barrier in one case (<u>Tom</u>); mixed in one case (Amy); uncategorised in two cases (<u>Rob</u> and <u>Meg</u>)
Summary of balance between enablers, barriers and mixed factors	High ratio of enablers to barriers/mixed factors in all cases	Mixed ratio of enablers to barriers/mixed factors across cases	Lower ratio of enablers to barriers/mixed factors in all cases

Note 1: SLI case names are underlined.

Note 2: 'Scholastic' is categorised as an enabler if attainments in subjects other than literacy are average or above and as a barrier if most or all subject attainments are below average. Otherwise, it is not categorised.

Note 3: 'Non-verbal' is categorised as an enabler if standardised scores are 100 or over and as a barrier if below 85. Otherwise, it is not categorised.

Question 5: What factors interrelate with social well-being in pupils with receptive SLI over the secondary transition period?

4.3.3.2 Individual factors in SLI

Is the number of individual enablers important?

Tables 4.14 and 4.15 and Table 4.16 clearly demonstrate the association between the number of enablers and levels of social well-being. Unsurprisingly, pupils with a high ratio of enabler factors to barrier or mixed factors were doing better socially. It was noteworthy that of the three in the 'Good' social categories of Table 4.14, Nick and Will had no barrier factors at all and Sam had only one. Nick and Sam also had mixed factors. Strikingly, all three had at least six enablers. For the two in the 'Fair' social category, Josh and Eve, the pattern was of relative balance between factors. In the 'Poor' social category, Rob had a similar balance to those in the 'Fair' category, but of the other two, Meg had only one enabler and Tom had none at all. Meg also had four barriers and Tom had six. In sum, the overall number of enablers did appear to be linked to overall levels of well-being.

However, this does not tell the whole story. Certainly, for the three pupils with the best social well-being, the equation was clear; enablers were substantial. Conversely, for the only pupil with 'Very poor' social well-being (Tom), barriers were similarly substantial. However, between these extremes, patterns in the 'Fair', 'Quite poor' and 'Poor' social well-being categories were less discernible, apart from the generally narrower gap between the number of enablers and barriers than was seen in the 'Good' categories.

Interim summary

Examining the number and balance of enablers and barriers is a useful but insufficient step to determining links with social well-being. Analysis needs to concentrate on the relative *importance* of these individual factors, both personal and environmental.

Which personal factors are important?

(i) Scholastic, non-verbal and degree of SLI

Most of the P-SLI experienced scholastic difficulties (see Table 4.10). Only Nick and Will, both faring well socially, were achieving at average levels across the curriculum. In Nick's case, the degree of receptive SLI was less severe for both grammar and vocabulary and perhaps had relatively little impact on curricular access. Will's impairment was severe for grammar and this should have posed scholastic challenges for him. Nonetheless, his receptive vocabulary was much stronger and at this early stage of secondary education he may have been able to use vocabulary as a scaffold for his learning. Nick and Will also had the highest non-verbal scores of the P-SLI (100 and 101, respectively). Their difficulties were largely 'invisible' in the classroom, although their peers knew they were withdrawn for specific language support.

In contrast, school work was a daily struggle for Sam, despite his mid-range non-verbal score (89), because his severe SLI impacted heavily on literacy, numeracy and the understanding of nearly all subject work. Sam's scholastic difficulties were therefore more obvious to his peers than those of Nick and Will. Yet, his social rating, like Nick's, was in the 'Quite good' category.

The other five P-SLI also had marked scholastic difficulties and none had social well-being ratings above 'Fair'. Josh and Meg were LRB pupils. Josh's non-verbal score (80) was the lowest of all the eight cases and his SLI was particularly severe, with major impact on all curricular subjects except PE. Meg's SLI was less severe; she had a non-verbal score of 93 and her attainments were much higher than Josh's, though substantially below average. Both were supported by a TA across the curriculum and their scholastic difficulties were highly noticeable to their peers. Although Josh's 'Fair' social well-being rating was above Meg's 'Quite poor', this was due to the enhancing effect of popularity with older boys who enjoyed playing football with him. However, Josh's difficulties in understanding work exasperated his own classmates in certain lessons and made them reluctant to work with him. Eve and Rob, with non-verbal scores of 90 and 93 respectively and moderate SLI, also received substantial TA support across academic subjects. Tom, with a

non-verbal score of 93 but with very severe SLI, had similar provision. None of these three pupils had the higher social ratings.

As expected, SLI had a more obvious impact than scholastic difficulties on conversing with peers. This was apparent in a range of settings, especially when interaction involved more than one other person:

KR: 'Ever wonder what people are talking about?'

Nick: 'Yes. You sometimes think that. But only sometimes. Yeah.'

Sam: 'It's hard to get in [to group conversations]. I'm always behind them. They say "What are you talking about?" It's easier with one person – more fun, more relaxed [when other group members are absent]. Easier in Art ... cos they ask me to help ... than just hanging out.'

Eve: 'They all come up to me and stuff ... sort of, but it is harder to join in if they talk to someone else and don't talk to me for all of lunch.'

Eve's mother: 'She takes things very literally. [The SLT] always said "Eve doesn't understand life like [peers] do ... always a step behind." Girls are now in realms of teenage stuff and Eve struggling to catch up with them all.'

Rob: 'Feel left out in the playground [when two friends are chatting]. I don't understand what they're talking about.'

The degree of difficulty was sometimes hard for others to appreciate. For example, Sam's SLI was well masked by his mature manner and use of sophisticated vocabulary. Peers may well have seen him as having scholastic but not language difficulties, especially since Sam described himself as 'dyslexic'. Tom also showed this superficial expressive competence, using quaint expressions such as 'safe and sound' that were at odds with his receptive SLI and led people to overestimate his understanding:

Tom's mother: 'Misunderstood? Yes! He could talk for England. And sometimes he uses words I'd need a dictionary for ... And he uses them in that sentence, but he can't explain what he means after. And you can give him the simplest of instructions and he just looks at you and says "What?". And you try to explain and then you give up.'

Evidence suggested that some types of classwork also created social challenges. Drama was noteworthy. Two pupils mentioned it was hard to join in and one was observed having great difficulties:

KR: 'Do you ever feel left out in lessons?'

Josh: 'Yeah (reflective) Cos when I do Drama, they won't let me join in. No. I get too ... excited Drama.'

KR: 'How do you feel when they tell you to go away ...?'

Josh: 'Sad (sounded very despondent). I'm good at Drama.'

KR: 'Do you ever feel left out in lessons?'

Meg: 'Yes, I feel a little bit left out when they do stuff. Cos they have a partner and I'm like on my own. Like with boys. And I feel "Oh no, I'm the only girl!"'

KR: 'In which lessons?'

Meg: 'Some of them, actually. Some of them I don't have and some I do. Drama [is really bad].'

KR: 'They leave you out?'

Meg: 'Yes, and lucky today I don't have Drama.'

Sam: 'Oh, I'm confused!' (ignored by Drama partners)

Sam: 'Where are we? I can't hear.' (sounded upset)

Drama partner: 'We're here!' (sounded irritated)

Sam: 'I want to be Grandma.' (ignored by Drama partners)

Sam: 'What am I going to do?' (ignored by Drama partners)

Sam: 'Can I be Edna?'

Drama partner: 'Not doing Edna!' (sounded exasperated)

Why was this subject so problematic? The main issues seemed to be the degree of shared enterprise and the language level needed to participate. In the other subjects observed, each pupil was responsible for their own task, which was reasonably transparent to them. They went about it more or less successfully, without it impacting greatly on other pupils. In contrast, Josh, Meg and Sam's inability to understand group tasks irritated their peers. Drama lessons often require a group 'product'. Unlike more practical endeavours, such as cooking or craft, participation in Drama often relies on the ability to follow and contribute to negotiations and individuals lacking these skills may constitute a

liability to the group. This certainly happened to Sam. Without visual props to support meaning, he floundered and was increasingly ignored by his group.

Interim summary

Analysis suggests that scholastic levels, non-verbal ability and the severity of SLI may all have been associated with social well-being, but not necessarily in all cases, nor in equal measure. Of the eight cases, we have seen that Will and Nick were the most socially successful, had the highest non-verbal ability and had average scholastic attainments. Their SLI was not inconsiderable, but it had not affected their school work too seriously. In contrast, the other cases had substantial SLI, somewhat lower non-verbal ability *and* scholastic difficulties, so it is not easy to determine which 'mattered more' in their social well-being. The non-verbal scores are interesting. The three cases with the lowest social well-being ratings (Rob, Meg and Tom) did not have the lowest non-verbal scores. All had a non-verbal score of 93 – higher than those of Sam, Eve and Josh, who were each faring better socially. For the former three, poor social well-being was not therefore obviously associated with non-verbal scores; these were not particularly low.

In sum, the relationship between social well-being and each of these factors in *isolation* is less than straightforward. Nonetheless, poor language ability stands out. The analysis suggested that it undermined participation in daily conversation and in some kinds of collaborative work in the classroom. Of course, discrepancy between verbal and non-verbal functioning may have been especially disadvantageous, leaving pupils unable to communicate at a level commensurate with their cognitive abilities.

(ii) Pragmatic and dispositional

The pragmatic analysis was informed by several data sources, of which pupil interviews and observations were key. It is hard to separate pragmatics entirely from language form, because poor comprehension and expression hamper access to conversation. However, in this analysis I was particularly alert to 'compensatory pragmatics', e.g. situations in which a participant with poor language brokered entry into conversation via strategies such as making clarification requests or admiring another pupil's work. It is also hard to separate

the exercise of pragmatic skills from personal disposition. Sunny, humorous, helpful or confident individuals are perhaps better motivated than those who are dour or combative to use their pragmatic knowledge to good effect. Pragmatics and disposition are therefore both included in this section, although pro-social disposition did not always co-exist with good pragmatic skills. Table 4.10 displays individual data on these characteristics.

The classroom observations and interviews were highly revealing of pupils' pragmatic skills. Will, who was observed in Science, was a cheerful and outgoing boy who conversed readily with peers and adults. He occasionally lost the thread of conversation during his interview, but was happy to ask me for clarification. Nick was also friendly, as well as polite and gently humorous. He came over as fairly quiet and did show a slight weakness in gaining peers' attention before addressing them in a busy Home Economics lesson. When they did not hear him at the first attempt, he would turn to an adult instead. Meg had a superficial conversational fluency, characterised by the overuse of fillers such as 'actually'. Like Nick, she showed poor attention-gaining strategies, but to a much greater extent, so her remarks in ICT often went unanswered. Nevertheless, she continued talking as though somebody had responded. Rob was a friendly interviewee, but quite antagonistic towards the classmates who tried to include him in an Art lesson. Sam's pragmatic skills were good with peers and adults alike. He was very polite, listened carefully and asked for clarification when it was needed, but as noted already, these skills were unequal to the demands of his Drama lesson. Josh was not observed in class, but during his interview, his pragmatics were extremely poor, characterised by constant interruption, impulsive responses and unsignalled topic switches. This pragmatic profile was confirmed by SEN staff, who also reported that the effects were tempered by Josh's positive dispositional features. These earned him affection among his fellow LRB pupils:

LRB TA: 'He has a fantastic memory for names, birthdays, timetables and people's interests. Even where they are meant to be – Room 15! That endears him to others.'

Eve, observed in Art, was a quiet girl who tended to shrug off questions that she did not understand and to give minimal responses. These features were also

noticeable during her interview. Tom, observed in a Drama theory lesson, had a loud, bombastic manner and had no hesitation about hailing peers from a distance. Like Josh, Tom had very poor pragmatic skills and often interrupted questions. During his interview, he was cooperative and eager to please, but perseverated with topics that he warmed to and needed 'moving on'. In sum, both Tom and Josh had topic management difficulties, but in opposite ways. Unfortunately, Tom did not show dispositional features that could redeem his social position with peers.

The P-SLI expressed a range of functions in their interactions, a few of which are shown in Table 4.17. A small number were negative and a small number helpful. Quite a lot were just 'basic' functions, concerned with workaday matters and expressed in few words.

Table 4.17 A sample of utterances and functions in the P-SLI

Case	Utterance	Function
Rob	No! (when invited to join group) / Oi! Get your <i>own</i> red. What? I haven't <i>got</i> a yellow!	Refuse offer/Protest
Meg	I did it myself. I added this stuff. This is for the fire/ I'm using my old design/ Go to 'new shape', then 'layout'. (when peer stated a design problem)	Inform/State intention/Offer help
Eve	Have we got Maths today?/ Are we allowed to colour?/J, can you try to do this sharper?	Request information/Check instructions/Request help
Tom	I can't do <i>that!</i> (when peer explained what he should be doing)/ We got History next! (shouted to peer who had asked somebody else)	Protest/Inform
Nick	Is that done though? (to peer removing tray from oven)/ Got burned – look! (when asked by peer what had happened to his thumb)	Check progress of task/Explain
Will	Can I borrow some colours?/This gives me a chance to finish/I keep my bag really neat/Do I put it here?	Request favour/Explain/Inform/Check instructions

So how did peers interact with these pupils? Tom was largely ignored and interactions with Meg, Eve and Rob were quite limited. They tended to be neutral and rather utilitarian, e.g. requesting or granting loan of equipment, confirming how to do something, or acknowledging help or loan. These exchanges were usually cordial and work-related, but were 'micro-conversations' which did not lead to further interactive turns. Although Will and Nick used some of the same functions, their utterances tended to be fuller and to invite further engagement. Their peer conversations were certainly longer and their peers simply appeared to be more responsive and to take greater interest in them.

Interim summary

The evidence suggests that pragmatics and disposition both had some impact on social participation with TD peers. Nick and Sam had good pragmatics and Will's were exceptionally good. All three boys had very pleasant dispositions as well. Yet, of the seven pupils observed, only Will (and Nick to a lesser extent) joined in much. It was unclear whether TD peers consciously or unconsciously limited conversation with some of these pupils, perhaps anticipating that it would be hard work, or whether the P-SLI sabotaged their own engagement by the kind of initiations and responses that they made. For Tom, Rob, Eve and possibly Meg, either or both might have applied. In Sam's case, the problem was clearly linguistic, not pragmatic. Reticence, a characteristic discussed earlier as potentially detrimental to social position, possibly influenced Eve's interactions. She was described by her mother as more assertive since transition, but her manner was still not very forthcoming. Her monosyllabic answers could be interpreted as off-hand and socially uninterested. In class, I had the impression that her TD peers often forgot that she was there.

The evidence points to something of particular interest. Whilst the social position domains are closely linked, particular barriers seemed to impinge differentially on these domains. Sam's case illustrates this well for social

participation. His good pragmatic skills and likeable disposition ensured that he was well accepted by peers and had a few good TD friends. Unfortunately, these personal assets could not compensate for his poor receptive language in verbally demanding situations. In other words, the P-SLI's pragmatics certainly seemed to be linked with their social position as a whole. Pragmatic violations such as interrupting and poor topic management were off-putting and even more subtle weaknesses meant that the pupil was less frequently addressed. Conversely, good pragmatics could help compensate for poor language skills, but only to a point.

(iii) Athletic

All three of the P-SLI in 'Good' social categories and one in 'Fair' (Josh) were also good at sport, whereas the others had unremarkable or poor athletic abilities (see Table 4.10). Will was a keen and very competent footballer in and out of school and Nick was a well-regarded cricketer and rugby player, although his interest had waned in Year 7, due to the loss of former friends from his sporting circle. Sam was exceptionally gifted at all things athletic and played football at a regional level. Josh was also very good in every aspect of PE and particularly in football, but unlike the others he did not play in clubs out of school. Analysis suggested that athleticism was quite a powerful social enabler for these four boys, particularly for Will and Sam, because it made them well-known and liked and provided a regular social outlet:

Will: 'Football on Tuesday ... and erm I go out with some friends sometime in the gym. Doing that today.'

Will's father: 'His hobbies? Playing games. He likes football. Playing on Sunday, training on Tuesday. Boxing. He's started to go back to the ... leisure centre ... this week.'

Will's TA: 'He's become well known to other tutor groups through his football.'

Sam: 'I'm very popular in PE and that makes me feel better. Got good friends through sport.'

Sam's TA: 'His best friend he met through football.'

Playing games at a formal level with set rules seemed to suit these boys, because it drew on their strengths and made relatively few linguistic demands on them. In comparison, Josh's 'kickaround' football with his neighbour resulted

in constant quarrels, because there were no clear rules or boundaries and Josh's very poor language and pragmatic skills got in the way of negotiation:

Josh's mother: 'Out of school? He plays football with the little boy down the road. Sometimes they fall out and Josh complains he is swearing and fighting, but I say "you're probably doing the same." I don't think he knows how to talk himself out of a fight. But next day they're playing together again.'

Happily, playing football by established rules with Year 10 boys in school was much more harmonious and successful for Josh.

Although their athletic skills were undoubtedly a social asset, the four boys did not all feel the same way about them. For Josh and Will, for whom football was a passion, a 'sporty' reputation ensured they had many friendly acquaintances around the school. For Will, this went further, acting as a passport to both best and regular friendships (Meyer, 2001), whereas Josh's same-age friendships were not primarily based on sporting interests. Nonetheless, he saw the Year 10 boys as his friends and did not make a distinction between their acceptance of him as a player and more personal friendship, although the latter was not in evidence.

For Nick, too, sport was a route to acceptance among older boys in school, but his reputation was largely gained prior to transition:

Nick: 'I've got older friends ... in Year 11 ... they see if I'm OK. I knew them by a Year 10, cos I used to play cricket with ... like when I was in Year 5, I think and Year 6 and that's how I got to know Year 11s.'

Sam's sporting status was growing steadily in school and intensive practice for regional competitions also kept him busy and socially engaged at weekends:

Sam's mother: 'Football is big time out of school – three times a week – he's a very popular team member... no time for other activities out of school.'

Despite this, neither Nick nor Sam's close school friendships were mainly based on sport, but rather on general companionability or other characteristics:

Nick: 'Um ... like ... they're nice to hang out with. They're fun and we ... just talk about stuff. They've got X-Box live, so we just chat [about it] as well. If you didn't have a friend, you'd be quite upset and bored and that. If you got a friend it's much better.'

Sam's mother: 'Current friends are all boys and one was sweet but now mocks him – very bright. The other four are also bright – he's always gravitated to bright pupils.'

Sam, a particularly thoughtful boy, seemed to have mixed feelings about his social position, recognising that social acceptance through athleticism did not always translate into ease of closer friendship in Year 7:

Sam: 'Friends? Not a lot. Some are in different forms ... I didn't know any except one girl. There's only two others from primary ... and I'm still friends with L. Can't always find [new friends] at break, so each day is different.'

Interim summary

The P-SLI presented an expected range of athletic skills, from excellent to poor, with corresponding levels of sporting interest. The three boys who enjoyed the highest social position also had the best athletic skills. For Nick and Sam, these skills seemed to operate as overall 'status enhancers', rather than as entry cards to multiple new friendships in school. Similarly, for Josh, football guaranteed some measure of social acceptance and playground participation, but this was rather superficial and did not involve same-aged TD peers nor lead to close friendship.

Which environmental factors are important?

(i) School

Secondary schools are complex institutions and several factors appeared to relate to social well-being (see Table 4.10). The first was school **size**. When I met the P-SLI in Year 6, some were apprehensive about transition to a larger school, although these worries were commonly voiced by TD pupils too. Nonetheless, I anticipated that secondary schools might be socially more daunting for these pupils. This was not always the case. For Will, a larger school brought social benefits:

KR: 'Has it been easier or harder to make friends in Year 7?'

Will: 'Easier, just cos in secondary school, there's more people [and] everyone don't seem so shy.'

Will's father: 'At Christmas, he said he loves the big school. He's come from a small school, so it's a great adventure – he loves the size. It's been the making of him actually ...'

Nick also welcomed having a larger social pool, but this was because his former friendships had deteriorated towards the end of Year 6, following his period of absence from school:

Nick: 'I think it was stressful for me last year. My old friends ... I don't like them as much ... yeah, they changed. [But] I'm more popular in Year 7, cos loads of people kind of know me.'

Nick's mother: '[He's glad of more people] ...as he actually lost all the primary school friends he had last year – all through school – they're no longer his friends. Partly because he got put in with another tutor group and they got funny about it. And partly because the last term, they sort of ... started calling him names behind his back. And silly little things like that, like children do.'

The other P-SLI did not express opinions on school size.

Second was school **location**. Distance from home had most impact on the social lives of the two pupils attending the LRB. Both were from villages well outside the school catchment, and neither LRB nor mainstream schoolmates lived nearby. They relied on designated transport for LRB pupils, which restricted socialisation with friends after school:

KR: 'So you say transport is a problem, because ...?'

Meg: 'Cos I have a taxi of course. My mum drives a bike and my dad can't pick me up. Once they [taxi] were late and one of the LRB people drove me home.'

For others, distance was not an issue, but they missed their former Year 6 peers who now attended different schools. For Sam, the loss of old friends was quite painful, despite having made a few new ones:

Sam: 'I sometimes feel lonely this year.'

Sam's mother: 'It's been the biggest change ... he's not yet got close friends. He was "cool" with six lads at his old school – was very popular. Contact with old friends? He doesn't use Facebook. He sees them at football on Friday and Sunday. He misses them, but is "funny" about seeing them.'

Rob had found it even harder to adjust to separation, although he had struggled to fit in at primary school as well:

KR: 'So it's been harder to make friends here ...?'

Rob: 'Yeah. I had loads more friends at primary. When them two [his only friends] are away, I ... like get really lonely ... I normally hang out on my own.'

Rob's mother: 'He doesn't find it easy. The others find him immature. It's the developmental level he's at. But then again, he didn't really have friends in primary either. He doesn't mention any names [of friends] ... I really worry about it.'

Pupils who attended very local schools were potentially advantaged, since they could easily join after-school clubs and, for Will, socialisation took place walking to and from school:

Will: 'Yes, cos these last three days, walking to school and walking back, we been talking about saving up for an I-Pod touch and they were wondering about questions and I say to them and they look it up just by that thing really. So I say "blablabla" about whatever it is and then they look it up on the internet. So I help them.'

Neither Nick nor Rob walked with peers, despite living very near school. Nick did not voice concern, but for Rob this was another source of unhappiness:

Rob: 'I've got friends out of school, but when I like, walk home, I've got none. I don't like walking on my own.'

School **ethos** and **social organisation** were important and good home/school liaison was particularly valued by parents. For example, the willingness of the SENCo and Head of Year to place Eve's new friend from out of school in the same tutor group was seen in a positive light:

Eve's mother: 'Staff really listen to you. That helped, as [Eve and her friend] have done everything together since. They've taken notice.'

Similarly, good communication between home and school allowed active rejection or bullying by same-age peers to be dealt with promptly:

Nick's mother: 'We had a little dip back along when he hated PE and wanted to change groups and I sat him down and asked him. And it was about this [exclusion by peers from a different primary school]. He didn't like some of the people in his lesson, so I spoke to his PE teacher and now he's happy again.'

Josh's mother: 'The school were really good and it [bullying] all stopped. No calls home at lunchtime now ... And his tutor is lovely. She has a really good relationship with him. She will always ring me if there are problems.'

All the pupils' schools offered a range of lunchtime and after-school activities. Sam (and Nick, initially) struggled to remember the club timetable and were

reluctant to ask either adults or peers. Occasionally, parents felt that extra support would pay dividends:

Sam's mother: 'They could encourage him more to go to lunchtime clubs – art and sport – he would see B [a new friend] more ... or ask him to do jobs they "need" him to do ... he really responds to that. He has no time sense. Today is just because he's woken up.'

Others simply lacked the motivation or social confidence to attend clubs:

Meg: 'I don't really want to go to after school clubs, cos they don't really help me.'

Tom: 'No. I'm not into football. I don't do any clubs. My tutor wants me to do homework club. I said "no!" I'd just be away from my parents. I wanted to go home.'

KR: 'But fun clubs, not homework?'

Tom: 'No. If there was a console club, I might do that ... Art? Gardening? They do Art already. I don't do clubs. That's me.'

KR: 'Not interested or worried about being with other people? What's putting you off?'

Tom: 'It's both.'

Most schools supported socially vulnerable pupils at lunchtime in designated rooms. Rob and Tom both attended such facilities, although even there Tom preferred to play games with adults rather than with his peers (see Table 4.12). Josh and Meg usually chose to eat lunch in the LRB. These social support systems ensured that the four pupils were not too lonely outside lesson times, but also separated them from their TD peers and probably drew attention to their difficulties.

The LRB school expressed concern about this situation. The LRB teacher respected her pupils' desire to use the base at lunchtime, but was proactive about fostering their interaction with TD peers. She had observed that TD peers rarely sought these pupils' company at break times and therefore encouraged the LRB pupils to invite TD friends for lunch. However, she soon realised how rarely this happened. She wondered whether the LRB pupils' invitations were unclear, or whether TD peers perceived the LRB to be an SEN provision only

and avoided it for reasons of stigma. In contrast, Rob's TA felt he was better off spending lunchtime with other pupils with SEN, since with TD peers:

Rob's TA: 'Sometimes he claims to be bullied outdoors – he has no skills to cope with banter and distinguish it from real victimisation.'

Scholastic organisation was also analysed, since it was reasoned that pupils would probably befriend those whom they met in lessons. This was generally the case. In Year 7, subjects were mainly taught in mixed-attainment tutor groups (Table 4.10) and only Tom, Meg and Josh were in lower-attainment sets for most subjects. Of the three, Tom's few friends were all in lower sets and all had SEN. Unfortunately, these were not always high quality friendships:

Tom's TA: 'His friendships with both R and L are very on/off and with L he gets silly in the playground.'

Tom's mother: 'He's more on his own now. He's with the same crowd, but they're not necessarily good for him. One friend, he's had bullying from him for years on and off and he puts up with it. He couldn't stand up for himself [with anybody]. He'd just cry like a baby.'

Meg's personal friends, like Josh's, were LRB pupils, not TD pupils from her subject sets nor pupils with other forms of SEN. She sat with LRB pupils in most of her lessons and this may have been a barrier to mixing more widely. These LRB relationships went back several years and Meg seemed to be outgrowing some of them, but a sense of solidarity prevailed:

KR: 'Are you still friends with Year 6 LRB pupils?'

Meg: 'Yes, of course. Quite a few come here. M? He's been quite ... bit swearing now. And Josh. He's been a little bit more swearing. Now they're in secondary, they think "Look at me. I'm the big boss person."'

KR: 'You told me once you liked hanging out with the LRB boys – playing football etc.'

Meg: 'Actually, no. Not now.'

KR: 'Are your primary school friends still your best friends?'

Josh: 'Yeah ... Meg kind ... plays with me every lunchtime. Yes, same people. We play football, acorn.'

KR: 'With your LRB friends?'

Josh: 'Yeah. Only with LRB friends.'

Josh's mother: 'Close friends? The same ones as in Year 6, from the base. Especially Meg. She's a tomboy. They play football and get on really well.'

KR: 'Do you feel the LRB pupils want new friends now they are older?'

Josh's mother: 'No, they don't. They get on really well. They seem to understand each other.'

The other five P-SLI were grouped by attainment for one or more core subjects only. Yet, only Will had a lot of close TD friends and just one with SEN (SpLD). These friendships were of good quality. Nick, like Sam, also had a few good TD friends in his classes and each had just one with SEN (again, SpLD). In contrast, staff reported that Eve and Rob had no close or regular TD friends in their mixed-attainment classes or in core subject sets (Table 4.12).

Lastly, TD **peer attitudes** in school varied a great deal (Table 4.12). Will experienced positive attitudes in Year 7, as he had in Year 6, and Nick was largely well thought of as well:

Will's school SENCo: 'It's easy to forget he has language difficulties. He's just not your typical LLC kid. The assistants say he is always with [TD] friends and quite a livewire!'

Will's mother: 'Since he's been back [in a town school], obviously we'd do the parents evenings and he'd walk down and they'd go "There's Will!" so I think that's been good for him here. I think that's definitely helped him fit in here. Coming from [the village primary] into big [secondary school]. They knew his name.'

Nick's mother: 'He's liked by most, cos he's a nice happy little boy ... They don't take the mick out of him, tease him ... or anything.'

Nick's TA: 'He is [positively regarded] as he's very approachable. Smiley... Trustworthy in friendship. Quiet but not shy. Lovely lad. Quite a "boys' boy". Never involved in incidents. Quite mature for his age.'

Most of the others experienced varying degrees of friendliness, neutrality and negativity. In some cases, this manifested as a complex mixture of improvement and deterioration since Year 6. For example, the perception of SEN staff was that Eve: '... gets on OK with people day to day ...' and her form tutor's social rating was moderately encouraging – certainly better than that of her Year 6 classteacher. Nonetheless, rejection by former classmates had become an issue in Year 7:

Eve's mother: 'The old [primary school] children walked away, but that's no surprise ... they used to be quite sweet, but they're much "older" now. There's four girls in her class that literally day one took off without her, not turning round to check she's ok or anything.'

Sam also reported mixed peer attitudes:

Sam: '[They can be] annoying ... moody ... bossy ... nose-y about my problems ... some are supportive and understanding. I feel treated differently because of my problems. I was really popular at my old school.'

Sam's mother: 'In Year 7, he's had teasing ... low-grade spite ... though he has no fallout history. But at least he's not actually unhappy. He has got five friends and he came in with no friends. He's done really well.'

Rob felt that his new TD classmates disliked him, although they were not actively unkind:

Rob: 'Yeah, feel left out... I want to go back to my primary school ... I'd just retake, er ... rewind and start from reception ... I just want to go back to Year 6. Cos I just want to keep repeating what I've done ...'

Only Tom faced constant negativity and seemed almost resigned to it:

Tom: 'Other people just tell me to bugger off. They just like having their own friends ... I just say "Hi". And then I just listen and then they tell me to go. Some girls go "Uh, I don't want Tom!" [sitting next to them].'

KR: 'How does that make you feel? Angry, I can see ...'

Tom: 'Oh yes! Makes me feel sad as well.'

KR: 'You feel they don't like working with you?'

Tom: 'No, they don't like me on the tables ... in any lessons.'

Tom's TA: 'He drives [TD peers] mad. Takes it all over.'

For most, neutral peer attitudes were more common than either genuine friendliness or outright rejection. Yet, Meg, Josh and Eve all tended to overestimate the number of real TD friendships:

Josh: 'I got lots of [TD] friends ...I got friends in Year 10 and Year 11 and Year 8. Loads of friends!'

Meg: 'Well, I've actually got quite a lot of friends, I do. Twenty. It's easy. Yeah, I just say "Hi. Do you want to be my friend?" And a lot of people say "Yes". Yeah, I actually find it easier all the time.'

Eve's mother: 'She talks about a larger [TD friendship] group ... she'll sit with a larger group at break times ... [But] she went to Welfare a couple of times at beginning of term with "tummy ache" – once R was away and she was nervous.'

All three nominated as 'friends' people who worked alongside them or who tolerated their presence as group hangers-on. Staff felt that these TD 'friendships' were not usually reciprocal:

Josh's LRB TA: 'He's liked by these older boys as he's the most gregarious one [of the LRB Year 7s]. Football is the key! But his close friends are all LRB Year 7s.'

Meg's LRB TA: 'She struggles to make a [TD] friendship. She playfully hits others to get attention and to communicate, which annoys them. So she resorts to LRB for convenience but also familiarity. There are no particular "love hate" scenarios [with TD peers] ... an even struggle daily.'

Eve's school SENCo: 'She has five or six [TD] "friends" and one close friend. She thinks everyone is her friend, but the reality doesn't meet this perception. The majority of her "friends" are with her for convenience. Her closest friend is of similar ability and seems to need Eve as much as Eve needs her.'

Even Tom, who was so painfully aware of negative peer attitudes towards him, sometimes overestimated his general social standing and the quality of his friendships:

Tom: 'I think I've got more [TD] friends this year than last year. Yes, because when I got back from Florida, everyone was talking about it ... and everything. I think my life has changed. They're not picking on me anymore ... I think I've got the best friends and I've chosen the right [ones].'

Three parents felt that their child worried about how their close friends regarded them. This seemed to be a bigger issue than peer attitudes in general:

Sam's mother: 'He uses a comedy/cool routine that makes them laugh ... he's not shy... but he has some anxiety about [close] friendships and will tell me and he sometimes feels excluded.'

Nick's mother: 'He does worry about losing what he's got, cos he doesn't want to be on his own. I think if he lost his main friend, he'd be lost. I think the fact he's got someone there to back him up ... I think that's what he likes the best.'

Eve's mother: 'Yes, she does worry ... with her best friend too. And after a minor fall out with a PE friend, she was upset for a long time and worried about it.'

Only one parent confirmed that friendship anxiety had never been a problem at all:

Will's father: 'No, none whatsoever ... I don't think he's ever been concerned about his circle of friends.'

Another parent felt that her son was impervious to the attitudes of both friends and other peers:

*Tom's mother: 'I don't think he gives a **** to be honest. He'd be scared of people hurting him, but not what they think of him. His brain doesn't allow him to worry about things like that.'*

This last quote raises an important question of interpretation. What was the precise nature of social anxiety in these young people? The pupil interviews and the survey questionnaires suggested that fear of negative evaluation by peers was often a big worry and interviews highlighted the attitude of friends as the chief concern. On this, Eve and Sam's views concurred with those of their mothers. Nonetheless, careful interpretation is needed. For instance, Tom's comment: *'Yes ... I get worried about loads of stuff ... because me and R, we just fall out ...'* could be interpreted as anxiety about what R might feel or say about him and therefore be at odds with his mother's view. Yet, disputes with R usually became physical, so Tom may have been more worried about getting hurt than about R's attitudes per se. Another example is from Josh. His claim: *'I don't fall out with friends. I have friends every day ...'* was encouraging, but his survey questionnaire in Year 7 showed a sharp increase in social anxiety. He had mentioned his concerns about bullying during the interview. Although the bullying was not very recent by the time he filled in the questionnaire, it may have influenced his questionnaire responses. In other words, his anxiety could have been about negative evaluation itself or about its possible consequences – physical bullying. These two examples show how important it is to resist facile conclusions based on different data sources.

Whatever the nature of their social anxiety, only Meg showed a marked decrease in anxiety by Year 7. This manifested in her survey questionnaire and her interview (Table 4.12). Unfortunately, I was unable to interview her parents for a comparative view. Any decrease in anxiety is desirable, but it may have reflected an over-optimistic view of peer attitudes towards her.

Interim summary

The impact of school factors on these pupils' social well-being varied considerably. Only Will and Nick perceived school size as actively beneficial to making new friendships. The others were neutral about school size, but sometimes unhappy about the disruption to former relationships. The two LRB pupils acknowledged distance as a barrier to staying after school, but were not unduly concerned about missing clubs. Despite schools' attempts to provide a positive ethos and a range of leisure activities, several of these young people failed to join in or otherwise to engage much with TD peers. Scholastic organisation did influence their friendships. As expected, most participants gravitated socially towards those with whom they sat in class. However, being in mixed-attainment classes guaranteed neither friendship with TD peers, nor positive TD attitudes. Anxiety about negative peer attitudes varied and some pupils clearly overestimated their social position with TD peers.

(ii) Out of school

Social contact out of school was determined by a number of factors beyond proximity to school friends' homes (Table 4.10). One factor was **family lifestyle**. Unsurprisingly, Will, who had sociable, outdoor parents, mixed regularly with other young people of similar age. These were often the children of his parents' friends. Nick socialised with his mother's godson and Josh had fairly regular visits from his cousins. However, Tom, Eve and Meg had no social contacts of this sort.

Five pupils had at least one regular **hobby** or group activity, including the competitive sports already mentioned (Table 4.10). Examples, which occasionally involved school friends, were Sea Cadets (Rob), Scouts and Gang Show (Nick) and gymnastics and Guides (Eve). Social relationships with peers from the same or different schools were enjoyed via such activities. They could not provide the daily intimacy of classroom friendships, but they were sometimes of very good quality:

Nick's mother: 'They [Gang Show leaders] put on a different one each year and that's ages from 9 to 20-odd. And so he's made friends through them as well – some are from his school – so they've become a little team of their own. And

they all look out for each other. And there isn't nobody he doesn't get on with there. They're just really nice children.'

Eve's mother: 'There's a lovely little girl at Guides – very sweet with her. I'm so overwhelmed that Eve has her ... as such a lovely friend ... takes Eve for what she is and is never unkind to her. Eve feels special – somebody likes her.'

Unfortunately, Meg, Josh and Tom had no organised activities at all and Tom in particular appeared to do nothing out of school, apart from playing solitary computer or soldier games in his bedroom:

Tom: 'I'm normally ... if I've got nobody to play with, I go on my consoles ... Personality's my games, my armies. Computer games and my little army toys ... I'm actually really happy, right ... when I get a new game.'

Tom's mother: 'He goes straight upstairs. Happy on his own for hours with his army games and doesn't want us up there. He can self-entertain.'

Some pupils also enjoyed **neighbourhood** friendships (Table 4.10). Again, these tended to be less close than classroom friends, although a few attended the same school. They were often convenient, based more on proximity than on real commonality of interest and involved casual 'dropping in' or 'hanging out' locally. Unlike in school, being of the same age seemed unimportant in these relationships. Indeed, Sam actively welcomed the opportunity to mix with older or younger peers, feeling he could escape the pressure of comparison and be himself:

Sam: 'Yes ... one's 17 ... we play football. Another one's dyslexic. That's M – he's 15 or 16. Out of school's better, cos it's freer. My cousin's 14 – we do clay pigeon shooting ... and I've got much younger friends, too ... er five years? No, seven.'

Predictably, the success of these family or neighbourhood contacts also depended on the personal characteristics of those concerned. We have seen that Josh regularly fell out with his young neighbour, but they relied heavily on each other for companionship and continued to meet. He also got on poorly with one cousin of similar age, whom his mother described as: *'a problem child too, though not as bad as Josh'*.

Despite these limitations, Josh's parents were not confident about him extending his social circle, since this would mean venturing beyond the immediate vicinity:

Josh's mother: 'I wouldn't let him go into town yet – he's got no road sense. I'm waiting for the day he says "I'm off into town, Mum" – dreading it.'

Rob's neighbourhood relationships were also somewhat fractious, despite his parents' encouragement:

Rob's mother: 'He doesn't really have friends to visit. Sometimes it works, but not always. If they come round, they usually end up playing with his younger brother [aged 9].'

Meanwhile, Tom's attempts to socialise with neighbouring boys verged on the disastrous:

Tom's mother: 'Add another person in the equation and it creates such an issue. When occasionally he does have a friend round ... Just interrupts his way of doing things – how he's worked it out.'

Lastly, there was the role of social media, which has revolutionised the ease and frequency with which young people maintain peer contact out of school. In the case of the P-SLI, such contact was generally confined to mobile phones, since most parents were highly vigilant about use of the internet. Rob, Meg, Josh and Tom used their phones very sparingly, mainly to contact their parents. Will and Nick used theirs a little more with peers, whilst Sam was vague about his pattern of use. None used landlines very much. Nick played highly supervised games over the internet and enjoyed this form of interaction. Eve was the only one who regularly used social media sites. This had resulted in bullying by her former classmates, leaving her torn between distress and a desire to fit in by having online 'friends':

Eve: 'Want Facebook. All my friends got it. It's really not fair. I'm desperate for it ... But my mum knows I can get bullied and I already got bullied on MSN. They don't see me anymore and stuff.'

Eve's mother: 'A girl from her old school was quite horrible to her on MSN. I asked her to delete her, but Eve put her back on. One girl ... Eve said "Hi" and she said "What do you want? I don't want to talk to you!" Really hurt her. I say "Why do you put yourself through it?" She'd be shaking about it.'

Most pupils' limited use of the internet reflected parental restrictions, but low mobile phone usage was sometimes influenced by their language difficulties:

Josh's mother: 'He has a mobile to ring us if he's hurt and that, but he doesn't use it with friends. He tries to text, but he doesn't know how and I say "Leave that."'

Nick's mother: 'He's now got a phone for when he does go out. To keep in contact. But he does find it hard to text! Um, he does use the phone rather than text [with friends], but he's quite hard work on the phone. Because what he's thinking in his head doesn't always come out in the right sentence.'

Interim summary

Out of school, social opportunities depended on these young people's own attributes, the characteristics of their families and the composition of their immediate neighbourhoods. As such, they varied from high levels of positive engagement to virtual isolation. Of the eight participants, three had no socially-oriented hobbies or organised activities at all. This mirrored their situation in school, where none attended clubs. Casual socialisation in the local area was also limited or less than satisfactory for these three, as it was for Rob. Social technology was used relatively little and not always successfully. Mobile phones were useful on occasions, although some found calling and texting so difficult that mobiles did little to facilitate peer socialisation out of school.

4.3.3.3 Factor interrelationships in SLI

Which factors interrelated and to what effect?

In the previous sub-section, I indicated that a few pupils had *clusters* of personal enablers (Table 4.10). For example, Will and Nick's good non-verbal scores co-existed with a milder (or at least less pervasive) manifestation of SLI and few scholastic difficulties, along with good pragmatics and athleticism. Sam's personal cluster was smaller, but it did include dispositional, pragmatic and athletic strengths. The clustering of personal enablers made it relatively difficult to untangle their individual impact on social well-being in these cases. Intuitively, though, higher non-verbal abilities might allow some young people with SLI to develop fine-tuned social strategies that compensate for their linguistic shortcomings, thus constituting a 'virtuous circle' of personal factors. I raised this point in Chapter 3 and there was some evidence for it in Will and Nick. These boys described how, when getting to know their Year 7 peers, they would listen carefully to interactions and only then signal a wish to join in, rather than either rushing in or withdrawing:

Will: ' [Then] I just go in there really and say "Can I join you?" '

Nick: 'I'd [wait and then] start talking to them ... and first give names and that ... and hang round and become friends. [Or] you'd ... go to the side of them, say "Hi" and then just start talking.'

We have seen that **peer attitudes** were certainly affected for better or worse by pupils' **pragmatic skills**, but that language impairment sometimes remained a barrier to social participation, even when pragmatics were good. Certainly, language difficulties inhibited the use of social media and this perhaps in turn reduced social opportunities or adversely affected their quality. Overall, we have also seen that some of these young people did not engage with social activities, in or out of school, as successfully or as independently as one might expect for their age. Yet, most had at least modest social involvement with peers, whether TD or those with SEN. So what processes interacted to help or hinder their social well-being and to what effect?

The relationship between **family** and the use of leisure time was found to be highly important. Figure 4.4 illustrates how this differed between cases. For example, Will's parents facilitated peer socialisation via camping and kayaking holidays with other families. This reflected their own sociability, not a need to fill a social gap for Will, but it certainly increased Will's social circle. On the other hand, he was not dependent on it. His parents were confident that he could manage his own social life and gave him a free rein:

Will's father: 'He's independent. Goes up to town with his friends. Might go to town this afternoon after school. Put a pound in his pocket and off he goes ... We give him a lot of freedom as well. We're comfortable with the kind of friends he has. He's got the sense to come back.'

In contrast, the families of Rob, Nick and Eve were highly proactive in nurturing their social lives and their participation in leisure activities. The overlapping circles in Figure 4.4 show this close interrelationship. These families attempted to compensate for their child's language or social difficulties, organising things they felt their child could manage and even getting directly involved themselves. To illustrate, Rob's parents had become voluntary workers with Sea Cadets, whilst Eve's mother had made contact with the family of the Girl Guide mentioned above, in order to facilitate friendship between the two girls.

How effective was this parental involvement? Certainly, it kept the young people active and socially engaged in their free time and occasionally led to new out of

school friendships. For Nick, it provided a boost to social confidence which allowed him to meet Gang Show friends in town:

Nick's mother: 'I had to go into town with him on the bus, but then I left him with them. And he just phoned me when he was ready to be picked up. So he spent most of the time in town with them and he loved it So it's just beginning. He was confident to do it. Before, he didn't want to do it on his own. So it's coming.'

To a fair extent then, parental involvement facilitated contact with schoolmates or other friends at the weekends. Yet, despite enormous efforts, there were limits to what these parents could achieve:

Rob's mother: 'Sea Cadets. How does that go? Fine, but they steer away from him after a bit. And there's no contact with them outside Cadets.'

Nick's mother: 'He does Scouts on a Tuesday, but he's not enjoying that at the moment. They've just changed leader and premises and Nick doesn't deal very well with new situations - and he doesn't feel he's getting on well with the boys there. They're quite rowdy boys ... and he is finding that quite hard at the moment.'

Eve's mother: 'She failed two Gang Show auditions ... she'd have had trouble understanding the dance moves.'

For Eve, this was a real social setback, as she lost all confidence in group performance and opted for private singing lessons instead. The parents of two other pupils had made repeated attempts to coax their child into social activities, but saw language difficulties as a major obstacle and had given up:

Josh's mother: 'No, I don't think he'd go [to Scouts or Sea Cadets]. His confidence wouldn't be so good about that.'

Tom's mother: 'No, we tried [to encourage after-school clubs] and they said we should push him more. But he says "No, no, no". He won't do it and I'm not making him.'

KR: 'What about activities not connected with school?'

Tom's mother: 'No, we always offer, but he doesn't want to go. If he's happy - that's just the way he is.'

Tom's case was particularly unfortunate. His relationships with his young neighbours were so poor that they affected the whole family. Not only had his parents ceased to encourage his socialisation, they had abandoned all attempts to socialise with neighbours themselves and had become quite isolated:

Tom's mother: 'No, we don't mix. My daughter's the same as him, though not so bad. And they've not got any cousins at all. The family is very dispersed.'

This was an example of two factors interacting negatively and compounding an unsatisfactory situation (Figure 4.4). In Meg's case, her parents were simply not in a position to help. Distance from school and from classmates' homes was exacerbated by the family's lack of transport. Meg's language difficulties meant that she could not yet travel into town independently. She therefore continued to have no contact with either LRB or mainstream classmates out of school – another example of negative factor interrelationship.

Evidence from the previous sub-section suggests that the interrelationship between **school** and **family** was also quite important, especially when bullying threatened pupils' social well-being (Figure 4.4). However, parents were usually much less able to facilitate friendships in school, even when home-school liaison was good. In fact, it only happened for Eve, whose new friend also had mild SEN. Despite being highly welcome, this single friendship could not always protect Eve from isolation in school and did not lead to better social acceptance by TD peers – a situation reminiscent of Year 6:

Eve's mother: 'She's quite brave with people she doesn't know. Happy to chat to people. But she has been seen in the corridor by her sister with no-one. Sitting on a bench. And this was very common at [primary school]. Constant. I feel the bigger group wanted to push her towards children with special needs.'

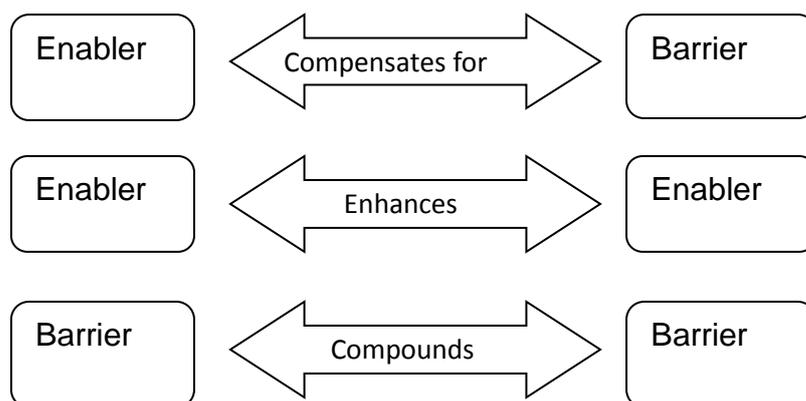
In essence, good relationships between school and family were helpful in resolving major social problems, but they had much less impact on nurturing real friendship with TD pupils, or enhancing overall social acceptance and participation in school.

Interim summary

In this sub-section, I have identified some ecological relationships associated with pupils' social well-being (Figure 4.4). Some interrelationships were between personal factors. Some were between environmental factors. Others were between personal and environmental factors. The analysis has shown that these interrelationships worked in three rather different ways. Firstly, there were enabler factors that *compensated* for barrier factors, though sometimes only in part. Secondly, the interrelationship between enablers sometimes *enhanced*

social situations that were already likely to be quite successful. Thirdly, there were situations in which the interrelationship between barriers *compounded* social situations that were already problematic. These patterns are illustrated in Figure 4.6.

Figure 4.6 Three patterns of factor interrelationships



Question 6: Do these factors interrelate similarly in pupils with SpLD?

4.3.3.4 Individual factors in SpLD

Is the number of individual enablers important?

Tables 4.15 and 4.16 show the association between personal and environmental enablers and social well-being in the P-SpLD. The associational pattern resembles that of the P-SLI. Like them, those with more enablers and fewer barrier or mixed factors generally had higher levels of social well-being, illustrating that the overall number of enablers was important. However, when contrasting social well-being ratings between the two SEN types, Figures 4.4 and 4.5 show a virtually mirror image at the extremes. Only one of the P-SpLD (Amy) was rated as 'Poor', compared with three of the P-SLI (Tom, Rob and Meg). Conversely, three of the P-SpLD (Olly, Kyle and Tara) were in the 'Very good' category, compared with just one of the P-SLI (Will). As a starting point, therefore, the evidence shows that most of the P-SpLD had more enablers than the P-SLI, were more likely to fare very well socially and were less likely to fare poorly. Nevertheless, there was noticeable middle ground. Some pupils in both

SEN types had enough enablers to fare adequately, or even quite well. This describes the position of just two of the P-SpLD and four of the P-SLI.

Interim summary

The number of individual enablers was important (Table 4.11). In this respect, the P-SpLD showed a similar associational pattern to the P-SLI; more enablers and fewer barrier or mixed factors co-existed with better social well-being (Table 4.16). As a whole, the P-SpLD had more enablers. Differences between the two SEN types in terms of social well-being were most noticeable at the extremes. More pupils with SpLD enjoyed the highest social rating and more with SLI presented low ratings.

Do the same personal factors influence social well-being?

(i) Scholastic, non-verbal and degree of SpLD

On the whole, the P-SpLD experienced fewer scholastic challenges than their SLI counterparts, since their specific difficulties were less severe and pervasive (Table 4.11). Only Olly was achieving well right across the curriculum, but Kyle, Zoe and Luke were also doing fairly well in some academic subjects. For them, spelling and writing (and numeracy, in Zoe's case) were greater barriers than reading. Amy needed a lot of academic support, but mainly for task organisation. Only Tara needed substantial in-class support to compensate for her poor reading. On the whole, these pupils' scholastic needs were apparent, but not glaringly so.

Four had non-verbal scores of 100 or more (see Table 4.11). These were higher than all but two of the P-SLI. In contrast, Luke and Tara respectively had non-verbal scores of 81 and 80. The lack of mid-range non-verbal scores in the P-SpLD, i.e. between 85 and 99, is a notable point of difference between the two SEN groups. Of the P-SLI, five had non-verbal scores in this middle range (see Table 4.10). Four of the P-SpLD were reported by SEN staff to be well or very well accepted by TD peers (Table 4.13). These were not invariably the non-verbally most able, nor the educationally most successful. As an example, Tara had the greatest scholastic difficulties and the lowest non-verbal score of all six of the P-SpLD, yet her overall social well-being was very good. Conversely,

Amy had good non-verbal scores (104), read well despite her SpLD, and was mathematically able. Yet, she had the poorest overall social well-being of all the P-SpLD. Observation, pupil interview and interview questionnaire collectively pointed to her limited, unstable friendships and to her poor social acceptance and group participation in class. Amy was described by SEN staff as: *'rejected, apart from the very few who go out of their way to accept her.'* Strikingly, she was the only participant across all 14 cases in the study to receive such a low social rating by SEN staff (Tables 4.12 and 4.13).

Interim summary

More of the P-SpLD than the P-SLI had higher-range non-verbal scores and fewer had severe scholastic difficulties. From this it might be concluded that differences in social well-being between the SEN types were associated with differences in these two factors. That risks oversimplification. The evidence for Amy indicates that higher non-verbal and/or scholastic levels did not guarantee social success. Conversely, evidence for Tara shows that lower levels did not always lead to social failure.

(ii) Pragmatic and dispositional

As with the P-SLI, most of the lessons I observed involved individual tasks, but with some general sharing of equipment. Just one lesson (Kyle's) was fully collaborative in terms of pooling ingredients and sharing the task itself. The observations and pupil interviews showed some striking contrasts between the two SEN groups. Five of the P-SpLD were observed to have good pragmatic skills with adults and peers. Specifically, they gained peer attention before speaking, clarified points of uncertainty, took verbal turns, managed topics appropriately and were assertive to a reasonable degree, i.e. neither withdrawn nor excessively dominant. The exception was Amy, reported by SEN staff as well-intentioned but overbearing with her peers. Amy had quite unusual pragmatics, although she had no diagnosis of language impairment or social communication disorder. During her interview, she was delightfully friendly and polite and showed excellent verbal comprehension. However, she gave long-

winded explanations and despite being quite articulate, she appeared to have word retrieval difficulties, e.g. confusing ‘asperger’ with ‘asthmatic’. In Art, she mainly sought adult attention or talked to herself. This was a running commentary on her own work and she did not address her remarks to anybody in particular. Amy displayed some of the pragmatic weaknesses seen in the P-SLI. She was garrulous and had poor attention-gaining strategies like Meg, was loud and exuberant like Tom and had a similarly poor social rating. Table 4.18 shows some of the pragmatic functions expressed by the P-SpLD during the observations.

Table 4.18 A sample of utterances and functions in the P-SpLD

Case	Utterance	Function
Amy	Can I borrow your rubber?/Thanks	Request favour/Acknowledge favour
Kyle	Have you washed this?/You cut it like this/Oops – gone in my eye!/Shall we do this one now?	Check progress of task/Offer help/Joke/Suggest action
Luke	Can I have that?	Request favour
Zoe	Can I borrow this?/I’m not going to use this bit – you can have it/Think I’ll do the background now/You go through that room and around/Do you like this colour?	Request favour/Offer favour/State intention/Offer directions/Seek opinion
Olly	Shall I do the other side? Yes, let’s do it/It’s part of the block.	Offer and suggest action/Explain

Some of the ‘basic’ functions such as requesting and acknowledging loan of materials were those noted for the P-SLI in Table 4.17. In comparison though, the P-SpLD expressed more explanations, offers, suggestions and intentions. They also tended to use more words in each of their utterances and in this respect they resembled Will and Nick.

The most marked difference between the SEN types was the higher level of conversational ‘take-up’ by TD peers of the P-SpLD’s initiations. This may have

related to the functions that they expressed and to their better pragmatic skills generally. These skills were interwoven with their good structural language, and the interface between the two was probably implicated in the differences between them and the P-SLI.

Although most of the P-SLI were not actively shunned, the analysis above showed that TD peers usually initiated or responded to them in quite a limited way. In contrast, all the P-SpLD except Amy participated on comfortably equal terms with their TD peers and their initiations and responses were just as likely to generate further conversational turns. There was a feeling of interactive ease and no sense that TD peers were humouring these young people or making a conscious effort to include them. The type of lesson did slightly influence the interactive content. Sedentary lessons, such as Art and Science, tended to favour more general social conversation than active ones such as Technology, in which task-related interactions predominated. In two active lessons, noise levels allowed very little conversation anyway. Yet, in both types of lesson, the P-SpLD usually joined in as much as their TD peers, whereas quite a lot of conversation was conducted over the heads of some of the P-SLI.

The disposition of the P-SpLD could not be fully gauged from these single observations, but they generally seemed to be cooperative young people who were able to work harmoniously with TD peers. Descriptors from other data sources (see Table 4.11) include '*helpful*', '*diplomatic*' and '*friendly*'. Notably, Kyle, a participant with very good social position, was described as '*outgoing*', a quality also attributed to Will – the P-SLI with the best social position. Luke was described by his mother as '*kind and loyal*', but his friendships were considered by staff to be '*mainly antagonistic*'. There was no evidence of social problems during my observation and his peers did not seem at all reluctant to work with him. This inconsistent pattern was not fully explained. His mother described how in Year 6: '*He was with SEN pupils. He felt staff regarded him as "stupid and lazy".*' She explained how a late diagnosis of SpLD by the primary school SENCo had actually improved his academic and social self-image. Possibly, though, he was still negotiating his position with TD peers and some difficulties may have existed outside the classroom. The lack of observation in such settings meant this could not be verified.

Interim summary

Predictably, pragmatic skills influenced the extent to which the P-SpLD participated in classroom interactions and maintained their conversational footing over longer exchanges. In this, five were more successful than most of the P-SLI. Clearly, they had the advantage. Without receptive or expressive language difficulties, they could join interactions without inhibition. They were not confined to simple 'here and now' functions. In the P-SLI, language difficulties were not always compounded by pragmatic difficulties, but they often were, at least in a mild form. Language and pragmatic difficulties in tandem probably put a brake on the length and quality of their interactions, a problem that was not experienced by the P-SpLD. In sum, pragmatic skills certainly seemed to be implicated in the better social participation of the P-SpLD and these skills were probably related to their greater language competence. Dispositional strengths were also evident in the four cases with the best social position, whereas there was mixed evidence for the 'Fair' case (Luke) and evidence of some dispositional weaknesses in the 'Poor' case (Amy).

(iii) Athletic

Of the four P-SpLD in 'Good' social categories, all but Zoe were competent at one or more team sports (see Table 4.11). Kyle's athletic skills included football and rugby, Tara was an excellent swimmer who competed at regional level and Olly had good all-round sporting ability, particularly equestrian skills, swimming and surfing. Luke, in the 'Fair' social category, enjoyed social swimming with friends, but was otherwise indifferent to athletic activities. Amy was in a top set for PE, but her classmates rarely sought her as a team member. So how did athletic pursuits influence these young people's social lives?

Sport played a particularly large part in the lives of Tara and Kyle, both in and out of school. Tara trained intensively at weekends with girls from other schools. She also enjoyed a wide range of physical activities with her school friends, including dance. Kyle attended multiple sporting clubs in school and played football for an area team at weekends. Additionally, his mother confirmed that he was greatly in demand as a playground footballer: '*... especially by the*

older boys. They find him quite good, apparently.' In this respect, he resembled Josh.

Despite their strong commitment to sport, Tara, Kyle and also Olly fitted it quite seamlessly with their school friendships. Sport was an important mutual interest, but they enjoyed other structured activities too, along with just friendly chats, sharing confidences or exchanging jokes:

Tara: 'We're all very sporty. And we all like playing instruments. We all play one instrument ... And just hanging out and chatting.'

Kyle: 'If something's, like, happened at home – which it hasn't, but if it has, you've got friends to fall back on and that. Some like me because of my football. Not all because of my football. Some like me because of my jokes ... in my tutor, me and my other friend are like the joke people – make the tutor laugh! ... I like talking. I like doing stuff.'

Olly: 'Yeah, most of them are like me ... they all enjoy the same lessons as me and the same things – hobbies and stuff – swimming I do quite a lot. I'm the only one who likes horse riding. J likes surfing as well as me. [At breaktimes] ... we just natter. I'm open about everything. Not one that will keep everything to themselves.'

So how did this compare with the lives of the more athletic of the P-SLI?

There were some similarities. In each SEN group, individuals found that athletic competence, particularly in team events, contributed to their social position with TD peers. It opened the way to 'low maintenance' activities in which they could participate with TD peers, without language or literacy difficulties getting in the way. However, there were subtle differences. For the P-SpLD, an interest in sport usually had social benefits, but Zoe, who enjoyed dance but lacked prowess, did not seem greatly disadvantaged. In other words, athleticism could ease the pathway to new friendships in Year 7, but it was not the only route. In Amy's case, it was not a route at all, at least in school. Amongst the more athletic of the P-SLI, we saw that only Will's friendships were characterised by an effortless flow between sport, other shared activities and general companionship. This contrasted with Sam and Nick, whose social and sporting lives were more compartmentalised.

Interim summary

In most of the P-SpLD, athletic performance was fair or good and it proved socially advantageous for all but one - Amy. Sport was an area in which they could excel (or at least perform competently) in the eyes of their TD peers. It gave them something to share and to talk about. In this sense, athleticism was a factor in their social well-being, just as it was for a smaller number of the P-SLI. However, for those with SpLD, it seemed to be more of a bonus than a necessity, easing the formation of new friendships in Year 7, but co-existing comfortably with other commonalities. This was not the usual pattern in those with SLI.

Do the same environmental factors influence social well-being?

(i) School

A theme that emerged very clearly was the P-SpLD's views on the **size** of their new schools (Table 4.11). Most actively welcomed the greater social choice in a larger school, seeing it as a chance to extend their friendship circle:

Olly: 'Pretty easy here ... There's a lot more people here to, like, pick from.'

Zoe: 'There's more [friendship opportunities] in Year 7. There's not a lot of people in Year 6, cos it's a fairly small village primary, with mixed age classes.'

Kyle: 'Um, well, I've got a lot more friends, as they're coming over from different schools. Instead of having a couple of friends, I can see what other people are like from different schools. And I've got a lot more friends than I did. Because there's more people. So there's more people to gel with and that lot. Popularity? I'd probably have it way higher in Year 7.'

Luke: 'A lot more than in primary! Like, there wasn't much people [at primary school] ... only about thirty in our class.'

Subject setting and seating plans were sometimes perceived as desirable, since they maximised contact with other pupils in the year group:

Tara: 'Yeah ... probably easier, cos when we like ... do different lessons, and we all split off, I make friends there ... Teachers leave us to sort ourselves out ... I like to work with different people.'

Zoe: 'I prefer a [seating] plan, cos it's a chance to make new friends. I would like more new ones ...'

Location sometimes involved separation from Year 6 friends, as it had for two P-SLI. Most coped with the challenge – sometimes better than anticipated:

Tara: ‘Yes, I miss them quite a lot .. they went to different schools. Only one of my friends came here. [But] I like making new friends ... I don’t like sticking to the same one ...’

Tara’s mother: ‘Only a few went to this school and they were paired for tutor groups, so mostly dispersedThey put her with this bubbly girl [T, a best friend from primary school]. We were pleasantly shocked! I thought she’d panic when T was away, but she just said “Oh, no, I just went off and found my other friends.” She’s really come out of herself. She’s got six or seven friends now she chats about at home.’

For some of the P-SpLD, as for Nick, the change of school offered a chance to replace problematic relationships with more productive ones:

Luke: ‘Because I didn’t really like my old class. I asked to move half way through Year 6, but they said “It’s a bit too late now.” I kept having fallouts and my two best friends were in the other class. We got split up in Year 3. I’ve a lot of [new] best friends, yeah.’

Olly: ‘[People here are] all different, whereas in my old school, there were quite a lot who were the same – I didn’t really get on with them.’

Zoe: ‘I’ve got better at sorting out quarrels [here]. I had some big fallouts sometimes with friends there.’

Schools’ **ethos** and **social organisation** supported pupils with SpLD in several ways (Table 4.11). One school had ‘dyslexia friendly’ kitemark status. Another school very actively looked for talent in pupils with a range of SEN and made great efforts to coax them into club membership. This worked particularly well for Kyle:

Kyle: ‘My music teacher encouraged me to go choir, cos he says I’m a good singer. Mostly, adults encourage me, cos they spot me – like in PE. They normally say “You’re quite good at this, so come to the club”. So I normally get support from adults.’

Tara also responded enthusiastically to club opportunities:

Tara: ‘Yeah. A club every lunch-time! Monday, it’s Drama, Tuesday it’s dance, Wednesday it’s impact [journalism], Thursday it’s Year 7 singers and Fridays it’s hockey!’

Tara’s mother: ‘Massive number – every day! I found out she didn’t have time to eat ... they [girls] like to sit and chat while they eat, not anywhere on the move, like boys!’

Amy was keen to join her school netball and hockey clubs. Like some of the P-SLI, though, she was confused about club arrangements and was reluctant to seek help from peers or staff:

Amy: 'I've signed up, but I still don't know what clubs I've signed up to. I wanted to do hockey, dunno where to do it, where to go and not gone to any of them ... I think. I signed up for three clubs.'

As described for the P-SLI, each school provided a lunchtime facility for socially excluded pupils, but of the P-SpLD, only Amy used it. SEN staff confirmed that she attended 'almost daily'. **Scholastic organisation** was also similar to that outlined above for the P-SLI. Like them, most of the P-SpLD were only set for one or more core subjects in Year 7 (Table 4.11) and were otherwise taught in mixed-attainment classes. Usually, these classes were intact tutor groups, but there was occasional splitting and merging of groups, particularly for practical subjects. Within their classes, most of the P-SpLD had TD best or regular friendships (Table 4.13). Tables 4.19 and 4.20 show how this compares with the P-SLI.

In contrast, Amy struggled socially with her new classmates and found that scholastic organisation disrupted the relationship with her old friend S, who also had SEN:

Amy: 'Yeah ... the thing is, we're in different sides of the year, so the same level, but ... different classes, and my parents are quite upset about that.'

KR: 'How many classes are you in with him?'

Amy: 'None, just tutor group. He was so distressed [about the separation], he fainted in the ICT room and I caught his fall. And Mr M said he can move ... with me. The thing is now they think it's not a very good idea ... so I'm told I got to wait till Year 8 till I get him in my class.'

Meanwhile, her friendships with TD pupils in her classes remained few and fragile:

Amy's school SENCo: 'Most of her friends have SEN – at least one has ASD. She became friends with them through the lunchtime support. She does have one or two TD "friends" [but] she falls out with them regularly.'

Amy's parents confirmed that even these TD friendships rarely extended beyond the classroom, whereas her friendships with other pupils with SEN were warmer:

Amy's mother: 'She still doesn't get many [TD] party invitations, which is upsetting as parents ... I'd say she goes for people ... with less ability. She relates better to them ... She likes to help them – to mother them.'

Table 4.19 Friendship patterns of P-SLI with number of cases

Best (TD)	Regular (TD)	Best (SEN)	Regular (SEN)
Nick Will	Nick Sam Will	Rob Meg Josh Nick Will Eve Tom	Rob Meg Josh
2	3	7	3

Figure 4.20 Friendship patterns of P-SpLD with number of cases

Best (TD)	Regular (TD)	Best (SEN)	Regular (SEN)
Luke Olly Kyle Zoe Tara	Luke Amy Olly Kyle Zoe Tara	Amy	Amy Kyle
5	6	1	2

Generally, the P-SpLD experienced positive **peer attitudes** both from their close TD friends and from the wider TD peer group (Table 4.13), although Kyle had experienced occasional bullying from one boy outside his social circle:

Kyle: ' ... because I'm dyslexic ... I got bullied in my old school – from Year 3 to Year 6, but now he's started on me again.'

However, his own peers were socially and scholastically very supportive of him and this support was reciprocal, as it was for Tara:

Kyle: 'If you're having problems, like with homework, they help you, they do stuff with you and then if they're stuck, you can help them ... I'll be a good friend to them. Because once, L - one of my best friends - got hurt, because he got pushed into a fence, so I just helped him with that. And they join in with me. Like today, I'm going to the church and I persuaded one of my mates to come, to do [choir] with me. So he's quite cool.'

Tara: 'They're really friendly and like, if you're upset, they'll comfort you and they won't leave you out ... And I'm really friendly to them and I help them if they get stuck with their [art] work.'

Luke, whose more uneven relationships were discussed above, did mention being excluded by a member of his friendship group, but he did not seem to be too concerned about it:

Luke: 'Sometimes ... if they're with Y. He'll say, "Sorry, I'm already with someone" and ... yeah, it hurts. But I think it happens a bit to everyone.'

Only Amy and her mother reported systematically negative attitudes, ranging from general unfriendliness to physical and online bullying:

Amy: 'I just have to sit next to them. Honest, they start to get more tough on me in PE, specially this person called A. She ... they're not like very friendly to me ... [But] the thing I wouldn't like to happen to me again is punched and kicked. That's ... from one girl in Year 9 and she's threatening me and stuff ... on Facebook.'

Amy's mother: 'The first term was really difficult – a real disaster ... She was kicked by an older boy in the shoulder and I had to take her to casualty. There's been a few problems. She helped a girl in Year 9 who was bullied, but they fell out and this girl picked on her. I had to get involved.'

The school dealt swiftly with these matters, but underlying attitudes towards Amy did not improve much. A small number of her peers were described by SEN staff as: *'very tolerant and patient – they have to be!'* Otherwise, Amy continued to rely on her old friend and one other with SEN for emotional support:

Amy: 'Well, we're very sensitive and we don't watch our backs. We usually pair up to see if we can protect each other and that ... At tutor we say "I'll meet you at the stump" and we wait there till we see each other. Erm ... I think my other best friend would be N. Basically, I mostly hang out with S and N.'

So what did these young people feel about having SpLD and about peer attitudes towards them? SEN staff reported that Amy, Olly and Luke all worried about their work (Table 4.11) and Olly confirmed this:

Olly: 'I struggle with spelling - and reading sometimes. And my memory [laughed] – I struggle with that. Yeah, things I've been told to do. I forget quite often ... Yeah, I would like more help.'

Tara also mentioned slight work worries, depending: '*... on whether it's hard ...*', but her mother felt that: '*... her spelling is wrong, but it doesn't worry her at all.*'

Interestingly, none of them seemed to worry that their SpLD would attract negative social reactions from their TD peers. In this, Olly and Tara judged correctly; both were very well regarded. Even Amy expressed no link between her worries about bullying and her SpLD. Staff reported that attitudes towards Luke were sometimes cool, but these apparently stemmed from his fluctuating moods, not from his SpLD. Kyle also seemed unconcerned about having SpLD and he shrugged off the bullying incidents. He did speculate that losing friends could lead to negative peer attitudes towards him, but his worries seemed mainly hypothetical and unrelated to his SpLD:

KR: 'You say you worry a bit?'

Kyle: 'Yeah, it's just about losing friends, cos you don't want to lose friends, cos if your friends go, they might say, like, "He's mean" and that lot and you won't get any more friends. [But] I generally keep the friends. If I had a bad day, I'd probably lose it, but the friends I've got forgive me. After school, I call up for them and just talk about it - and then play a bit of football.'

Kyle's mother: 'Social worries? No, he just gets on with it really.'

Overall, the pattern was one of lower social anxiety in Year 7 than in Year 6. This was noticeable in all but Amy, for whom the pattern seemed to have shifted from anxiety about negative peer attitudes to fear of physical bullying (Table 4.13).

Interim summary

Among the multiplicity of school factors, the analysis showed some clear group differences. Five of the P-SpLD had made quite an easy social transition into Year 7. Apart from Amy, they responded well to what their schools offered socially. Their pre-transition worries soon evaporated and they enjoyed having a greater choice of friendships. Some missed their old classmates, but less sorely than Sam or Rob, and others did not miss them at all. They joined school clubs

readily if they wanted to and usually mixed easily enough with TD peers in and out of class, although Luke's relationships were not entirely harmonious.

In contrast, Amy and some of the P-SLI were less willing or able to join school clubs, more likely to seek lunchtime support, and were less fruitfully engaged with TD peers generally, despite the efforts of their schools. Placement in mixed-attainment classes facilitated several best and regular friendships between SpLD and TD pupils, but fewer between SLI and TD pupils. In general, the P-SpLD were more positively regarded by their TD peers, were less socially anxious than they were in Year 6 and also less so than the P-SLI in Year 7. They were also more realistic than the P-SLI about their relationships with other pupils. They did not fear that their SpLD would attract negative social responses from TD peers. On the other hand, those with limited scholastic support did worry more about their school work than the P-SLI.

(ii) Out of school

Each P-SpLD had a supportive **family** who had reassured them socially throughout transition, welcomed their new friends home and encouraged social activities out of school (Table 4.11). Some of the young people were now permitted to undertake simple, unsupervised journeys with friends and one parent recognised that secondary transition reduces parental influence on children's socialisation:

Luke: 'We go into town ... swimming ... and [to the seaside] on our own, on the bus.'

Tara's mother: 'You can't engineer things once they leave primary school ... you can't go over to the mums in the playground and have a little chat.'

Unlike the P-SLI, all the P-SpLD had at least one socially-oriented **hobby** or organised activity (Table 4.11). As well as the athletic pursuits mentioned above, they included Sea Cadets (Amy), youth clubs and Scouts (Luke), sewing and French circles (Zoe) and variety shows (Kyle). As is common for young people of their age, their parents provided transport, hosted occasional sleepovers and watched their children take part in events. Otherwise, most were not directly involved in their child's activities. Like those of the P-SLI, 'other school' hobby friendships were usually more casual than those from their own

school, although only one pupil claimed that attending different schools was a real barrier to best friendship:

Kyle: 'I've made a couple, but it's weird. Because they go to a different school, I'm not with them all the time and I'm an outsider, basically, so I'm trying to fit in. So I make a couple, yeah ... Not best friends, but friends.'

Socialisation in the **neighbourhood** varied across cases (Table 4.11). In common with the P-SLI, it was partly determined by the number of young people living in the immediate vicinity or by family connections. Olly lived in a rather isolated location, but seemed unconcerned about the lack of young neighbours, since he spent much of his leisure time with other horse riders. Likewise, Kyle had no neighbourhood friends, but socialised happily with his many cousins from across town. Zoe and Luke, also town dwellers, lived close to classmates, so their school and neighbourhood friendships were often the same, especially Zoe's. As with the P-SLI, friendships that were not school-related comprised a range of ages and activities, from shared hobbies to more informal 'hanging out':

Luke: 'I've got another best friend in Year 9 – that's my best friend's brother. Our families are close ... we see each other loads, so the [parents] became close, so we go to theirs and they come to ours lots. I have [local] friends at Scouts. In my street ... there's this boy called R ... and A. Both were at [the former primary], but one's now private and one's still at primary.'

Luke's mother: 'He likes chill-out time with them [as well as structured activities]. He's close to his Year 6 cousin and he ... mixes happily with different ages in small groups. He goes to church club and another club [with a neighbour].'

For Tara too, the neighbourhood was a rich seam for convivial company. This was distinct from both her swimming team-mates and her school friendships:

KR: 'Ever lonely without swimming and school friends?'

Tara: 'No. Where I live, down my road, I have a lot of friends there and we pop round each others' houses.'

Finally, what role did social technology play in the peer socialisation of the P-SpLD out of school and how did this compare with the P-SLI? On the whole, the P-SpLD could use mobile phones and/or internet social sites more independently than the P-SLI, although they showed considerable variation in their patterns of use. For example, I coded Kyle and Tara's use of social

technology as 'minimal' (Table 4.11), because neither was permitted to use social internet sites and they used their mobile phones very sparingly. Kyle rarely had any credit on his phone, and Tara was happy to use her family's landline for anything more than fleeting conversations about matters such as homework deadlines. For these, she did use her mobile phone. In contrast, Luke used the internet to maintain contact with old friends who had moved from the area and Olly and Zoe communicated with a variety of old and current friends in this way:

Olly: 'Probably my friends and people – my old friends that have moved, or when we've moved, where they're quite far away. And school friends - yeah.'

KR: 'And Pony Club people?'

Olly: 'Yeah, I've got quite a few Pony Club people I talk to.'

Zoe: 'Some of my old friends went to middle school in Year 5. I don't often see them, but we talk on MSN. I talk to my school friends on MSN, but not every day and I don't use e-mail.'

Of the P-SpLD, Amy was the only one who had experienced abuse on social media sites. Unlike the P-SLI, none of the P-SpLD or their parents mentioned any difficulties with making phone calls, although Luke and Kyle said they found texting difficult, due to their poor spelling. Like Zoe, they were quite comfortable with social technology, but preferred face-to-face contact.

Interim summary

Having looked at out of school factors, some comparisons can be summarised. All the P-SpLD had socially-oriented hobbies, whereas three of the P-SLI did not. Comparing their unstructured socialisation, the evidence suggested that it was partly determined by where the young people lived. Some were simply lucky enough to live near school friends, congenial neighbours or cousins of similar age. Others were not so fortunate. Two points of difference between the SEN types emerged: the *quality* and the *independence* of their unstructured socialisation. On the whole, the P-SpLD simply got on better with their social contacts out of school and communicated with them more competently, using social technology where necessary. They also managed their social lives more independently than the P-SLI, whether they were meeting friends locally, or travelling further afield.

4.3.3.5 Factor interrelationships in SpLD

We have seen that a supportive **family** and **school ethos** helped most of these young people to manage secondary transition with confidence. They allowed them to socialise and to make new friendships, including those with TD peers. As individual factors, they were therefore influential on social well-being. But to what extent was the influence ecological and how did this compare with the P-SLI?

A clear point of difference was the degree of family involvement in the young persons' social lives. Most of the parents of the P-SpLD followed their child's lead and did not attempt to 'engineer' friendships for them or to steer them towards leisure activities that would provide a vehicle for socialisation. In short, the young people pursued their own interests and relationships with just the practical levels of parental help that are required for this age group. I indicated earlier that of the P-SLI, only Will showed this level of social independence and that the parents of some of the other P-SLI worked tirelessly to promote social opportunities for their child. Without this, the child may have been quite isolated in their free time. Once again though, we see a mirror image. Just as Will's situation resembled that of the P-SpLD, Amy's resembled that of the P-SLI. Her parents regularly drove her to a non-local branch of Sea Cadets at considerable inconvenience, because they knew and trusted the staff:

Amy's mother: 'She absolutely loves it. And they are brilliant down there. The lead was a social worker, who really understood Amy's needs. There's lots of children there on School Action Plus – it seems to attract them, cos there's not reading and writing. Lots of hands-on things – cooking and first aid and they can do Duke of Edinburgh. So even though it means going [so far], it's worth it.'

Interim summary

Family and school organisation were important to the social well-being of the P-SpLD, but mostly as discrete background factors, not as factors working ecologically to make a difference to their lives. Outside school, five of these young people relied minimally on adults to facilitate their social lives and their specific learning difficulties did not constitute a major social barrier. Ultimately, their own enabler characteristics - athletic and dispositional; certainly linguistic

and pragmatic – interacted with helpful aspects of their environment, allowing them to flourish socially. These environments were certainly good, but they were not *exceptional*. In short, most of the young people with SpLD were able to draw on more personal enablers than their SLI counterparts and were less dependent on ecological factors for their social well-being. Amy was the sole exception to this pattern.

4.3.4 Summary of findings

The thematic analysis revealed clear yet complex patterns in the factors associated with individuals' social well-being. Miles and Huberman (1994) argued that qualitative analysis of variables and processes is powerful for assessing causality. Nevertheless, I am not claiming straightforward causal relationships between the factors. To do so would underplay the very ecological considerations that are central to this investigation. Despite that, some factors stood out as being highly influential, especially for specific social domains. It was shown that these influences could be socially beneficial or socially detrimental. Further, the analysis revealed differences in social well-being and in the associated factors between the P-SLI and the P-SpLD, although there was one clear outlier in each group. Figure 4.7 shows how these outliers displayed characteristics more commonly seen in the opposite SEN group.

Findings for Question 5

I will summarise the findings for SLI first, since these address the fifth research question.

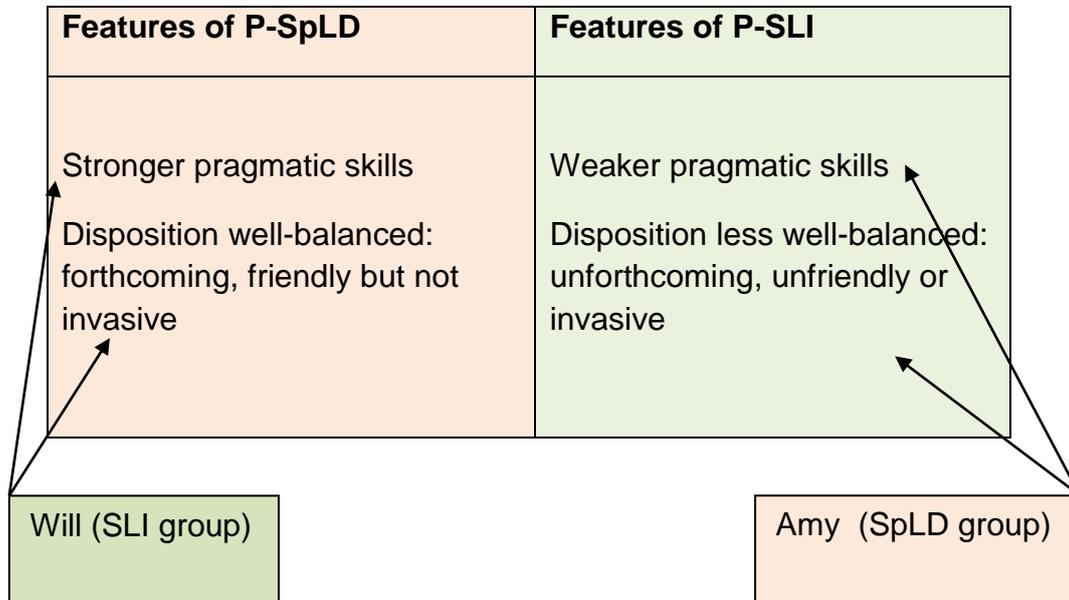
- Of the discrete personal factors, disposition and pragmatics showed the strongest link with personal friendship with TD peers, whilst athleticism enhanced social acceptance in terms of general status. Pupils with a friendly disposition and good pragmatic skills were the best accepted, both as close friends and as work or hobby companions. Conversely, those who committed pragmatic blunders or who were reticent with peers were more likely to be ignored and to have fewer close relationships, especially with TD pupils. On the whole, the evidence suggested that most were not actively excluded in the classroom, but their social acceptance was sometimes quite superficial. On a more positive note,

many of their day-to-day dealings with peers were reasonably amicable. There was no evidence that poor or indifferent athletic abilities particularly compromised the social position of these young people. In sum, good athleticism could enhance their social position, but poor athleticism did not actively harm it.

- Of the remaining personal factors: non-verbal scores, the severity of SLI and scholastic levels, the severity of SLI (regardless of non-verbal ability) showed the most obvious link with social participation. However, in the participants who had non-verbal and scholastic enablers and whose SLI was not too extreme, positive synergy between the factors may have been more influential than the sum of the parts. Poor receptive language clearly did not condemn pupils to a poor social position across all domains. Indeed, we saw a few pupils with compensatory qualities who could achieve good quality friendships with TD peers and/or good social acceptance generally. That said, poor receptive language was highly detrimental to social participation in verbally demanding situations and could lead to virtual exclusion from them. In this social domain at least, the severity of SLI seemed to be a particularly influential factor.
- Of the environmental factors, family was a key influence on social well-being, especially in synergy with the young person's personal enablers and with school ethos. Dedicated parents could at least facilitate social opportunities for their child out of school and ensure that schools dealt with bullying incidents. In short, such relationships could create favourable 'ecological niches' in Bronfenbrenner's terms and help the young people to make the very best of things. However, neither a supportive family nor a positive school ethos really influenced their social position with TD peers in school, particularly in terms of best or regular friendship. This seemed to be determined mainly by the personal characteristics of the young person and of their peers. Practical issues such as the distance between school and home had a more marginal influence. Even out of school, where they had more influence, families could not fully compensate for their child's language and social difficulties. 'Friends' with whom the young people shared organised

activities did not necessarily seek their company elsewhere and neighbourhood relationships did not always work out either.

Figure 4.7 Outlier cases and their key features



Findings for Question 6

The findings for the second research question are summarised next.

- The same personal enablers were associated with social well-being in the P-SpLD as in the P-SLI, but they possessed them in greater measure. Good pragmatics, easy disposition and athleticism all showed strong links with their better social well-being. Those best endowed with such assets found it easier to make and keep quality close friendships, to be accepted by TD peers and to participate in social activities in and out of school. Of the three factors, athleticism was probably the least important. It did not guarantee social success in the absence of the other two factors and generally acted as a bonus, not as an essential quality.
- More of the P-SpLD than the P-SLI had good non-verbal scores and fewer had severe scholastic difficulties. Nonetheless, these two factors,

at least in isolation, did not seem to be strongly linked with their social well-being. Favourable pragmatics and disposition could compensate for non-verbal or scholastic shortcomings. This did not necessarily work in reverse; in one case, non-verbal and (relative) scholastic strengths failed to compensate for pragmatic and dispositional shortcomings.

- Most of the P-SpLD had coped well with secondary transition. Indeed, all but one actually showed improvements in social well-being in Year 7. Their families and schools had encouraged them to access a range of social activities and to make new friendships at this important time. Generally, they responded well and their social lives continued to develop nicely, apart from the normal setbacks experienced by this age group. Despite their SEN, they did not seem to need much overt social support. A strong ecological relationship between home and school was less important than the direct interrelationship between a single environmental factor and the young people themselves. Within this framework, they engaged with hobbies, close TD friendships and casual socialisation quite successfully and with a good deal of independence.

Reflections on the comparative findings

For both research questions, this study drew on multiple data sources and the findings were broadly consistent across these sources. For the young people with SLI, who were the primary focus of the study, the ease of social adaptation during secondary transition varied considerably. Accordingly, their social well-being ranged from hearteningly good to very poor. Between these extremes there was evidence of participants who coped reasonably well from day to day and who enjoyed some social contact out of school, but whose situation could not be described as optimum. Some appeared to be ambivalent about their social position in school and three had become notably more socially anxious in Year 7 – a situation that was not mirrored by the P-SpLD. Generally, the P-SLI's social position did not change too radically from Year 6 to Year 7. Nonetheless, the two pupils who were separated from former classmates *perceived* that their social position had deteriorated. For the majority, social life in school was manageable, but less rosy than it was for most of the P-SpLD.

The social well-being of these young people with SLI was linked to several factors and factor interrelationships. Of these, receptive language impairment is the single factor that completely distinguishes them from those with SpLD. I am not suggesting that receptive language impairment alone accounted for different levels of social well-being between the two groups. Most of the pupils with SLI also had more severe scholastic difficulties and slightly lower non-verbal scores than their SpLD counterparts. Moreover, the group differences in well-being were not absolute; it was seen that one pupil with SLI coped very well socially and one pupil with SpLD coped very poorly. However, the analysis also revealed that these outlier cases had unexpected pragmatic and dispositional features (Figure 4.7) and pragmatics and disposition were found to be highly important factors in social position. In view of that situation, it was not too surprising that the pupil with SLI fared better, despite his language difficulties.

Overall, the pattern across cases suggested that the difficulties associated with SLI were more detrimental to social well-being than the difficulties associated with SpLD. Both SLI and SpLD predispose pupils to scholastic difficulties, but receptive language impairment, at least for the cases in this study, appeared to constitute a bigger social challenge than scholastic difficulties alone. Where language difficulties were conspicuously compounded by other personal or environmental barriers, the challenge was greater still and evidence of a successful and independent social life was correspondingly less. In school, those with the greatest number of additional barriers did not experience Meyer's best or regular frames of friendship with TD peers, although the attitudes of these peers towards them were sometimes quite benign. Their friends had SLI or other forms of SEN. This situation was not experienced by most of the young people with SpLD.

4.4 Chapter summary

The quantitative and qualitative analyses have yielded findings on four and two research questions respectively. The quantitative phase of the study answered questions about the social well-being of young people with receptive SLI at the time of secondary transition and compared their well-being with that of their TD peers. The qualitative phase developed the topic. It explored a range of

personal and environmental factors associated with social well-being in a few of these young people with SLI, compared them with those who have SpLD and considered the ecological relationship between the factors.

The findings of the two research phases are separate but complementary. Between them, they suggest that at this educational stage, young people with receptive SLI often face greater social challenges than either typical peers or those with SpLD. Nonetheless, considerable individual differences were apparent. Moreover, some were relatively unaware of their social position, whereas others were both aware and worried about it. The implications of the findings, separately and as a whole, are discussed further in Chapter 5.

CHAPTER 5: DISCUSSION

5.1 Introduction to the chapter

I will start this chapter with separate discussions of the quantitative and qualitative phases of the study. For each, the findings are critiqued and then related to the literature. The strengths and limitations of each method are outlined. The connection between the quantitative and qualitative phases is re-stated, with consideration of how the study as a whole addressed the research questions and hypotheses. Discussion of the achievements and shortcomings of the mixed method design follows. The original contribution to knowledge in the field is discussed next, followed by the implications of the findings for policy, provision, practice and future research. Finally, the concept of SLI and the discrepancy model described in Chapter 2 are revisited. This reflection takes account of the study's findings and the recommendations of the Better Communication Research Programme (BCRP), to which I referred in section 1.2.

5.2 Quantitative phase

5.2.1 Critique of the findings

5.2.1.1 Social acceptance: self and teacher ratings

Findings for social acceptance at Time 1 were noteworthy. For pupils with SLI, the large difference between self-ratings and teacher ratings was particularly revealing. The teacher ratings were much lower than those of the SLI pupils themselves. The teacher ratings of TD pupils were also much higher than their ratings of SLI pupils and in the case of TD pupils, self-ratings and teacher ratings were much more similar to each other.

There is evidence that some children with SLI lack awareness of peer negativity towards them (Jerome et al., 2002, citing Fujiki, Brinton, Hart & Fitzgerald, 1999) and that they overestimate their social position with peers (Wadman, Durkin & Conti-Ramsden, 2011a). The teacher ratings in the present study may therefore have been more realistic than the pupil self-ratings. Of course, it might be argued that if pupils with SLI do have an unrealistically positive view of

themselves, there are some advantages. Overestimation could protect them from the worst emotional squalls of rejection, including feelings of loneliness. On the other hand, an unawareness that their perspective differs from that of others could leave these young people less prepared to develop strategies for improving their social position as they mature.

It was observed that TD self-ratings on this measure had *increased* at Time 2, rather than the SLI self-ratings having *decreased*, and this accounted for the difference between the groups at Time 2. However, the reasons for improved ratings only in the TD group remain speculative. Possibly, these pupils were developmentally more prepared than those with SLI for the new social opportunities that they encountered in secondary school and successful relationships with peers in Year 7 boosted their social confidence. In comparison, the static scores of the SLI participants created a sense that they were coping but not flourishing in Year 7, and were 'treading water' whilst TD pupils forged ahead socially and scholastically.

The missing teacher responses in the Time 2 survey questionnaires were disappointing, because they removed an important data source for Year 7. Responses were received for only eight (34%) of the 23 TD cases. For the 28 SLI cases, 18 (64%) were received, but of these, three had not been completed at Time 1. Seven (38%) of the SLI returns were from LRB teachers or others in specialist provision. In contrast, another LRB teacher was unable to obtain responses from mainstream colleagues in relation to any of her four pupils. Given the small number of teacher responses, especially for TD pupils, statistical comparison between Time 1 and Time 2 and between groups at Time 2 was not considered worthwhile and was not therefore undertaken.

The low response rate at Time 2 occurred despite the repeated efforts of SENCOs and LRB teachers. The reasons for the much poorer response than at Time 1 were not easily discernible. Perhaps some form tutors were reluctant to commit themselves to views that they considered to be socially judgemental, since they were not working with the pupils across the whole school day and had little opportunity to observe them with peers during break and lunch times. SENCOs and LRB teachers were asked to reassure these colleagues about

confidentiality and anonymity, but the tutors may have remained uneasy about rating pupils in this way.

Further reasons may be that primary SENCOs knew their colleagues better, had more professional influence on them, and had greater opportunities to explain in person the purpose of the survey. Without such clarification, tutors perhaps failed to see the relevance of including TD pupils in a study of SLI and this could help explain the lower percentage of completed questionnaires for this group. Certainly, when requesting returns, several secondary SENCOs mentioned emailing reminders or leaving them in colleagues' pigeon holes, whereas their primary counterparts spoke of 'catching' colleagues in the staffroom and even encouraging them to complete the questionnaires in situ. This personal approach would certainly have been easier in smaller schools. Without doubt, the poor response rate at Time 2 was unfortunate. Nonetheless, it was probably true that the Year 7 form tutors were less familiar with pupils' social position than their Year 6 classteachers had been. Tutor ratings would therefore have been based on a more limited perspective and the interpretation of results between times would have required caution.

5.2.1.2 Social anxiety ratings

The reported levels of social anxiety in the SLI group need to be compared with the clinical cut-offs of the measure used. Without such comparison, the findings only confirm that these participants were more socially anxious than TD peers at both times, not whether there are serious implications for their social well-being. This is an important distinction. Mean scores with standard deviations in parentheses are therefore shown in Appendix 16, alongside the SASC-R cut-offs for high and low social anxiety (La Greca, 1999).

Gender was not a variable in this study, but since gender differences were apparent on SASC-R, particularly at Time 2, they are worth commenting on. Time 1 means for both genders were a little below the cut-off for high social anxiety, whereas at Time 2, the female mean had increased and exceeded the cut-off. Despite considerable variation across cases, the level of social anxiety in the female SLI sample at Time 2 and the growing gap between the genders

was potentially concerning. This must be stated with caution, since the cut-offs are based on US norms that may not apply to the UK.

5.2.1.3 Associations between receptive SLI, social anxiety and social acceptance

The lack of association between receptive language scores and the outcome measures has particular importance, since the severity of receptive language difficulty was of key interest to the study. In this research, severity was conceptualised in two different ways, i.e. as verbal standardised scores and as discrepancy between these and non-verbal standardised scores. The association between verbal/non-verbal discrepancy and social acceptance (and tentatively with fear of negative evaluation, though at Time 1 only) suggests that this second concept of severity may have greater implications for the social well-being of children with receptive SLI than actual language scores. In other words, children who cannot follow language at a level commensurate with their non-verbal abilities may be more prone to doubts and worries about their social acceptance by a TD friendship group than those whose receptive language and non-verbal levels are more closely aligned and who might not have such a natural affinity with TD pupils. This makes sense, but only if we hypothesise that children are drawn to peers whose non-verbal ability is similar to their own, regardless of verbal and scholastic differences. By that reckoning, children with SLI too would identify with peers of broadly similar non-verbal ability, leaving those with the greatest verbal/non-verbal discrepancy aspiring to friendships within which they are unable to communicate well. This could have real implications for their social well-being.

The hypothesis needs to be tested. There is evidence of demographic, cognitive and social homogeneity in TD friendships (Howe, 2010). However, in relation to children with SLI, the characteristics that underpin their friendship preferences, as opposed to the friendships that they actually have, remain unclear. Research suggests that children with 'mild learning disabilities' tend to form friendships with those of similar academic level (Estell, Jones, Pearl and van Acker, 2009). I noted in Chapter 2 that this US term approximates to primary SLCN or SpLD in UK terms. Nonetheless, the evidence does not reveal whether these are the

friendships that such children would naturally choose, or whether they are determined by factors such as familiarity or feeling unwanted by TD classmates.

5.2.1.4 Absence of change in SLI measures from Year 6 to Year 7

The absence of change in SLI social acceptance and social anxiety scores from Year 6 to Year 7 was surprising (Appendix 13C and 13D). Secondary transition is a time of great upheaval for most pupils and: 'The lower level of communicative competence of children with SSLD may be predicted to pose additional demands following transfer to a new school when they must negotiate new surroundings and interact with new teachers and peers.' (Dockrell & Lindsay, 2007, p.101)

Since the results based on the whole SLI sample were unexpected, the results for each gender were again scrutinised for changes from Time 1 to Time 2 that might have been concealed by combining the gender scores. In fact, Time 2 male and female means for social anxiety changed in opposite directions, balancing each other out and yielding a combined mean that was very similar to that of Time 1 (Appendix 14). Given the small number of participants, gender means were not compared statistically.

Three other factors could account for the absence of change between Time 1 and Time 2. Firstly, individuals within the SLI group may simply have coped with secondary transition better than expected. Perhaps liaison between their primary and secondary schools was especially good, or they were reassured by the presence of former Year 6 classmates in their tutor groups. Conversely, those who had not fared well socially at primary school might have been happy to make a fresh start. Secondly, at 11-12 years, the pupils were still only on the threshold of adolescence and they may have been relatively unsophisticated in their social self-perceptions. If this were the case, any overestimates of their social acceptance in Year 6 might well have persisted into Year 7, leading to a picture that was static over the year, but which would not necessarily remain so throughout adolescence. Thirdly, some changes in the mean scores, particularly of social anxiety, might have been apparent had changes in placement type been more numerous and more socially onerous than they were. For example, pupils moving from the supportive environment of a primary LRB placement to

an unresourced secondary school would probably have experienced separation from their long-term LRB friends and perhaps felt greater anxiety with unfamiliar peers who did not share or understand their difficulties.

In the event, this type of placement change only applied to the two pupils who had attended an area LRB part time. Since they only attended one day a week, these pupils' closest friends had been in their unresourced primary school, not in the LRB or the school in which it was based. Separation from other pupils who had attended the LRB was not therefore reported as traumatic. The other two pupils leaving LRB placements entered specialist schools for complex needs, where social support levels were high and where they were not required to win the acceptance of TD peers. The remaining eight primary LRB pupils transferred to secondary LRBs with their friends from the primary base and one joined a secondary LRB from an unresourced primary school. Collectively, there may therefore have been a cushioning effect for these eleven pupils which compensated for the expected social challenges of secondary transition and contributed to the absence of change in one or both of the group measures.

5.2.1.5 Prediction of social anxiety from self-rated social acceptance, athletic competence and scholastic competence

I noted in Chapter 4 that social acceptance was a unique predictor of social anxiety, but that athletic and scholastic competence were not. This, combined with the consistent and moderately strong association between social acceptance and social anxiety, provides further evidence of a robust relationship between the two. Nevertheless, the combined model of athletic, scholastic and social acceptance data did predict social anxiety and it is worth noting that there were significant associations between social acceptance and athletic and scholastic competence at both Time 1 and Time 2. Moreover, these associations too were moderately strong (Appendix 15).

5.2.2 How key findings relate to the literature

5.2.2.1 SLI and TD: comparison of social acceptance self-ratings

Viewed with reference to the literature, the findings reveal both consistencies and discrepancies. I am relating the findings to three studies that are similar in

scope, not least by dint of using versions of the same social acceptance tool as the present research: Harter's SPPC. These studies are: Lindsay et al. (2002), Jerome et al. (2002), and Wadman et al. (2011a). Of the three, the first provides the most obvious comparison, because there are greater similarities of design with the present study. Both are longitudinal studies of pupils with SLI in Year 6 and Year 7. The degree of receptive SLI was not a variable in Lindsay et al.'s study, but their sample appeared to include many participants with receptive language difficulties. Findings for social acceptance self-ratings were consistent between the two studies in Year 7. In both, the social acceptance mean scores of the SLI sample were lower than those of TD comparisons. However, in contrast to the present study, Lindsay et al. found that in Year 6 also, the SSLD group had lower self-ratings than the TD comparisons. The SLI group means did not indicate worryingly low self-ratings of social acceptance in either my own study or that of Lindsay et al., but discrepancy between the means and those of TD comparisons do suggest that their social position is less than ideal.

Differences in the Year 6 findings of the two studies are clearly not accounted for by the use of non-equivalent tools. A possible explanation, apart from any differences in participants' language profile, is gender composition. Lindsay et al.'s female to male ratio was approximately 1:3 (17:52), reflecting the typical gender balance for SLI (Leonard, 1998). In contrast, my own female to male ratio was much higher, i.e. 12:23 at Time 1 and 9:14 (on the reduced sample for matching the TD group) at Time 2. Nevertheless, Lindsay et al. found that both genders rated their social acceptance lower than TD comparisons at both times and that there were no significant gender differences on this variable. The different gender ratios may therefore be an inadequate explanation for the different results that were obtained.

A more likely reason for the discrepancy is the smaller sample size of the present study. Differences in social acceptance between the SLI and TD groups at Time 1 (Year 6) in fact just missed significance ($p = .057$) and showed a borderline medium effect size (Cohen's $d = .488$). Analysis of a larger sample may have avoided these borderline results and produced significant differences between the two groups at Time 1.

The findings of Jerome et al. (2002) are superficially more compatible with the present findings insofar as their younger children with SLI (6-9 years) self-rated their social acceptance similarly to TD peers, whereas the older children (10-13 years) did not. By chance, their gender ratio for the younger group was identical to mine at Time 2. These authors likewise acknowledged that failure to find group differences in the younger children may have been attributable to their small sample. However, their study was cross-sectional and caution must be exercised when comparing findings between a cross-sectional and a longitudinal study. Additionally, examination of the language data confirmed that quite a number of their participants, in both age groups, had expressive-only SLI, a clear difference from the present study.

Based on an SLI sample of 11 females and 17 males, Wadman et al. (2011a) found no differences between SLI and TD participants in a single time measurement of social acceptance. Recall that their participants were aged 11-15. Unlike Time 1, my Time 2 measures did not accord with Wadman et al., since at that time I reported differences between the SLI and TD groups, although in Chapter 4 I highlighted the need to interpret Time 2 TD measures conservatively. That aside, comparison between Time 2 and Wadman et al.'s measures is potentially instructive since the participants in both studies were of secondary school age. Nonetheless, important developmental changes occur between 11 and 15 years, complicating a direct comparison between that age range and a single year group of 11-12 year olds. Indeed, if we surmise that young people with SLI gradually become more realistic about their social position, older participants might be expected to be more aware of their shortcomings and to make more modest self-ratings than TD peers or a younger SLI age group. On that basis, differences between the two studies are counterintuitive, since it was the study with the higher mean age participants (Wadman et al.'s) that reported SLI self-ratings that were similar to those of TD comparisons.

There are two possible explanations for this. Firstly, the size and the age distribution of Wadman et al.'s sample need to be considered. The number of participants in each year group was unspecified, but within a total of 28, the effect of the oldest may have been relatively slight. If so, any expected

depression of ratings by older participants might have been compensated for by higher ratings in the younger pupils. Secondly, as with Jerome et al., not all their participants had receptive language difficulties. Since the present study found that discrepancy between receptive language scores and non-verbal scores was associated with social acceptance (even though language scores themselves were not), different language profiles in the two studies may have influenced differences in outcomes. In other words, Wadman et al.'s sample included expressive-only SLI participants whose ratings may have boosted the group social acceptance mean to a level comparable with that of TD comparisons.

In sum, the findings of the present study fit into quite a complex and sometimes contradictory picture of self-rated social acceptance at particular ages. Perhaps this says less about the actual levels of social acceptance and more about the wide spectrum of social self-awareness in pupils at any given age. However, when examining the general SEN literature, older pupils do seem to rate their own social acceptance more modestly than younger ones. For instance, Pijl et al. (2008) found that 12-13 year olds' ratings were poorer than those of 9-10 year olds, when compared with those of TD peers.

5.2.2.2 SLI and TD: comparison of social acceptance teacher ratings

The findings for Time 1 (Year 6) teacher ratings are highly consistent with those of Lindsay et al. (2002). In each study, Year 6 class teachers rated the pupils' social acceptance significantly lower than the pupils rated themselves and lower than the teachers rated TD pupils. The respective results for Year 7 cannot be compared since teacher measures were unavailable in the present study. The consistency in Year 6 is particularly interesting, given the common rating tool (Harter's SPPC), since this removes one doubt over the equivalence of findings. Moreover, most primary class teachers can be expected to know their pupils exceptionally well and therefore to be very good judges of their social position in class and in the playground. For these two reasons, the weight of evidence that pupils with SLI of this age have lower social acceptance than TD peers is fairly convincing, even if their self-ratings suggest otherwise.

5.2.2.3 SLI and TD: comparison of social anxiety ratings

The literature on social anxiety in young people with SLI/SLCN is slimmer than for social acceptance and mainly less precise in terms of the language profiles of participants. Nonetheless, the study findings are broadly in line with those of Beitchman et al. (2001) and Voci et al. (2006), whose young people with a history of language impairment were more socially anxious than TD comparisons at the time of follow up. Although their samples were by then young adults, compatibility with the present findings reveals a slowly lengthening chain of evidence that social anxiety is an issue for those with SLI at a number of life stages.

A much more direct comparison can be made with Wadman et al. (2011a), whose novel findings for social anxiety are again for pupils aged 11-15. The consistency between their findings and the present ones is noteworthy. The higher social anxiety of the SLI sample in the present study at both Time 1 and Time 2 mirrors that of Wadman et al.'s SLI sample. In each comparison, the young people with SLI showed higher rates of social anxiety than their TD peers. The difference in study design, apart from the mean age of participants, was the anxiety tool. Wadman et al. used the Social Avoidance and Distress Scale (Watson & Friend, 1969). Comparison of findings derived from different measures warrants care, but in this case similarities between the constructs of the two anxiety measures are strong. In relation to the SASC scales, it was confirmed that: 'Our initial work with children's social anxiety closely paralleled [the work of Watson & Friend] and extended the concepts of "social evaluative anxiety" and "social avoidance and distress" to a developmentally younger population.' (La Greca & Stone, 1993, p.18). In view of this, the consistency of findings between Wadman et al. and the present study is of considerable interest.

5.2.2.4 Relationships between self-rated social acceptance and other domains of self-perception in children with SLI

The findings for social acceptance and athletic competence at Time 1 and Time 2 were consistent with the findings of Lindsay et al. (2002). However, in the present study, an association between social acceptance and scholastic

competence was found at both times, whereas for Lindsay et al. it was apparent at Time 1 only.

5.2.2.5 SLI social acceptance self-ratings: lack of change from Year 6 to Year 7

Again, the findings are consistent with those of Lindsay et al. (2002). Their social acceptance self-ratings (along with those in other SPPC domains) were also stable in SSLD participants from Year 6 to Year 7. Collectively, the evidence suggests that either secondary transition itself is not a catalyst for change, or else that 10-12 years is simply an insufficient window for changes in this aspect of self-perception to manifest clearly. Given that Lindsay et al. found changes in their same sample over a longer period, i.e. between 7-8 years and 10-12 years, changes may simply emerge more gradually than over a single school year, even if it is a year typified by the social upheaval of secondary transition. St Clair et al. (2011) suggested that social change in less specific terms may indeed be gradual, rather than suddenly triggered. They reported a steady increase in general peer social difficulties in SLI over the ages of 7, 8, 11 and 16, rather than a sudden jump. However, only cautious comparisons can be drawn, since these researchers obtained measures from teachers only and they did not specifically address social acceptance.

Jerome et al. (2002) cited Harter (1999) on the tendency for young learners and even those in middle childhood to think in social absolutes. The ability to judge their social position more relatively and to compare themselves with others of their age comes later. Perhaps the developmental journey from social absolutism to a more balanced self-perception takes longer in those with language impairment than in those with typical language. If this is the case, sudden changes between 10 and 12 years could only be expected if social experiences in school deteriorated (or improved) very dramatically over that short period.

5.2.2.6 SLI social anxiety: lack of change from Year 6 to Year 7

The literature review revealed few sources against which these findings can be directly compared. Just as there is limited research specific to social anxiety and receptive SLI, there is correspondingly less on changes in anxiety over a

short time span. However, the lack of change from Time 1 to Time 2 may reflect the same possibilities as for social acceptance, i.e. that secondary transition triggers less change than expected, or else that 10-12 years is either the wrong age or too short an interval for changes to be captured. On the issue of age, it is instructive to return to the research on general populations. Social anxiety increases from about 13 years, especially in girls (Bittner et al., 2007; La Greca & Lopez, 1998; Pearce, 2000). If this pattern is mirrored in young people with SLI, the present findings would suggest that whilst they were already more anxious than TD peers in Year 6 and remained so in Year 7, any new surge in social anxiety that was not brought on by the demands of secondary transition itself would not manifest until they entered adolescence proper, approximately one year later. Although hypothetical, there is some logic in this, given that many Year 7 pupils are still physically pre-adolescent.

5.2.2.7 The severity of receptive SLI: associations with social acceptance self-ratings and social anxiety

Durkin and Conti-Ramsden (2007) found that receptive standardised scores at age seven predicted friendship quality at age 16, but the present study found no concurrent relationship between receptive scores per se and either social acceptance or social anxiety. Similarly, Wadman et al. (2011a) found no concurrent link between social anxiety and receptive language scores, nor between social anxiety and non-verbal scores. In contrast, they did find a modest relationship between social anxiety and expressive language scores. In view of the limited associations for language as a whole, Wadman et al. suggested that social anxiety in SLI cannot be explained by language impairment alone. This conclusion is by no means incompatible with the present position. The lack of association between social anxiety and receptive language score or non-verbal score *separately* does not rule out an association with discrepancy *between* them – a tentative finding in the present study. However, an examination of links between social acceptance and receptive language scores or verbal/non-verbal discrepancy did not form part of Wadman et al.'s study, so no comparisons can be made with the present findings on those variables.

5.2.2.8 Relationships between social anxiety and social acceptance in SLI

The robust association between social anxiety and social acceptance in participants with SLI is highly compatible with the findings of Wadman et al. (2011a). These authors reported a large association between the same two variables.

Similarities across other findings are striking as well. Given the strong association between social anxiety and social acceptance, it is intriguing to reflect that in the present study, social anxiety in the SLI group was higher than in the TD group at *both* times, not just at Time 2 when the social acceptance self-ratings were lower than those of TD peers. In other words, even at Time 1, when their self-rated social acceptance was not significantly different from that of TD peers, their social anxiety was higher. This accords fully with Wadman et al., who speculated on the same anomaly in their own findings.

The finding that social acceptance also predicted social anxiety accords with evidence for general populations and for SLI. For general populations, I noted in Chapter 2 that La Greca & Lopez (1998) found that both social acceptance and friendship quality predicted social anxiety in 15-18 year old girls, but that only social acceptance was a predictor in boys. Since gender was not differentiated in the present study and no discrete friendship measure was taken, a direct comparison with the literature cannot be made in that respect. For SLI, comparison with Wadman et al. (2011a) is again noteworthy. Self-rated social acceptance was the strongest predictor of social anxiety and predicted higher social anxiety in their SLI group than in TD peers. As previously indicated, this last comparison between SLI and TD could not be tested at Time 2 in the present study, because the TD social acceptance scores did not show a normal distribution.

5.2.3 Critique of the quantitative methodology

5.2.3.1 Strengths

This study has particular strengths in the breadth of its design. The design allowed several important questions to be addressed about pupils with receptive SLI at a key point of their educational careers. Conceptualising the severity of

SLI in terms of verbal/non-verbal discrepancy allowed the focus to move from verbal scores alone into one of the very areas that distinguish SLI from general language delay: the gap between verbal and non-verbal functioning. Crucially, the methodological procedures were described in considerable detail, allowing the study to be a template for replication. Student researchers are heavily constrained by time and resources and it is tempting to 'play safe' by addressing less challenging topics and employing simple designs. However, more ambitious approaches need not be ruled out. A transparent methodology and analysis can function as an effective 'crumb trail' for better resourced investigations, adding value to the original research. The present study has provided such a trail, and its methodology could be replicated quite easily on a larger scale. For example, access to a greater number of SLI cases assessed on common verbal and non-verbal assessment tools would allow more generous samples to be included in the discrepancy analyses, adding statistical power to future findings.

5.2.3.2 Limitations

The study also has limitations, some of which stemmed from the sampling problems outlined in Chapter 3. These created some issues with the interpretation of results. To illustrate, Type 1 errors can occur when several analyses are conducted on the same data and setting more stringent alphas is recommended in order to reduce the risk (Pallant, 2007). The number of analyses conducted on the data probably warranted post-hoc tests. Unfortunately, they would have made it very difficult to obtain statistically significant results on these samples, some of which were quite small. For this reason, the decision was made to retain the alpha of .05, but to report results with due circumspection.

The SLI full sample was adequate for most of the analyses, but was less than ideal for testing the association between the outcome measures and the severity of receptive SLI and verbal/non-verbal discrepancy. Such analyses were conducted, but the heterogeneity of the verbal and non-verbal assessment tools used severely restricted the number of cases that could be included. Moreover, attrition in the TD group at Time 2 was greater than anticipated and

made that sample less satisfactory as well. There were also issues of data distribution. The non-normal distribution of the TD athletic performance data at Time 1 and of the TD social acceptance data at Time 2 restricted the variables that were intended for the regression analyses of H6. This meant that a comparison between the TD and the SLI regression results could not be made. The non-normal TD social acceptance data at Time 2 also meant that only conservative interpretation of between-group MANOVA findings was warranted.

Finally, reference must be made to the limited number of cases with milder receptive SLI, i.e. those at or around 1 SD below age norms on at least one language measure. On initial recruitment, only three participants were at that level. Although the overall sample represented the full range of severity, from those just meeting the SLI criteria on language level to those with very severe difficulties, a greater balance across severity levels would have been preferable. Inevitably, more children with moderate or severe SLI profiles were proposed for the study, especially by SLTs, since these children predominated on their caseloads.

5.3 Qualitative phase

5.3.1 Critique of the findings

5.3.1.1 The role of pragmatics

Pragmatic functioning was found to play a strong role in all three domains of social position, but particularly in friendship with TD peers. Recall from Chapter 3 that I defined pragmatics as language or non-verbal communication in a social context. As such, the term refers to the situational use of language or other communication systems rather than to the structure of language. However, I noted in Chapter 4 that these two aspects of interaction cannot be separated entirely.

The association between pragmatics and social position highlights the importance of effective interventions for pupils with pragmatic difficulties, even if good pragmatic skills cannot fully compensate for language weaknesses. Interestingly, pragmatic intervention models have been available for over 30 years, but clear evidence of what works has been lacking. Gerber, Brice,

Capone, Fujiki and Timler (2012), who carried out a systematic review of studies from 1975 to 2008, noted that treatment effects were reported in areas such as topic management, narrative and conversational repairs, but they stressed the importance of further investigation into the interventions described. These authors claimed that the communication difficulties noted within the studies: ‘... often indicate the need for treatments designed to address language use in social interactions. Although treatments designed to improve language form and content are critical, it is not likely that such treatments, by themselves, will address difficulties in social interaction.’ (p. 236)

To this might be added the importance of identifying ‘micro-pragmatics’, i.e. the skills and strategies needed in specific social contexts, rather than more general ones such as establishing eye gaze, taking turns in conversation, or staying on topic for an appropriate length of time. For example, the ability to negotiate and to repair unclear statements may be particularly relevant to participation in group work in class, whereas the ability to ask and answer questions contingently, respond appropriately to humour, or to praise and compliment others might be more important in general peer conversation. Nonetheless, these micro-skills need to be integrated with gains in receptive and expressive language skills. The case studies showed that good general pragmatics worked best in situations that were not too linguistically challenging.

5.3.1.2 The role of family support

The greater dependence of the pupils with SLI than those with SpLD on their parents for a successful social life out of school raises important questions about their social development over the secondary years. As adolescence advances, membership of organised groups such as Scouts sometimes gives way to more casual and self-directed activities with friends, such as visiting the cinema, going bowling or cycling to the park. These are almost entirely organised by adolescents themselves, often via social technology, so successful participation requires the ability to understand and respond clearly to arrangements – a demand that would challenge many of those with more severe SLI.

For these young people, a tension is likely to exist between being continually helped by parents to manage social contacts with typical peers and being able to enjoy leisure time with similar others in a more carefree and independent fashion. Myers, Davies-Jones, Chiat, Joffe and Botting (2011) noted the dearth of information on community provision for young people of this age with language impairments. They reported on a small qualitative study of 13-23 year olds who attended a youth programme supported by the Association for all Speech Impaired Children (AFASIC). These young people mainly felt positive about the freedom to be themselves amongst similar peers.

5.3.1.3 The impact of subject setting and school placement type on friendship with TD peers

The relatively few friendships between TD pupils and the pupils with SLI in mixed-attainment classes suggested that such organisation does not necessarily lead to close relationships between these pupils. In only three cases did this occur, compared with most of those with SpLD. In the majority of the case study schools, the policy was to increase setting from Year 8, although not usually for all subjects. Depending on their attainments at the end of Year 7, the three participants with SLI who had TD friends might therefore be taught separately from them in Year 8. It can only be speculated whether these friendships would wither or whether being in the same tutor group or a smaller number of shared classes would be sufficient to maintain them. Potentially, this would also apply to pupils with SpLD, but only one case study participant with SpLD (Tara) had wide-ranging scholastic difficulties that might lead to extensive placement in lower-attainment classes.

For the participants with SLI, placement type may also have been an issue for the development of friendship. The two LRB pupils' lack of friends outside the LRB is particularly interesting. Meg and Josh were in lower-attainment mainstream classes for most subjects, and it would be logical for them to have made new friendships in these classes. Yet, staff confirmed that this had failed to happen. In terms of overall social position, though, Meg and Josh showed overlap with the non-LRB participants with less favourable social ratings. For

example, Meg's 'poor' rating was shared with two non-LRB pupils with SLI and Josh's 'fair' rating with one. The difference between LRB and non-LRB cases appeared to be in friendship placement type, not necessarily in their overall social position or in whether they had friends without SEN.

This difference warrants further attention. I stated earlier that Meg and Josh were supported by a TA across much of the curriculum, sometimes with other LRB pupils in order to maximise support. I have already referred to literature suggesting that intensive TA support in lessons may act as a barrier to interaction with peers (see Giangreco, 2010) and noted that this was borne out during pilot observations. Since classroom interaction is a natural route to forming new friendships, it makes sense to suppose that pupils who do not work independently with peers are less likely to make friends with them. In the case of these LRB pupils, sitting together perhaps set them apart, even from other pupils with SEN. In some subjects, they were supported by 'their' LRB TA, rather than by a TA allocated to the class as a whole.

A double barrier may have been erected, firstly by the presence of the TA and secondly by the separateness of this support, which constantly reminded peers of the specific needs of these pupils. A combination of the two might have explained in part the lack of friendships between them and any mainstream pupils. It may also be that some peers in these lower attainment sets had relatively weak interactive skills themselves and were unable to adjust to the even poorer skills of the LRB pupils. Unfortunately, it was not possible to confirm whether friendships and support patterns were similar for other pupils in this LRB or in comparable provision elsewhere. Moreover, I was unable to observe Josh in class and Meg, unusually, did not have TA support on the day that I saw her. For these pupils, discussion of TA support is therefore based on staff report, not on direct observation.

5.3.2 How key findings relate to the literature

5.3.2.1 Pragmatics and receptive language

The findings for pragmatic skills and social well-being resonate with those of other studies, although most of them are derived from quantitative methods.

The greatest care must be taken when drawing on quantitative findings in a discussion of qualitative findings. In Chapter 3, I raised the methodological complexities of comparing evidence obtained in such different ways. Nevertheless, some very broad observations can be made. For example, St Clair et al.(2011), who studied 7-16 year olds, stated: 'What this study makes clear is that pragmatic aspects of language seem to be more directly implicated in peer relation problems in individuals with a history of SLI.' (p.195)

Laws et al. (2012) also found that pragmatic scores, based on CCC-2 (Bishop, 2003), were associated with social acceptance in 7-11 year olds. This is important, since the authors stressed that even children whose SLI is not categorised as primarily pragmatic are prone to pragmatic difficulties. More than half of the present case study participants with SLI fitted this pattern to a fair extent and some showed less effective entry to on-going interactions than their TD classmates. This is convergent with the findings of Fujiki et al. (1999).

Conversely, the impact of *good* pragmatics as an enabler accords with an observation by Durkin and Conti-Ramsden (2010) that I made earlier, i.e. that self-aware pupils with SLI may better their social chances by letting others talk and listening carefully, whilst signalling interest in the conversation. These are precisely the skills reported by Will and Nick, the two SLI case study participants with the best social position.

The similarities and differences between the present findings and others linking receptive language, social position and social anxiety were discussed in the quantitative section above. Here, reference to Durkin and Conti-Ramsden (2007) on friendship quality is pertinent, since friendship emerged as the most important social position domain for the case study participants. Durkin and Conti-Ramsden's study revealed that in 16 year olds with SLI, receptive and expressive language, along with literacy and non-verbal scores, were weaker predictors of friendship quality than either difficult or pro-social behaviour. Again, only tentative connections can be made, but friendship quality in the SLI case studies also seemed to be less associated with receptive language on its own than with other personal factors, in this case pragmatics and general disposition. The evidence therefore seems to be consistent on this point:

personal factors beyond structural language impairment are implicated in friendship quality, although the interrelationships between language and other factors are likely to be important and complex.

5.3.2.2 Family, neighbourhood and the social lives of participants with SLI

To my knowledge, there are no closely comparable studies on family and neighbourhood specific to pupils with SLI. However, the high dependence of some participants with SLI on their parents to organise their social lives accords with the evidence of Cuckle and Wilson (2002) for secondary aged pupils with Down syndrome. In both studies, parents were found to have limited influence in school, few pupils saw classmates independently outside school and their social contacts were structured and compartmentalised. Cuckle and Wilson noted that only a few of their very oldest participants (aged 18 years) were reasonably independent. Young people with SLI would typically have higher non-verbal scores than those with Down syndrome and greater levels of social autonomy might be anticipated. Carroll and Dockrell (2010) suggested that most of their 17-22 year olds with a history of SLI had indeed become more socially independent post-16, although a small group remained highly dependent on their parents. The evidence is therefore not entirely discouraging. It suggests that many young people with SLI can eventually take some control of their social lives, but considerably later than TD peers or those with SpLD. Meanwhile, the secondary school years are likely to pose challenges for them and Myers et al.'s study (2011) suggests that these adolescents may find socialisation with similar peers something of a relief.

The struggle that many parents face to ensure that the educational and social needs of their child with SLI are met can have an impact on the whole family (Lindsay & Dockrell, 2004). The extent to which this eventually creates negative synergy and leaves parents less able to help their child, is under-researched. However, the isolation and poor socio-economic circumstances of one case study participant, Tom, did illustrate the point I raised earlier, i.e. that the stress of bringing up a child with SLI may cause parents to seek less recreational and social support for their child. Durkin and Conti-Ramsden (2010) suggested that the stresses might indeed be greater for parents who were less socially

advantaged. This is unsurprising. Logically, more advantaged parents would be better placed to seek professional advice on meeting their child's needs out of school and to pay for a wider range of suitable social activities, rather than relying on casual neighbourhood opportunities.

Of the participants with SLI, only Sam specifically mentioned the benefits of having neighbourhood friends of different age to himself. Howe (2010), citing Kurdek and Lillie (1985), noted that children with poor social position tended to have more neighbourhood friends who were younger than themselves. Sam did not entirely fit this picture, because his overall social position was quite good. He also enjoyed having older friends as much as younger ones. This distinction might be more apparent than real. Perhaps having either older or younger friends fulfilled the same function – that of removing the pressure of comparison with same-age peers. Again, there is little further evidence against which this can be compared.

5.3.2.3 Subject setting and social participation: SLI

It was seen that the participants with SLI in lower-attainment sets did not have TD friends, whereas in mixed-attainment sets, a few did. The literature on subject setting does not illuminate the impact of subject setting on either friendship choices or more general social participation in children with SLI. Likewise, it is unclear whether the impact is similar across different SEN types. Howe (2010) noted evidence that even in smaller TD groups, children with (unspecified) learning difficulties take less dominant roles and Wadman et al. (2011a) suggested that pupils with SLI may actually avoid interactive work in class. In the SLI case studies, active avoidance and withdrawal were not apparent, but weak conversational entry skills sometimes were. This difficulty was seen in a lower-attainment class and in mixed-attainment classes alike. The impact of subject setting on the social participation of pupils with SLI remains inconclusive, since the literature offers little in the way of comparative evidence.

5.3.2.4 Placement type and the social acceptance and friendships of participants with SLI

The literature on LRB pupils has focused more on bullying than on social acceptance itself and more on comparison with TD peers than with pupils with SLI or other SLCN in non-LRB placements. Direct comparison with the present findings is therefore problematic, although I identified some related strands in Chapter 2. To re-cap, Knox and Conti-Ramsden (2003) compared self-reported risk of bullying in Year 6 pupils with SLCN over five educational placement types, including LRBs. They found no differences based on placement type. However, when compared with the self-report of TD peers, the participants with SLCN reported themselves as more likely to be bullied. Savage (2005) reported similar findings for half of his small sample of Year 7 LRB pupils, whilst Laws et al. (2012) found that LRB pupils were rated lower by mainstream peers in Years 3 – 6, although actual bullying was not measured.

Examination of the findings in the light of these previous studies confirms that LRB pupils show considerable individuality in their levels of social acceptance, and that the relationship between acceptance and vulnerability to bullying is quite complex. To illustrate, of the two LRB case study participants, Josh reported bullying, but had a higher overall social rating than Meg, who was not bullied. On friendship, some consistency with Laws et al. is apparent. In their study, negative peer ratings of LRB children certainly decreased when the LRB moved to a model of greater inclusion. Under this new regime, LRB pupils were registered in mainstream classes and spent more time in them than they had previously. Yet, there is no clear evidence that close friendships developed between these pupils and TD peers, whereas the researchers noted that good peer relationships in the LRB were enjoyed both before and after the re-organisation.

This appears to be compatible with the present study. The LRB attended by Josh and Meg already operated a high-inclusion model, but their friendships were only with other LRB pupils. Possibly, a reduction in segregation helps to dismantle myths about pupils in specialist provision, making other pupils more relaxed in their presence and perhaps more generous in their ratings, but has

limited impact on friendship formation. As such, LRB pupils who experience increased levels of inclusion would hopefully become less vulnerable to active rejection, but in terms of Meyer's frames of friendship they may remain 'ghosts' or the 'inclusion child.' This requires further investigation.

5.3.2.5 Scholastic difficulties and the social anxiety, social acceptance and friendships of participants with SpLD

Scholastic difficulties linked to literacy are common in both SpLD and spoken language impairments (Stackhouse, 2000). As noted, this shared feature provided the rationale for including pupils with SpLD as comparative case studies. The analysis showed that for this small group with SpLD, scholastic difficulties did not have a negative impact on social well-being with TD peers. For anxiety, there was some convergence with Miller et al. (2005), who found that the severity of dyslexia (their term) was not conspicuously linked with anxiety levels. However, as previously reported, these researchers used composite anxiety scales, of which social anxiety formed only part.

In fact, the analysis showed that some participants with SpLD in the present study worried more about their scholastic difficulties in Year 7 than about their social acceptance and friendships. This predominance of scholastic concerns over social ones does appear to be at least broadly linked with the literature that I reviewed in Chapter 2. For example, Burden (2008), in an overview of research on self-perception, claimed that a poorer scholastic self-concept was quite likely in those with dyslexia (his term), but found little evidence that dyslexia affected social interaction with peers.

Terras et al. (2009) also found that children with dyslexia rated themselves lower than typical peers on the Harter scholastic performance domain, but not on the other domains. Likewise, Ingesson's Swedish participants (2007) reported earlier feelings of scholastic ineptitude, but no social problems. Of course, it is important not to overstate prior evidence. After all, Alexander-Passe (2008) implicitly suggested that scholastic stress could lead to social stress in children with dyslexia. Nonetheless, the present case study participants voiced more scholastic worries than their SLI counterparts, but neither their scholastic shortcomings nor their feelings about them seemed to affect them socially.

5.3.3 Critique of the qualitative methodology

5.3.3.1 Strengths

The study drew on multiple perspectives, using three data collection methods. These produced extensive data. The methods allowed a wide range of personal and environmental factors to be explored and the ecological relationships between them to be revealed. The methods also tapped both the influence and the limits of such ecological relationships in supporting the social well-being of young people with SLI and allowed comparisons to be made with SpLD. A particular strength of the methodology is that it was able to address the three domains of social position, i.e. acceptance, participation and friendship. In Chapter 2, I argued that there is a strong conceptual interrelationship between them. The inclusion of all three provided insight into social position at a much more holistic level than if just one domain had been examined. A further strength is the foray into the young people's socialisation out of school, creating a much richer picture than in school alone. Although settings outside school were not observed first hand, interviews with parents yielded considerable and valuable data on this under-reported area.

5.3.3.2 Limitations

The disadvantage of using several qualitative methods was the limited time that could be allocated to each. For instance, some of the classroom observations were too short or did not lend themselves to as much interaction as I had predicted. This severely restricted data collection and meant that conclusions were drawn from limited evidence, especially on the range of functions that pupils expressed in their peer interactions. Observation on several occasions and in diverse settings could have helped to overcome this problem. The latter would also have captured differences between more and less verbally demanding situations. To illustrate, the participants with SLI who struggled in Drama may have fared better in another practical lesson. Conversely, the two boys with SLI who joined in well may have been less successful in Drama or a similarly collaborative lesson.

I noted previously that several elicitation strategies were employed during pupil interviews to ensure that the participants with SLI could understand and respond to questions. I also reported that they sometimes needed prompts when describing their friends. Such prompts are potential 'leads'. Prompts were therefore kept as non-directive as possible, e.g. 'There are all sorts of pupils in school. Can you tell me about the ones who are your friends ...?', rather than 'Are your friends kind or unkind?' Nonetheless, it is possible that the participants could not express all the concept vocabulary that they needed and therefore did not answer questions in full. With hindsight, their responses to questions on overall peer acceptance might have been facilitated by a Talking Mats approach (Brewster, 2004, citing Murphy, 1997), whereby they could show the places in which they felt most and least socially accepted. Talking Mats, which allow symbol cards to be moved around, were developed for interviewees with severe learning difficulties, but they can be adapted for other participants. For example, mats could have been pre-illustrated with classrooms, other school buildings, the child's home and out of school activity venues. Pupils could then have been given 'people cards' to represent peers in and out of school as we discussed them.

The interview questionnaires provided a valuable perspective on the number, basis and quality of pupils' friendships, whereas some of the social acceptance ratings were less informative. These were vicarious, since the SEN staff were asked to consider how peers might rate the pupil. Although the ratings were based on their direct observation of the pupil with TD peers, due reservation is required when using second hand judgements of this kind. Moreover, the spread of ratings was similar between the two SEN types, but every other data source suggested that the acceptance of the participants with SLI was much more superficial. The questionnaire would have been better with a comments box directly after the rating. This could have identified important differences in social acceptance between cases that had the same ratings.

Addressing the three social domains of acceptance, participation and friendship led to sacrifices in terms of depth. Of these domains, friendship emerged as a compelling issue for all cases in both SEN types. All mentioned the importance of having good friends and all prioritised friendship quality over the number of

peers by whom they felt liked. Inevitably, some important aspects of friendship were not explored in full.

As detailed in Chapter 3, the SpLD sample did not include participants with the most severe scholastic difficulties. Although the data allowed many valuable conclusions to be drawn, a wider range of scholastic difficulties would have allowed better comparisons with the participants with SLI, most of whom had considerable scholastic difficulties.

Lastly, it proved impractical to enlist a co-rater for the composite ratings of participants' social well-being. This is by no means trivial, since the ratings provided a foundation for the analysis. In the absence of a co-rater, additional attempts were made to ensure that the ratings reflected the full data.

Specifically, I chose five of the 14 cases at random for re-rating. For these five cases, I re-examined all the data before I had memorised the ratings that I originally allocated. The two ratings for each case were then compared and found to be the same. However, re-rating by another person would clearly have been preferable.

5.4 Reflections on the study as a whole

5.4.1 How the overall study addressed the research questions and hypotheses

In this chapter I have critiqued the quantitative and qualitative phases separately in terms of their findings and the links between these findings and prior research. I have also critiqued my use of the individual methods within each phase. It is now timely to draw the quantitative and qualitative threads together, showing how *collectively* they addressed the areas of interest. It is important in terms of presenting the research as a connected whole. After all, this is a single study, not two related but separate ones.

I have argued throughout the thesis that the main aim of carrying out this mixed method study was not to triangulate the quantitative and qualitative findings but to produce complementary ones, i.e. in relation to linked but separate research

questions (see section 4.4). I have already shown how the study was operationalised, analysed and critiqued in two parts to reflect this aim. However, the fact that triangulation was not a primary aim did not preclude the identification of some points of similarity across the quantitative and qualitative findings. In a sense, these similarities were incidental, insofar as they were not actively sought. Nevertheless, they add to the *collective* evidence that the study produced in relation to the research questions and they are included below. For clarity, I will re-summarise briefly what the quantitative and qualitative methods revealed in relation to the questions that each addressed.

The survey addressed four research questions on social well-being, from which seven hypotheses were developed and tested (see section 3.4.1 for the questions and Figure 3.2 for the hypotheses). The quantitative analysis of the survey revealed a picture of young people with receptive SLI who were socially more anxious than their peers, who were rated less favourably on social acceptance by their teachers and whose own perceptions of their social acceptance were associated with both social anxiety and verbal/non-verbal discrepancy. As a group, their self-perceptions on both the social domains remained constant over one year.

The observations, interviews and interview questionnaires addressed two different research questions (see section 3.6). The subsequent qualitative analysis based on these three methods revealed individual variations in levels of social well-being, a range of related factors beyond the verbal/non-verbal discrepancy identified in the survey analysis and levels of social well-being that were generally below those of peers with SpLD.

So how did these address the areas of interest in a connected way? Essentially, the connection between the quantitative and qualitative phases of the study lies in theoretical congruence. In other words, the respective findings are based on research questions that are discrete but conceptually very closely aligned. Both question sets focused on the same two domains, i.e. social anxiety and social position, and each set explored factors *associated* with those domains.

Some linked patterns across the two sets of findings are not therefore too surprising. To illustrate, each set of findings suggested that young people with

receptive SLI are socially heterogeneous but do fare less favourably in social well-being than classmates without SLI. Of course, the comparison groups were different, so the findings do not converge in the strict sense. The quantitative comparison was with typical peers, whereas the qualitative comparison was with pupils manifesting a different form of SEN. However, this was an important combined finding, because it widened the evidence base in relation to young people with SLI and their classmates. Of further note, both sets of analysis produced incidental evidence that young people with receptive SLI may overestimate their social position with peers. A specific quantitative example of this is the marked difference between pupil and teacher survey ratings. A specific qualitative example is the difference between some pupils' perceptions in interviews and data gleaned from adults and observations in relation to these same pupils.

In sum, the quantitative and qualitative parts of the study produced a collective picture of young people with receptive SLI as socially heterogeneous, but often with poorer social well-being than other young people of their age. The study as a whole identified several important factors in this. There were some points of similarity across the quantitative and qualitative findings. These were not wholly unexpected, given the close relationship between the two sets of research questions.

5.4.2 Strengths of the mixed method design

The mixed method design achieved what a single methodological approach could not. Firstly, it produced statistical findings on the social well-being of young people with SLI and TD peers. Secondly, it allowed some comparison between young people with SLI and those with another specific form of SEN – SpLD. It will be recalled that this comparison was not possible in the quantitative phase, due to recruitment problems. Inclusion of participants with SpLD in the qualitative phase provided some compensation for this shortcoming. Thirdly, the qualitative design allowed a wider range of potential factors in social well-being to be explored ecologically.

The focus on groups, individuals and environments was important, because the literature showed complex and sometimes contradictory evidence of the social

well-being of children and young people with SLI. Nonetheless, it confirmed that in some respects SLI does pose a risk to social well-being. Concerns for this relatively large population remained justified and they warranted further investigation at a group level. The quantitative element of the study fulfilled this role. The literature also indicated that SLI is highly variable in its characteristics and outcomes. This justified the inquiry into how interacting characteristics influence outcomes and whether influences might be environmental as well as individual. The importance lies in the fact that certain environmental conditions, especially in school, might be improved by adults working with these young people.

Finally, addressing the group and the individual strands in a single study allowed cases from one part of the study to be included in the other and some data to inform both strands. This provided a natural and direct link between levels of social well-being on the one hand and factors influencing them on the other. Together, the strands provided exploratory and explanatory perspectives on the social well-being of these 10-12 year olds with SLI.

5.4.3 Limitations of the mixed method design

The limitations of the mixed method design are primarily those discussed above for the qualitative phase: they stemmed from rationed time. In this sense, the limitations are the mirror image of the strengths. Answering the questions of interest demanded a breadth of data collection, but it raises a key question: did this breadth allow the research questions to be answered fully and in depth?

Undoubtedly, there were compromises. For example, extending the interviews to significant adults out of school, such as youth club leaders, would have enriched the data. Likewise, the survey data would have been fuller had measures of pupils' social anxiety been obtained from parents. I noted in Chapter 3 that the parent version of SASC-R was excluded on validity grounds, but other measures could have been used had time permitted.

5.4.4 Overall inference quality

In Chapter 3, I used the terms 'validity' and 'reliability' to describe the quality of the quantitative research design and 'trustworthiness' to describe the qualitative

design. As I consider the quality of the study as a whole, I return to the term 'inference quality'. As noted in Chapter 3, this was suggested by Teddlie and Tashakkori (2003) as a global term:

'... to assess the accuracy with which we have drawn both inductively and deductively derived conclusions from a mixed methods study. By using a common term to assess both the internal validity and the credibility of a study, we avoid some of the problems that practitioners of the two orientations have in interacting with each other.' (p. 40)

The 'inference quality' evaluation model thus refers to both design quality and to interpretive rigour. Of particular note, the model requires that both the design and the inferences are consistent with the research questions. Of additional note for the present study, the model requires the final inference across methods to be consistent with those obtained discretely from the quantitative and qualitative phases.

In fact, some of the greater dilemmas of conducting mixed method research were avoided in this study, since triangulation was not the main purpose. In Chapter 3, I noted that triangulation of findings from different methods is a common purpose of mixed method research, but is one that can pose particular challenges to the interpretation of such findings. As I intended, my research adhered to the expansion purpose model of Greene et al. (1989), since it used different methods to answer separate research questions. This was strongly demonstrated throughout the study and I believe that the design and inferences meet the requirements of Teddlie and Tashakkori's 'inference quality' model in this respect.

I acknowledge that both quantitative and qualitative data contributed to composite ratings of social well-being in the qualitative case studies and that particular care is needed when combining data in this way, especially when analyses are conducted without a co-rater. However, using composite ratings implied a recognition that social well-being is multifaceted and likely to manifest differently according to context. In this sense, using several data sources that were not always neatly convergent was actively beneficial and produced 'best fit' ratings against which associated factors could be analysed.

The research also maintained fidelity to the theoretical integration level (Moran-Ellis et al., 2006) that I claimed for it in Chapter 3. In accordance with this level, I did not attempt to integrate the quantitative and qualitative phases at the analytic level. Rather, the findings were derived from separate analyses and then brought together to form a connected whole. Again, this meets the requirements of the 'inference quality' model.

Despite limitations and cautions, I believe that the strengths of this mixed method research outweigh its drawbacks. The six research questions were addressed sufficiently for new knowledge to be added to the substantive topic and this is summarised next. Additionally, the implications of the findings for policy, practice and future research were readily identified and these too are signposted below.

5.5 Original contribution to knowledge

The present study added original knowledge to the substantive topic in three key areas:

1. A longitudinally robust association between social anxiety and social acceptance was found for 10-12 year olds with receptive SLI. Social acceptance was also found to predict social anxiety in these young people. To the best of my knowledge, such findings have not been reported for pupils in their last year of primary education and their first year of secondary education.
2. An association between social acceptance and verbal/non-verbal discrepancy was also found. Although receptive SLI has been linked with social difficulty in earlier studies, the role of verbal/non-verbal discrepancy has not been a particular focus.
3. The study identified personal and environmental factors associated with social well-being in Year 7 pupils with receptive SLI. The approach was distinctive, because it focused on the young people's lives both in and out of school, examined the ecological relationship between the factors, and made comparisons with SpLD. To the best of my knowledge, the topic has not previously been investigated in this way.

5.6 Implications for policy, provision, practice and future research

5.6.1 Policy and provision

The study as a whole has raised questions around policy models for pupils with SLI, including LRB provision. LRBs typically cater for 10-12 pupils on site, either full or part time, although some also provide outreach support for local schools with similar pupils. Overall, a relatively small number of pupils with SLI are in full-time provision of this kind, but percentages of the total SLI population are elusive. As LRBs increasingly admit pupils with other forms of SLCN (Archibald & Gathercole, 2006a; Laws et al., 2012), the figures become harder to determine.

In rural authorities, placement in an LRB can mean travelling well outside the neighbourhood from an early age. Travel is less problematic in urban areas, if the child does not live too far beyond the LRB school catchment. In rural areas, placement in specialist provision of this kind has implications for travel fatigue in the early years and for socialisation with classmates out of school at all ages. Of course, there are compensations. Pupils in LRBs typically have more access to direct speech and language therapy, at least up to 11 years, although there is a general move towards more indirect models of service delivery (Dockrell et al., 2006). Indirect models refer to consultancy approaches whereby the SLT explains and demonstrates the necessary interventions to school-based personnel, such as teaching or SLT assistants (Dockrell et al., 2006). These interventions are then carried out under the professional supervision of the SLT. However, the obvious question for this study is: how do pupils in LRBs fare *socially* compared with those in other types of provision?

In the present study, perusal of the Time 1 and Time 2 survey data revealed negligible differences between pupils in and out of LRBs. In other words, social acceptance (self-rated and teacher rated) and social anxiety varied right across the SLI sample. However, the case studies raised questions about close friendship in relation to provision type. Do the friendship patterns of the two LRB

pupils typify those of pupils in similar provision elsewhere and, if so, why? What are the implications and for whom?

It is uncertain whether LRB pupils would actively prefer friendships with fellow LRB pupils, perhaps for reasons of shared difficulties and daily proximity, or whether such friendships are enforced by negative TD peer attitudes to pupils in LRBs. If the latter applies, one would expect pupils with similar levels of SLI in unresourced mainstream placements to have more TD friends. Yet, half of the SLI case study participants in unresourced settings had no such friends. What cannot be determined is whether the two LRB cases, and others like them, would have had TD friends in an unresourced placement, or whether their friends would have been pupils with other forms of SEN.

This raises an important policy issue. If pupils with SLI naturally gravitate to others with SEN, surely LRBs will offer them a greater number of friendship opportunities with very similar peers and protect them against the loneliness that some of the case study participants with SLI reported in unresourced mainstream settings. There is some support for this view. Simkin and Conti-Ramsden (2009) interviewed former LRB pupils who remembered the relief of being placed with pupils who had comparable needs. On the other hand, if a specialist placement is detrimental to pupils' social status in ways that cannot readily be overcome, friendship with a wider range of peers may be jeopardised by such placements. Although most of Simkin and Conti-Ramsden's young interviewees reflected positively on their years in the LRB, a few, together with their parents, recalled a sense of social stigma and of feeling different from mainstream peers.

In terms of policy and provision, the crux is whether peer attitudes are shaped more by a pupil being in specialist language provision or by the language impairment itself. Savage (2005) reflected that there may be negative synergy between the two, but there is no definitive evidence either way. We saw that Laws et al. (2012) found that greater inclusion of LRB pupils influenced peer attitudes for the better. Once LRB pupils were registered in mainstream classes, their ratings tended to improve from rejected to neutral. This was a welcome change, but not a dramatic one. Against this, Laws et al. noted individual

variations in social acceptance, suggesting that peer attitudes were not wholly explained by the LRB placement.

Clearly, the issues are complex and for secondary LRBs the picture may be different from primary. Finally, the fact that young people with SLI have friendships with others with SEN should not automatically be considered problematic, as long as the young people do not reinforce each others' difficulties (Durkin & Conti-Ramsden, 2010). A far more important concern for policy makers should be whether these friendships predominate over others. If so, the reasons and the consequences for wider social acceptance need to be known.

5.6.2 Practice in schools

The findings for social acceptance and participation in school suggested that some children with SLI have social needs that might warrant systemic change in their learning environment. This has implications for practice in schools at several levels. I will take these in turn.

5.6.2.1 Classroom strategies and the deployment of TAs

The primary responsibility for pupils in lessons rests with the class or subject teacher. Pupils with SLI and other forms of SEN often require compensatory strategies, because however effectively they are targeted for specialist intervention, the curriculum will not stand still while they improve their core skills. Even if they are placed in lower-attainment sets, pupils with the most complex needs are unlikely to access the curriculum without such approaches.

Typical strategies include the simplification of teachers' instructional language and visual support for key vocabulary in the form of photographs or symbols. Alternative ways of recording work, such as circling answers from a multiple choice format or using pictorial representation, can by-pass the need for text level writing. This is particularly helpful for pupils with poor language or literacy levels. Differentiated approaches are set out in the National Strategies' Inclusion Development Programme (IDP). The IDP (Department for Children, Schools and Families, 2008) is a national SEN training resource for head teachers and mainstream teachers. It now targets a range of needs, but the

SLCN and dyslexia version was issued and up-dated first. So how could this programme be beneficial to pupils socially as well as scholastically?

Applied well, compensatory strategies should influence the working style of TAs in class. As noted in the case studies, TAs' working style might in turn influence social participation in class. TAs play a key role in provision for pupils with SEN in mainstream schools (Egilson & Traustadottir, 2009), but the way in which they work in the classroom varies considerably (Egilson & Traustadottir, 2009, citing Olason, 2005). At one extreme are those 'velcroed' to individuals or to particular SEN groups. Others are encouraged to act as a human resource for all pupils' learning.

Essentially, this is both a policy and a practice issue. At the policy level, it is related to how head teachers conceptualise learning in general, inclusion in particular and the role that TAs should play in the learning process. Giangreco (2010) reported evidence in both the US and the UK that TAs are increasingly expected to adopt an instructional role rather than that of supporting pupils to complete tasks designed by teachers. There are potential issues for pupils' learning and their social engagement with peers. Most TAs are not qualified teachers and they may have neither the pedagogical skills nor the specialist subject knowledge to set suitable work. Conversely, if teachers set tasks that are too difficult for pupils with SEN, they may direct TAs to sit alongside these pupils throughout the lesson, since the pupils cannot work independently. If so, TAs will perform a supervisory role which is likely to isolate the pupil from their peers. In mainstream classes, expectations of the TA's role partly depend on whether subject teachers are willing and able to use compensatory strategies. If they are, the strategies should give pupils greater autonomy, freeing TAs to work more flexibly and removing an interactive barrier between pupils with SEN and TD peers. Although speculative, greater independence might enhance the status of pupils with SEN in the eyes of their peers.

5.6.2.2 Lesson modes

Removing an obvious barrier to peer interaction in the classroom is an important step, but it may only increase social participation marginally. For fostering higher levels of participation, I return to the work of Howe (2010).

According to Howe, the UK classroom is an underused forum for fostering the social, personal and scholastic development of all pupils via collaborative learning tasks. She emphasised that collaborative learning covers many dimensions of co-working. Drawing on the work of Deutsch (1949), she described two classroom modes: performance, where the teacher largely controls interactions and cooperative, which fosters listening to others' perspectives, providing help and engaging in intellectual conflict. Of the latter mode: 'The theory rests upon the assumption that members of social groups are rendered interdependent by virtue of common goals.' (Howe, 2010, p. 59)

It would be naive to assume that working to common goals with TD peers will automatically increase the social participation of children with SLI. Observation of one case study participant with SLI (Sam) revealed a situation in which this clearly did not happen. Howe maintained that scholastically able pupils are more likely to discuss work with their friends and that such interactions have more productive outcomes than interactions with non-friends. So how can pupils disadvantaged by their language status break into the circle and make a welcome contribution? And if they cannot, does inclusion in such lessons have any real value for them? What can teachers do to influence their participation?

There are no easy answers to these questions. In order to participate successfully, pupils with SLI need a good understanding of the subject matter, so pre-teaching of the key vocabulary and concepts by SEN staff is essential. Making each member accountable for their learning and contribution, as Howe described, would hopefully reduce the likelihood of the pupil with SLI becoming a 'passenger' in the group. However, there is evidence that the issue is not straightforward. Brinton, Fujiki, Montague and Hanton (2000) carried out a small pilot study of six and seven year olds with 'language impairment' (LI). In this study, each child worked serially with two different TD peers on cooperative learning tasks that were highly practical. Each child with LI experienced a number of roles, e.g. as materials manager, checker, etc. The members of each triad were instructed to work together and were informed that their individual contributions would be checked afterwards. The outcomes for the six participants with LI were highly variable. Interestingly, Brinton et al. found that the success of their participation was largely predicted by their own social

profile, rather than by their language profile. Those who showed aggressive or withdrawn behaviour, or both, were the least successful. However, the characteristics of their TD work partners also affected their levels of participation.

Cooperative learning has two main implications for pupils with SLI and those with other forms of SLCN. Firstly, there is the need for joint planning between teachers and TAs. Evidence suggests that opportunities for this are currently inadequate in relation to SEN generally (Giangreco, 2010). Joint planning is particularly important for secondary school pupils, because cooperative learning tasks for pupils of this age would be linguistically and conceptually more demanding than those undertaken by Brinton et al.'s young participants. Secondly, classroom seating plans need consideration. These plans are often implemented for behaviour management purposes, but seating for cooperative learning calls for more creative decisions to ensure that all members are involved in joint tasks and can make contributions that are meaningful and valued by their peers.

The findings of Brinton et al. suggest that in order to achieve this, teachers need to consider the social profiles of the TD members of the group as well as that of the pupil with SLI. In other words, they need to seek TD work partners who are actively skilled at including such pupils, rather than choosing partners who will tolerate their presence but not attempt to engage them. Brinton et al. noted that offering suggestions or asking the opinion of the children with LI were successful peer strategies for encouraging their participation.

5.6.2.3 School clubs

The case study findings for school clubs also have implications for practice. Clubs offer enjoyable activities in the company of like-minded peers. As such, they can be shared with existing friends, but can also be a route to making new ones. Unlike schoolwork, most club activities do not rely excessively on core skills such as literacy. It was concerning that some of the case study participants with SLI did not feel comfortable about attending school clubs. If this is common amongst children with SLI, there is a danger that they are missing a valuable source of companionship. It is important that school staff are

aware of these pupils' greater dependence on encouragement, clear directions and support. It is worth checking that they are confident about club arrangements and are comfortable with the activities on offer. For those with athletic skills, sport is an obvious outlet. For those without, practical activities such as jewellery making, environmental projects, or horticulture may be beneficial, because they generate conversation about the 'here and now'. This will usually be more accessible to pupils with SLI than abstract topics about things and people not physically present.

5.6.3 Future research

5.6.3.1 Replication and modification

Replication of the survey on a larger scale could include SpLD as a second comparison group. Matching participants non-verbally and on levels of literacy and numeracy would add strength to a replication study, providing further evidence on whether scholastic or language difficulties are more detrimental to social well-being. Since change in the social well-being measures was not found in pupils with SLI between Year 6 and Year 7, repeated measures at intervals throughout secondary schooling would be helpful. At these intervals, sociometry and tutor ratings would add further evidence of pupils' social position.

As stated, the link between the measures and verbal/non-verbal discrepancy also needs further investigation on a larger scale. For this, it would be instructive to include more cases at the very mildest end of the SLI severity continuum, and particularly those who had progressed to this level from a low baseline. I noted earlier in the study that progress in language does not always lead to better social well-being. Including a number of substantially improved cases would illuminate this important issue. Indeed, the investigation could go one step further and examine whether cases with resolved receptive SLI are doing better socially than those with current receptive language impairment.

5.6.3.2 Extension

Although secondary transition at age 11 was not found to trigger poorer self-ratings of social well-being in pupils with SLI, transition at a later age might be

associated with increased doubts and worries about social position. Pupils aged 13 years who are transferring from middle to high schools in Year 9 could usefully be compared with pupils of the same age who entered secondary school in Year 7. This makes sense, since 13 is the age at which social anxiety tends to increase, at least in females within general populations (Bittner et al., 2007; La Greca & Lopez, 1998).

Comparison of the same social well-being measures between pupils in LRBs and those in unresourced mainstream placements is warranted. Numbers in the present study were too small to make statistical comparisons by placement type. Research on this topic would add to the findings of Laws et al. (2012) for the relationship between provision structure and social acceptance.

Lastly, the findings of this study strongly suggest the need for further qualitative research on personal friendship in pupils with SLI. Considerable investigative effort has now been expended on the wider aspects of their social position, and an intricate mosaic of knowledge has been built up. Post-16 friendship has also attracted attention (Durkin & Conti-Ramsden, 2007; Carroll & Dockrell, 2010). However, relatively little is known about the close friendships of young people with SLI at the point between late childhood and early adolescence. Overall, the literature review pointed to fewer and poorer quality friendships throughout schooling (Durkin & Conti-Ramsden, 2007), often with pupils who have comparable needs, but thankfully it did not present a picture of total friendlessness.

The present study confirmed that position. Since young people with SLI usually desire social interaction with their peers (Wadman, Durkin & Conti-Ramsden, 2008), further research on friendship is surely a high priority. This particularly applies to adolescence, when friendship becomes increasingly important for social inclusion (Pijl et al., 2008). For young people who struggle socially, the ability to make and keep even one or two high quality friendships may be the key to their social well-being during these challenging years. How friendship is conceptualised, forged, maintained, repaired and lost are all important issues for research, along with a closer focus on homophily. Howe (2010) noted that demographic, cognitive and social homogeneity is high in typical friendship

groups. However, since SLI is often characterised by a discrepancy between verbal and scholastic levels on the one hand and non-verbal levels on the other, it is unclear which aspects of commonality prevail in the *preferred* friendships of children with this impairment.

5.7 Conceptualisation of SLI and the discrepancy model revisited

Lastly, I will revisit some conceptual issues from Chapter 2. Since this study began, the final reports of the Better Communication Research Programme (BCRP), to which I referred in Chapter 1, have been published. The BCRP constitutes the first comprehensive set of investigations into issues of policy, provision and practice for children and young people with SLCN, including SLI. The findings have raised important questions about how - and how well - their needs are identified and met.

In Chapter 2, I presented evidence that SLI is underpinned by one or more cognitive weaknesses, some of which are also apparent in other learners with SEN, such as SpLD or mild learning difficulties. However, my review of linguistic theory also suggested that the language profile of SLI tends to have some distinctive features, such as a marked difficulty with morphology that is not generally seen in children whose language is delayed, but who do not have SLI. In other words, the profile of children with SLI appears to be both similar to and different from those of certain other SEN groups. They share some cognitive characteristics, but they are linguistically rather different, even if the overall language scores are similar.

I described how the discrepancy model, along with the exclusionary model that rules out other primary SEN, has traditionally been used to diagnose SLI and thus to distinguish SLI from non-specific language delay. Recall that according to this model, a discrepancy of at least one standard deviation between verbal and non-verbal standardised scores must be evidenced. I drew attention to conceptual difficulties with the model. For example, some children with SLI may under-perform on non-verbal group tests. In such cases, the apparent discrepancy between verbal and non-verbal scores may be narrow, because the non-verbal score is an under-estimate of the child's ability in that domain.

In the light of this issue, I concluded in Chapter 2 that the discrepancy model has value in identifying SLI, but needs to be used cautiously in conjunction with the clinical presentation of SLI, i.e. evidence that the language profile shows atypical features as well as overall delay. Clinical presentation is particularly important if the verbal/non-verbal score discrepancy is less than one standard deviation. However, this in turn raises questions. Is a large verbal/non-verbal discrepancy alongside exclusionary criteria sufficient for a diagnosis of SLI if the language score is substantially low for chronological age but the profile does *not* show markedly atypical features? In other words, is severe atypicality only essential diagnostically if verbal/non-verbal scores are too similar for the discrepancy model to 'work'? And crucially, what is the importance of this?

Before addressing the question of importance, I re-confirm here the position that I adopted in Chapter 2, i.e. that SLI remains a useful if somewhat inexact way of describing children for whom language acquisition is particularly arduous and unexplained by low non-verbal scores or other forms of SEN. In these children, the 'purest' form of SLI manifests both as a notable verbal/non-verbal discrepancy and as a language profile with atypical features, particularly of grammar. Yet, not all cases exhibit such a clear profile. Some show a wide verbal/non-verbal discrepancy, but relatively few clinical features, whereas others show the opposite. Either way, I uphold that the difficulties might reasonably be conceptualised as SLI. Inevitably, though, some cases will be borderline on both discrepancy and on clinical presentation, posing considerable diagnostic challenges.

Why does the concept of SLI matter? Essentially, it is important because there are implications for provision. In Chapter 2, I cited the concerns of Bishop (2004) that the stringent application of discrepancy and exclusionary criteria for accessing services may deprive children of beneficial provision. This issue is now highly topical, because provision for SLCN is central to the BCRP outcomes (see Lindsay, Dockrell, Law & Roulstone, 2012, for the main report on the entire programme).

One of the BCRP's six main recommendations was for support at three service levels, i.e. universal, targeted and specialist. These levels form a continuum

from provision of a communicatively supportive environment for all learners through to highly individualised intervention for learners with the most severe and complex SLCN.

Of particular relevance to this thesis is the application to social needs. The BCRP's thematic report on SLCN and BESD concluded that the social impairment of each individual needs to be identified *independently* of their speech, language or communication category (Lindsay & Dockrell, 2012). The category alone was deemed insufficient for planning provision, since categories show overlapping needs and the individual's social trajectory may change over time. It is important to note that in this report, Lindsay and Dockrell compared the categories of SLCN and autistic spectrum disorder (ASD), not SLI and non-specific language difficulties *within* SLCN. However, there are clear implications for SLI. If we accept that categories (and the diagnoses that place learners within those categories) are poor determinants of provision needs, we must also consider whether or not children diagnosed with SLI have social needs that are distinct from those of other SLCN. For example, from my own findings of an association between social acceptance and verbal/non-verbal discrepancy, it could be argued that children with a large discrepancy will need targeted or specialist level support to sustain relationships with peers of similar non-verbal ability who do not have SLI.

Certainly, verbal/non-verbal discrepancy may pose a frustrating barrier to the social aspirations of some individuals with SLI. This would warrant skilled intervention. Moreover, the literature suggested that SLI is often associated with more fundamentally impaired social cognition. Again, this calls for appropriate provision. Nevertheless, my own research confirmed great social heterogeneity across SLI cases and the SLI diagnosis itself revealed very little about each individual's social needs. In contrast, the BCRP recommendation for support *based on a clear understanding of the individual's SLCN profile* offers a robust framework for meeting both the language and the social needs of pupils, without excessive dependence on diagnostic labels. Within the three support levels, Lindsay et al. (2012) advocated flexibility. For instance, a pupil might require specialist provision for language and targeted provision for social well-being.

To conclude, I have revisited SLI and the discrepancy model in the light of the BCRP evidence. They provide a valuable conceptual framework for describing and researching language difficulties not otherwise explained. However, SLI covers a multitude of language, learning and social needs and its impact on daily life varies from relatively mild to severe and pervasive. For this reason, I would argue that the diagnosis of SLI has less value as a determinant of *need*. As for other learners with SLCN, rigorous scrutiny of the individual language and social profiles of those with SLI is essential to ensure that their needs are addressed appropriately within the BCRP's three support levels.

5.8 Chapter summary

This chapter has provided separate critiques of the quantitative and qualitative findings of the study and has related them to other literature in the field. The strengths and limitations of each methodological phase were also outlined. Next, I drew the quantitative and qualitative threads together, showing how the study as a whole addressed the conceptually related research questions and the hypotheses, and providing some examples of incidental convergence between the quantitative and qualitative findings. This was followed by a critique of the overall methodology, with reflection on its quality and on how successfully it was implemented. The original contribution to knowledge was then stated. The implications of the findings for policy, provision, practice and further research were discussed next. Finally, I revisited the concept of SLI and the discrepancy model with reference to my own findings and in the context of new research that is of national importance.

CHAPTER 6: CONCLUSION

Since this study began, *Hello!* – the National Year of Speech, Language and Communication (2011) has come and gone, generating much interest in developments and outcomes for children and young people with SLCN. Reports have highlighted examples of very good practice since the Better Communication Action Plan (Department for Children, Schools and Families, 2008) was implemented. Nonetheless, they have also suggested that improvement in services has been uneven and that progress is stalling in some areas. For example, Gascoigne (2012) observed that joint commissioning of services for SLCN has not always produced balanced gains across the key areas of provision, access to skilled personnel, training and inter-agency leadership and management. On the positive side, legacies of the National Year include the introduction of standards for teachers in promoting oracy and a stronger sense of shared responsibility for speech, language and communication needs (Gross, 2012).

This study has also coincided with the most significant planned changes for pupils with SEN in 30 years and with accelerated change in school funding models in England. Each has potential implications for children with SLI and other forms of SLCN. Provision for SEN will undergo radical re-structuring if the proposals of the government's SEN and Disability Green Paper (2011) are adopted. Of note, is the dismantling of the present SEN Code of Practice (Department for Education and Skills, 2001) levels of Statement, School Action Plus and School Action. Statementing would give way in 2014 to a single education, health and care plan for those with the most severe needs, whose parents will determine the use of budgets. The two school-based action levels would become a single category and pupils currently funded by local authorities at School Action Plus are likely to be supported under school budgets. This would include pupils with SLI who are presently funded within the SLCN category. Whether it will result in reduced or poorer quality provision is a matter for conjecture.

The re-shaping of SEN policy and provision will play out against changes in the way secondary schools are financed. In the past two years, there has been

exponential growth in the number of English secondary schools leaving the control of their local authority and becoming academies. These are funded directly by central government via the Education Funding Agency, although some have sponsors such as universities, businesses or faith bodies.

Academies were first introduced in 2000, primarily to improve schools deemed to be underperforming. The Academies Act (2010) sought to increase their numbers and conversion to academy status is now by no means confined to poorly performing schools.

At the time of writing, around 50% of secondary schools in England have academy status. Academies are not restricted to using the SEN support services of their former local authority and may purchase specialist support from elsewhere if they choose. Whether they will purchase support service input at all for children who do not have the protection of a care plan is uncertain. Prior to re-designation as academies, most schools had at least some level of free access to their local SEN support services, both for advice on individual pupils who were statemented or at School Action Plus, and for whole school training in SEN and inclusion.

In the light of these changes and in a climate of on-going financial constraints, it remains to be seen whether a trajectory of improved service delivery can be expected for pupils with SLCN. Certainly, awareness of their needs has become much greater and, anecdotally, there is a will to improve outcomes for them. Given the findings of the present study and the extensive outcomes of the BCRP, it is hoped that services, schools and parents will continue to work more collaboratively and effectively to support the social well-being of pupils with SLI. This, along with these pupils' scholastic and linguistic development, needs to be a priority goal for all concerned.

APPENDICES

APPENDIX 1 Sample questions from the measures

A. SPPC (social domain only)

1. Some children find it hard to make friends BUT Other children find it's pretty easy to make friends.
2. Some children have a lot of friends BUT Other children don't have very many friends.
3. Some children would like to have a lot more friends BUT Other children have as many friends as they want.
4. Some children are always doing things with a lot of children BUT Other children usually do things by themselves.
5. Some children wish that more people their age liked them BUT Other children feel that most people their age do like them.
6. Some children are popular with others their age BUT Other children are not very popular.

B. SASC-R

This is not a test. Please use these numbers to show HOW MUCH YOU FEEL something is true for you:

1 = Not at all 2 = Hardly ever 3 = Sometimes 4 = Most of the time 5 = All the time

Now let's try these sentences first. How much does each describe how you feel?

- a. *I like summer vacation ...* 1 2 3 4 5 b. *I like to eat spinach...* 1 2 3 4 5

1. I worry about doing something new in front of other children..... 1 2 3 4 5
2. I like to play with other children..... 1 2 3 4 5
3. I worry about being teased..... 1 2 3 4 5
4. I feel shy around children I don't know..... 1 2 3 4 5
5. I only talk to children that I know really well 1 2 3 4 5
6. I feel that other children talk about me behind my back 1 2 3 4 5
7. I like to read 1 2 3 4 5
8. I worry about what other children think of me 1 2 3 4 5
9. I'm afraid that others will not like me 1 2 3 4 5

APPENDIX 2 SLI cases with borderline verbal/non-verbal discrepancy

No	Verbal SS	Non-verbal SS	Discrepancy between verbal/non-verbal SS	Discrepancy fit/other qualification	Clinical presentation
01	70	83	13	KS2 LRB confirmed persistent underperformance in group tests. Also met criteria for continued specific language provision at KS3, based on clinical presentation.	Moderate specific difficulty in receptive grammar; low average receptive vocabulary
04	75	81	6	BAS-2 confirmed all non-verbal scores 'age equivalent'. (No exact scores reported.) Fits on clinical presentation.	Moderate receptive SLI in both grammar and vocabulary; very patchy, disordered profile, especially following sequences
09	78	92	14	Placed in high maths set; staff confirmed persistent underperformance in all group tests.	Some average or mild difficulty scores, but language memory 7 th centile (-1.5 SD); clear disorder profile

APPENDIX 3 Visual support for SASC-R

1 no	2 not much	3 sometimes	4 most of the time
5 always	Yes	No	
			

APPENDIX 4 Guidelines for schools: survey administration



A. Social Anxiety Scales for Children – Revised (SASC-R)

1. Please reassure the child that this is not a test. Explain everyone is different and they will be helping you to find out about their thoughts and feelings. There are no wrong answers. You would like them to answer all the questions if they possibly can. However, they can refuse or have a break if necessary. No other child will see their answers. No other adult in school will see the answers without their consent.
2. For practice items a. and b., anglicise 'vacation' to 'holiday' and change 'spinach' to 'carrot'. (These words will be more familiar to them.)
3. Continue as shown, making sure just one number is circled for each of items 1-22. To make this easier, display the **worried/OK** face pictures. Then line up the number cards under the **Yes/No** cards and the pictures. The child should first decide if the statement is **Yes** or **No** for them and **then** how much, i.e. which number is best.
4. It is fine to read and circle the answers for the child if they prefer. It is also fine to repeat the questions and to explain any word the child does not understand, as long as meaning is not altered and the child is not unwittingly 'led' towards a particular response.
5. Please ensure the child's name and date of birth are on the questionnaire.

B. and C. Self-Perception Profile for Children (SPPC)

1. General instructions are as A. 1. above.
2. For practice item a. (Child version), ask the child to decide first which side of BUT describes them best and **then** whether 'sort of true' or 'really true' is the best fit. Again, it is fine to read aloud (and tick) for the child, also to repeat and explain, subject to caution as in A. 4. above. Continue with all circled items, ignoring the rest.
3. Please arrange for the teacher version to be filled in without sight of the child's completed version, to avoid unwitting influence on the teacher's responses.
4. Please ensure the child's name is on both versions of the questionnaire.

Finally, please return the following in the envelope provided: Form A (SASC-R questionnaire), Form B (SPPC child questionnaire) and Form C (SPPC teacher questionnaire), with parental consent slip. **There is no need to score the responses.** *Thank you very much for your help.*

APPENDIX 5 Parental consent letter at Time 2



Reference CLPG/SLI 2

Dear

Last school year, you very kindly consented to the completion of social self-perception questionnaires with your son/daughter (X). This was part of my PhD educational research on Year 6 children with specific language impairment.

I am hoping to repeat the questionnaires with the same children in their new schools. The aim is to measure any changes in children's social self-perception between Year 6 and Year 7.

As before, participation is entirely voluntary. The same strict ethical standards will apply to this stage of the study, including confidentiality and full anonymity of reported data. However, please do not hesitate to contact me on kjr205@exeter.ac.uk with any queries. I will be delighted to give you any further information.

With many thanks.

Yours sincerely

Karen Robinson

Karen J Robinson

PhD Student, Graduate School of Education, University of Exeter

.....

I....., the parent of give consent for questionnaires to be carried out with him/her. This is strictly for the research purposes stated in Karen Robinson's consent letter (reference CLPG/SLI 2).

Signed:

Please return signed slip to the school office, for the attention of the SENCO. Thank you.

APPENDIX 6 Child interview schedule

Domains/constructs	Elicitations/ hierarchical questions
<p>Friends in school</p>	<p>Tell me about your friends in school.</p> <p>Having friends</p> <p style="padding-left: 40px;">How many friends? Do you have a best friend?</p> <p style="padding-left: 40px;">What are your friends like? (Probe ability/gender/disposition/interests.)</p> <p style="padding-left: 80px;">Are they the same as you?</p> <p style="padding-left: 40px;">Why are friends important to you?</p> <p style="padding-left: 80px;">What do you like in them?</p> <p>Being with friends in school</p> <p style="padding-left: 40px;">Where and when do you spend time together? (Probe whether tutor group, subject classes, support sessions, breaks.) Easy to find them?</p> <p style="padding-left: 40px;">Do you ever wish you had different friends? And/or more friends?</p> <p style="padding-left: 80px;">Who/What sort of friends?</p> <p style="padding-left: 40px;">Do you ever worry about your friendships?</p> <p style="padding-left: 80px;">What do you worry about?</p> <p>Friendship management and change</p> <p style="padding-left: 40px;">Has making friends here been different from when you were in primary school?</p> <p style="padding-left: 80px;">Harder or easier?</p> <p style="padding-left: 80px;">Why?</p> <p style="padding-left: 40px;">Has anything or anyone helped you make new friends here?</p> <p style="padding-left: 80px;">How was this helpful?</p> <p style="padding-left: 40px;">What happens if you fall out with a friend?</p> <p style="padding-left: 80px;">Who helps to sort it out?</p>

<p>Membership of a social group</p>	<p>Are your primary school friends still your best friends?</p> <p>Why do you think that is?</p> <p>During break, students often hang out in groups. Groups that hang out in Year 7</p> <p>Who do you hang out with?</p> <p>Are any of these your best friends?</p> <p>Do you always hang out with the same people?</p> <p>More or less popular now?</p> <p>Why is that?</p> <p>What do you like to do together?</p> <p>How do you join in? (approach directly, hang around on fringe etc.)</p> <p>Is it ever hard to join in?</p> <p>Why do you think that is?</p> <p>What could you do?</p> <p>Could/do other people help?</p> <p>In what way?</p> <p>What does your group like best about you? (Probe academic, athletic and personal attributes.)</p> <p>You're good at...?</p> <p>Do you ever worry about fitting in with the group?</p> <p>What worries you most?</p> <p>Do people listen to your worries?</p> <p>Who else could you tell?</p>
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<p>Participation in a class network</p>	<p>Would anything else help you with your worries?</p> <p>Can you say how?</p> <p>Which is best? Lots of friends or a few good ones?</p> <p>In some lessons and school clubs, students can choose who they want to be with.</p> <p>Lessons in Year 7</p> <p>Do you choose places, or is there a seating plan?</p> <p>Who chooses you? Why?</p> <p>Who do you choose? Why?</p> <p>Is choosing or having a seating plan better for you?</p> <p>How does that help?</p> <p>Are you ever left out of the group activity?</p> <p>Why/when does that happen?</p> <p>How does that make you feel?</p> <p>Do staff know you feel left out?</p> <p>What do they do?</p> <p>School clubs in Year 7</p> <p>Do you go to any school clubs this year?</p> <p>Lunch-time or after school?</p> <p>What made you choose or not choose them? Stop going?</p> <p>Did/do adults help you?</p> <p>What else would help you?</p> <p>What do you like best about the club(s)?</p>
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<p>Social participation out of school</p>	<p>Could things be better at the club?</p> <p>In the activities you do?</p> <p>In how well you join in?</p> <p>Some young people spend lots of time outside school with others their age - or different ages.</p> <p>Activities out of school</p> <p>What activities do you join in most often?</p> <p>What do you enjoy most about them?</p> <p>Who takes you there?</p> <p>Who do you do the activity with?</p> <p>Which schools do they go to?</p> <p>Do you do other things with them, or just this activity?</p> <p>Their age?</p> <p>Feelings about spending time with people from other schools</p> <p>What makes it more (or less) fun than being with people from your school?</p> <p>Do you have more people to spend time with in or out of school ?</p> <p>Do your best friends go to your school or to one of these other schools?</p> <p>Are you ever lonely out of school?</p> <p>More or less lonely than when you are In school?</p> <p>Any reasons for that?</p>
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	<p>Communicating with peers out of school</p> <p>Do you use social media (give examples) to keep up with people out of school time?</p> <p style="padding-left: 40px;">Which media do you use?</p> <p style="padding-left: 40px;">Is this to chat? Play games?</p> <p style="padding-left: 40px;">Do you use it more often with school friends or with out of school friends?</p> <p style="padding-left: 40px;">Do you prefer to chat that way or to meet your friends face to face?</p> <p style="padding-left: 80px;">Which is easier for you?</p> <p style="padding-left: 80px;">Why is that?</p> <p>Had any problems when using social media?</p> <p style="padding-left: 40px;">Why/with whom did that happen?</p> <p style="padding-left: 40px;">How did you deal with it?</p>
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Note: This schedule provides the main points of discussion and the question indentation indicates the hierarchical questioning structure. However, not all the points were covered as direct questions. Some were elicited by information-seeking statements instead. The mainly question format of the schedule is for ease of reference and economy of presentation.

APPENDIX 7 Interview questionnaire: SENCOs & LRB Teachers/Teaching assistants

1. Can you describe briefly this student's support? (e.g. balance of withdrawal and in-class provision)
2. Which subjects are set in Year 7? Does this change in Year 8?
3. How often does this student use the support dept/LRB at break/lunch times and what does he/she do there?
4. Please describe briefly this student's friendship group (e.g. number of close friends, and approximate number of less close but regular friends), noting whether these friends also have SLI/ SpLD (or other forms of SEN).
5. What do you feel about the *quality* of this student's friendships (e.g. mainly harmonious, antagonistic, or ambivalent/ 'love hate')? Are they based on things in common or mainly on 'convenience' ? Any other factors?
6. And lastly, how do you feel this student might be viewed by a wider range of same age peers (e.g. in the tutor group or in subject classes)? Please tick what best describes his/her social position. Any additional comments can be added below.
 - Highly accepted (actively sought by many for group activities)
 - Accepted (actively chosen by some and not actively rejected by rest)
 - Neutral (neither actively chosen nor actively rejected; presence is tolerated and peers may sometimes interact or help if asked)
 - Ignored (does not attract hostility, but appears virtually invisible to peers)
 - Rejected (actively excluded by peers; evidence of dislike and avoidance)
 - Ambivalent (varies considerably, according to the type of lesson or to the kind of peers with him/her in lessons)

Many thanks for completing this questionnaire

APPENDIX 8 Symbols for interviews



APPENDIX 9 Observation schedule and key

Observed pupil's social participation	Function	Interactive focus (scholastic, social)	Contribution to the interaction (positive, negative, neutral, mixed)

Functions (part sample)

Allow access to materials	Assist
Check instructions or permission	
Check intention of others	Check progress or action of others
Complain or criticise	
Comply with request	Declare fact
Demonstrate or instruct	
Explain	Impart information
Protest	
Reject offer	Request favour, help or loan
Seek opinion	
State action done	State intention
State opinion	
State preference	State problem
Suggest course of action	
(Other: please qualify)	

APPENDIX 10 Observation data re-coding (50% sample of the re-coded items)

Please record one or more communicative functions alongside each utterance, using the options listed. If choosing 'Other', please qualify, e.g. 'Refuse access'.

Case	Context	Participant utterance	Function
Rob	Art theory. Peer from adjoining table asked if he could borrow colour.	Get your <i>own</i> red!	Protest
Meg	ICT. Chat with peer about a design task. Each pupil was working alone.	I did it myself! I added this stuff.	State action done
(ditto)	ICT. Answering same peer who was not sure how to do next stage of design.	Go to 'shape', then 'layout'.	Instruct
Sam	Drama. Role allocation underway, but with frequent negotiations, interruptions and changes of plan.	But where are we <i>up</i> to? I can't hear!	State problem or request help
Nick	Home Economics. Participant ran tap, prior to soaking utensils. The water came out yellow. Participant turned to work partner.	It's coming out the wrong colour!	State problem
Eve	Art. Participant needed a particular colour, but the only one available was blunt.	Joe, can you try to do this sharper?	Request favour
Will	Science. Pupils finishing off folders. General chat with peers about the team coach at a weekend football game.	I wanted to [play football], but he wouldn't let me!	Complain
Tom	Drama. Pupils writing. Peer across room said 'You gotta make the playscript into a <i>story!</i> '	I can't do <i>that!</i> (shouted)	Protest
Zoe	Art. Peer stated need for spare materials and looked around table for possibilities.	I'm not going to use this (indicating pile of materials).	Allow access
Kyle	Home Economics. Re: a melon to be used with peer for fruit salad.	You cut it like this.	Demonstrate or instruct
Olly	Resistant Materials. Peer asked 'What's this random bit of wood?'	It's part of the block.	Impart information
(ditto)	Resistant Materials. With three peers, working on wooden plaque.	Shall I do the other side? Let's do it!	Suggest course of action

APPENDIX 11 Case study consent letter



Reference CLPG/SLI/cs

Dear Parent/Guardian

Last school year, you kindly consented to my completion of social self-perception questionnaires with your child (X), as part of my PhD research of Year 6 children with specific language impairment.

I am hoping to see some Year 6 participants again in Year 7, to explore further their social self-perception following transition. I am therefore seeking your permission to carry out one or more of the following:

1. An observation of your child during an interactive lesson such as Home Economics;
2. A 30 minute interview with your child;
3. A separate 45 minute interview with yourself/ves.

More information is attached. As before, participation is entirely voluntary and consent may be given or withheld for each component individually. The strictest ethical standards apply, including confidentiality and anonymity of reported data. However, please do not hesitate to contact me at kjr205@exeter.ac.uk with any queries. I will be delighted to give you any further details about this part of the study.

With many thanks.

Yours sincerely

Karen Robinson

Karen Robinson

.....
I....., the parent/guardian of, consent to Karen Robinson conducting : observation child interview parent interview .

Each is strictly for the research purposes stated in her consent letter (reference: CLPG/SLI/cs). I have read the additional information provided and ticked all the components for which I give consent.

Signed

**Please return signed slip to the school office, for the attention of the SENCO/LRB Teacher.
Thank you.**

APPENDIX 12 Case study: missing data sources (marked X)

Participant	SEN group	Parent interview	Observation
Meg	SLI	X	
Josh	SLI		X
Olly	SpLD	X	
Zoe	SpLD	X	

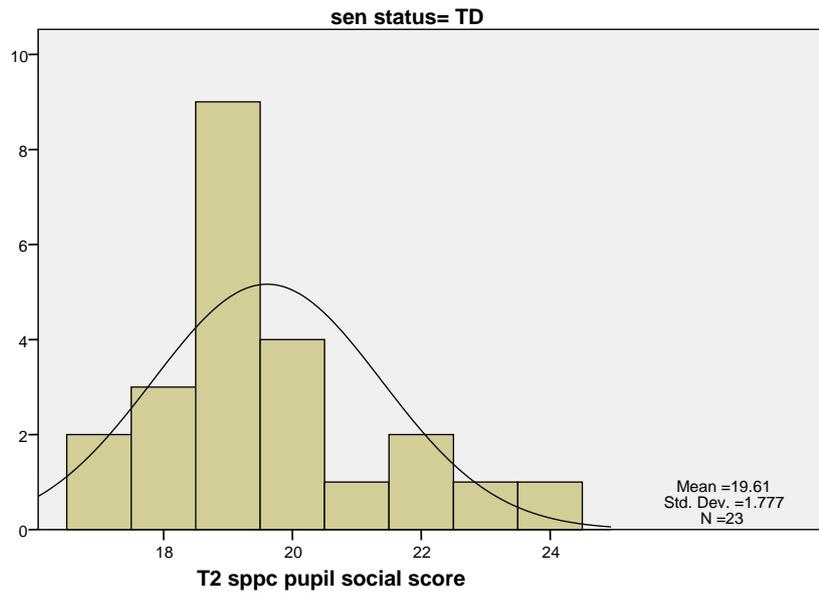
APPENDIX 13 Selected SPSS output

A. Data normality checks: Time 1 and Time 2

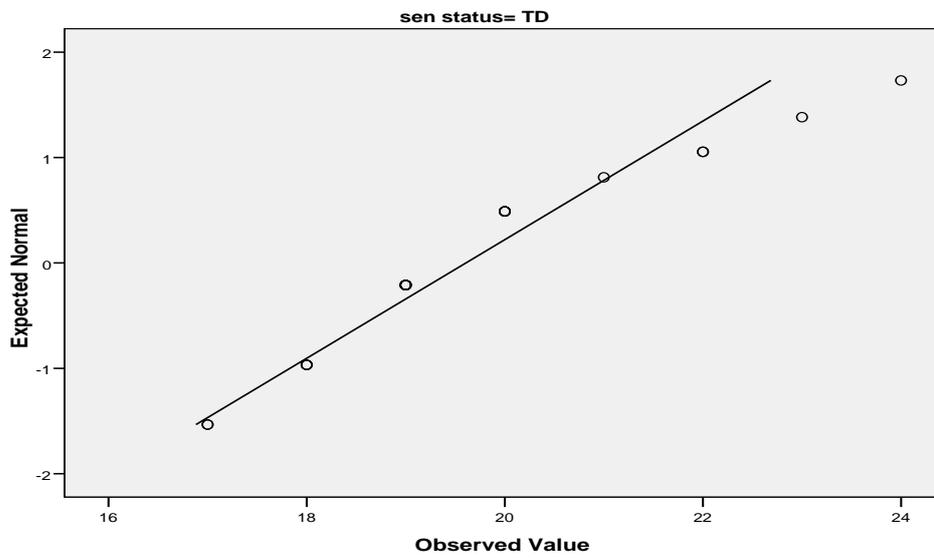
Time 1 Social anxiety composite	SLI 5% trimmed mean 49.80 Skewness -.002 Standard error .398 Kurtosis -.237 Standard error .778 Kolmogorov-Smirnov statistic .121 $p = .200$
	TD 5% trimmed mean 43.07 Skewness .314 Standard error .398 Kurtosis -.199 Standard error .778 Kolmogorov-Smirnov statistic .094 $p = .200$
Time 1 Social acceptance self-ratings	SLI 5% trimmed mean 16.42 Skewness .058 Standard error .398 Kurtosis -.684 Standard error .778 Kolmogorov-Smirnov statistic .097 $p = .200$
	TD 5% trimmed mean 18.48 Skewness -.808 Standard error .398 Kurtosis .453 Standard error .778 Kolmogorov-Smirnov statistic .109 $p = .200$
Time 2 Social anxiety composite	SLI 5% trimmed mean 50.08 Skewness .271 Standard error .481 Kurtosis .168 Standard error .935 Kolmogorov-Smirnov statistic .096 $p = .200$
	TD 5% trimmed mean 38.35 Skewness -.194 Standard error .481

	Kurtosis -.876 Standard error .935 Kolmogorov-Smirnov statistic .111 $p = .200$
Time 2 Social acceptance self-ratings	SLI 5% trimmed mean 15.77 Skewness -.246 Standard error .481 Kurtosis -.214 Standard error .935 Kolmogorov-Smirnov statistic .176 $p = .062$
	TD 5% trimmed mean 19.52 Skewness .922 Standard error .481 Kurtosis .660 Standard error .935 Kolmogorov-Smirnov statistic .243 $p = .001$

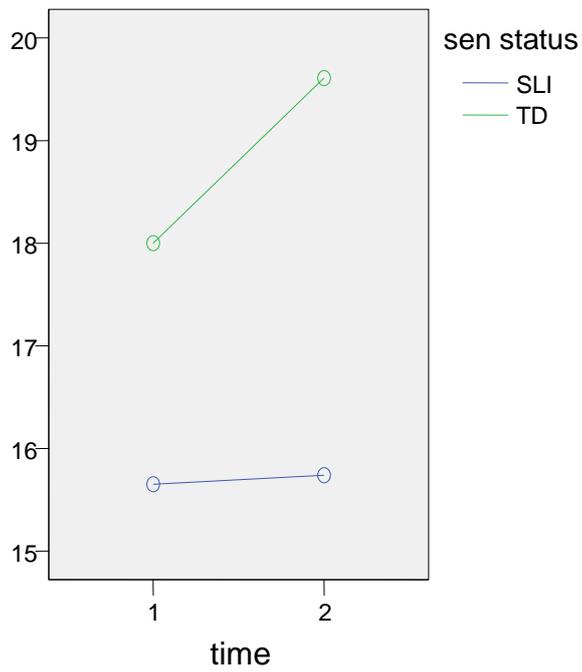
B. Time 2 self-rated social acceptance (TD group): distribution of scores and Q-Q plot



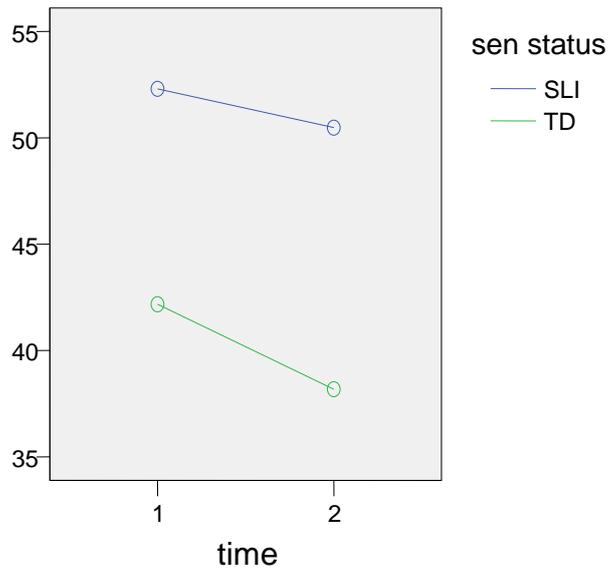
Normal Q-Q Plot of T2 sppc pupil social score



C. Social acceptance self-ratings: group changes Time 1 to Time 2



D. Social anxiety composite ratings: group changes Time 1 to Time 2



APPENDIX 14 SLI mean scores by gender: Time 1 and Time 2

Gender	SocP Time 1	SocP Time 2	SASCTo Time 1	SASCTo Time 2
Male	16.91 (<i>SD</i> 4.898) <i>N</i> = 23	17.65 (<i>SD</i> 4.663) <i>N</i> = 17	48.96 (<i>SD</i> 16.488) <i>N</i> = 23	45.71 (<i>SD</i> 17.695) <i>N</i> = 17
Female	15.42 (<i>SD</i> 3.397) <i>N</i> = 12	14.45 (<i>SD</i> 4.321) <i>N</i> = 11	51.83 (<i>SD</i> 13.190) <i>N</i> = 12	57.09 (<i>SD</i> 15.903) <i>N</i> = 11

Key SocP: Social acceptance pupil self-rating SASCTo: Social anxiety composite scale

APPENDIX 15 SLI correlations at Time 1 and Time 2: social acceptance, scholastic performance and athletic performance

Time 1	Social acceptance	Scholastic performance	Athletic performance
Social acceptance	1.00	.552 (<i>p</i> = .000)	.509 (<i>p</i> = .001)
Scholastic performance	.552	1.00	.253
Athletic performance	.509	.253	1.00

Time 2	Social acceptance	Scholastic performance	Athletic performance
Social acceptance	1.00	.636 (<i>p</i> = .000)	.657 (<i>p</i> = .000)
Scholastic performance	.636	1.00	.436
Athletic performance	.657	.436	1.00

APPENDIX 16 SASC-R means for SLI at Time 1 and Time 2, by gender and SASC-R cut-offs for high and low social anxiety

Gender	Time 1 mean	Time 2 mean	SASC-R high social anxiety cut-off	SASC-R low social anxiety cut-off
Female	51.83 (13.19)	57.09 (15.90)	At or above 54	At or below 40
Male	48.96 (16.49)	45.71 (17.70)	At or above 50	At or below 36
Combined	49.94 (15.30)	50.18 (17.64)	Not applicable	Not applicable

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ADDITIONAL MATERIALS: oversized tables

Table 4.12 Cross-case matrix (SLI): social well-being in discrete domains across transition, with role perspective and data type (pages 345-348)

Table 4.13 Cross-case matrix (SpLD): social well-being in discrete domains across transition, with role perspective and data type (pages 349-352)

Table 4.12 Cross-case matrix (SLI): social well-being in discrete domains across transition, with role perspective and data type

Social well-being domains					
Case	Friendship	Acceptance	Participation	Social Anxiety	Data consistency and transition summary
Rob	None came from own Y6. 'Very few close friends – all SEN' (TA) <i>SENIQ</i> . 'I don't really have any. Just one or two' <i>PI</i> . Never had many friends <i>PTI</i> . In SEN dept, '... always seems happy and joking' (SNCoth) <i>SENIQ</i> . 'Harmonious' in dept, but readily falls out with friends outside. (TA) <i>SENIQ</i> . More friends in primary <i>PI</i> .	'Neutral' (TA) <i>SENIQ</i> . <i>T1</i> and <i>T2 PQ</i> scores were well below the scale midpoint and poor. No <i>T1 TQ</i> data. <i>T2 TQ</i> score was mediocre. 'In Y6, he hung around girls, as boys excluded him from their playground games' <i>PTI</i> . No overt peer exclusion noted during <i>RO</i> .	Doesn't feel well included <i>PI</i> . Peers encouraged him to join them in class and attempted social interaction, but were rebuffed and gave up <i>RO</i> .	Considerable increase from <i>T1</i> to <i>T2 PQ</i> - <i>T1</i> was already high. Feels worried if his two regular friends are away <i>PI</i> .	(P) perception in <i>PI</i> was that he had many friends in Y6, whereas <i>PTI</i> was inconsistent with this. But <i>PQ</i> was almost identical at <i>T1</i> and <i>T2</i> . <i>T2 TQ</i> was somewhat better than these. <i>RO</i> was consistent with <i>PI</i> and <i>PTI</i> on social participation. Social anxiety data were consistent over (P) data sources in Y7, but comparison data were unavailable. Overall, data suggest social well-being in Y7 resembles that of Y6, but is poorer on both mainstream social position and social anxiety. This is less apparent in a highly supervised setting with peers who also have SEN.
Meg	Not successful with TD peers (TA) <i>SENIQ</i> . (P) maybe over-estimates number, ease and closeness of mainstream friendships and not sure how friendship differs from just being a classmate (R). But, aware they don't always respond to her, 'They promised me [their mobile numbers], ... it's been over six months now' <i>PI</i> . Minimal (P) data for out of school friendships and no other data sources.	'Ignored' (TA) <i>SENIQ</i> . <i>T1</i> and <i>T2 PQ</i> were above the scale midpoint, almost identical and fairly good. <i>T1 TQ</i> score was also fairly good. No <i>T2 TQ</i> data. No overt peer exclusion was noted during <i>RO</i> , but no active signs of inclusion either. Mainstream 'friends' don't visit her in LRB, but reason is unclear (TA) <i>SENIQ</i> .	On being part of the class group, sometimes feels left out – depends on subject <i>PI</i> . (P) also confirmed similar in Y6. However, she chose to sit alone during <i>RO</i> ; This frequently occurs (TA) <i>SENIQ</i> . 'I just like being alone' <i>PI</i> . Interactions during <i>RO</i> were sparse and mainly initiated by (P). Some went unheard due to her not checking that peers knew she was addressing them.	Considerable decrease from <i>T1</i> to <i>T2 PQ</i> . On current friendship worry, 'Not much. When we argue, I don't really mind. We might come back to [being] friends' <i>PI</i> .	(P) high perception of friendship in <i>PI</i> is consistent with <i>PTI</i> , <i>PQ</i> at <i>T1</i> and <i>T2</i> , and, for superficial friendship, with (SNCoth) <i>SENIQ</i> . (Y6T) <i>T1 TQ</i> was much lower than <i>T1 PQ</i> . Acceptance data show potential inconsistency within (TA) source. Participation draws on limited data sources. Anxiety data show some inconsistency within <i>PI</i> , but fair consistency between <i>T2 PQ</i> , parts of <i>PI</i> , and <i>PTI</i> (for out of school). However, high social anxiety in <i>T2 PQ</i> and high social self-perception in <i>T2 PQ</i> appear incompatible. Overall, data suggest (P) is more socially anxious in Y7, but this is about bullying, not personal friendship. Social position in school appears similar to Y6, but with marked differences in Y7 between superficial liking by older peers and

					acceptance for close friendship or co-working by mainstream Y7 peers.
Josh	Close friends (three) all LRB (SNCoth) <i>SENIQ</i> and 'quite harmonious' (TA) <i>SENIQ</i> . Feels he has friends all around and easy to find <i>PI</i> . 'He's got quite a lot of friends now [mainstream, from higher years]' <i>PTI</i> , though superficial and football based (SNCoth) <i>SENIQ</i> . Good relationship with LRB peers <i>PTI</i> . In contrast, only one friendship out of school, of ambivalent quality <i>PTI</i> . On loneliness out of school, 'Dunno. Yeah!' <i>PI</i> .	'Accepted' by Y7 peers and 'popular' with Y10 boys(TA) <i>SENIQ</i> . <i>T1</i> and <i>T2 PQ</i> scores were high –at and near top of the scale respectively. <i>T1 TQ</i> score was mediocre. No <i>T2 TQ</i> data. No <i>RO</i> carried out. Early bullying by mainstream peers resolved <i>PTI</i> . But mainstream 'friends' don't visit him in LRB - reason is unclear (TA) <i>SENIQ</i> .	Sometimes feels left out in class. Puts it down to talking about 'wrong' football team. Claims he never experiences this in LRB or playing outside <i>PI</i> .	Considerable increase from <i>T1</i> to <i>T2 PQ</i> . No friendship worries stated <i>PI</i> . But (P) did describe anxiety about overtly negative peer experiences. Would also worry about doing out of school social activities <i>PTI</i> .	<i>PI</i> and <i>PTI</i> data are consistent on anxiety, friendship and acceptance in Y7, compared with Y6. Participation data are consistent between <i>PI</i> and <i>RO</i> . A slight decline in the high social perception of <i>PQ</i> and <i>TQ</i> from <i>T1</i> to <i>T2</i> is also consistent with the above data. There is some inconsistency on friendship quality between <i>PI/PTI</i> and <i>SENIQ</i> and on friendship closeness between <i>PTI</i> and <i>SENIQ</i> . Overall, data suggest (P) is more socially anxious in Y7. (P) is still well-regarded by peers, but has found separation from former classmates hard, and has a slightly lower social position in school in Y7 due to starting afresh. Staff may be unaware of this. Social well-being remains reasonably good, but is better out of school than in.
Sam	Small group of good friends and one best friend, none with SEN. Quality is 'harmonious' (TA) <i>SENIQ</i> . Feels friendships are fewer this year <i>PI</i> . Mother confirmed this <i>PTI</i> . Mixed quality friendships <i>PI</i> and <i>PTI</i> .	'Quite well accepted [by wider peer group]' (TA) <i>SENIQ</i> and popular for football <i>T1</i> and <i>T2 PQ</i> scores were above the scale midpoint – very good and fairly good respectively <i>PI</i> . <i>T1 TQ</i> score was excellent - at the top of the scale and <i>T2 TQ</i> fairly good. Had a very admiring circle in primary school <i>PTI</i> . Felt much more popular there <i>PI</i> .	On being chosen readily by classmates, 'Um ... middling. Easier in Art ... cos they ask me to help' <i>PI</i> . (Harder to follow/ participate in group conversation than one to one <i>PI</i> . <i>RO</i> noted problems keeping up in group negotiation, so became increasingly left out.	Considerable increase from <i>T1</i> to <i>T2 PQ</i> . 'Sometimes' socially anxious - goes in phases <i>PI</i> . May be part of more generalised worry (SNCoth) <i>SENIQ</i> . Worries about older boys getting rough in playground ball games and about losing face with friends <i>PTI</i> .	<i>PI</i> , <i>PTI</i> and <i>SENIQ</i> data are consistent on the number and quality of Y7 friendships. But there is notable inconsistency between mediocre (FT) <i>T2 TQ</i> (which was also lower than (Y6T) <i>T1 TQ</i>) and the positive <i>SENIQ</i> – this probably reflects adjustment to completely changed peer group. There is some inconsistency between <i>PI</i> and <i>PTI</i> on anxiety. But the slight decrease in social anxiety <i>T2 PQ</i> is consistent with <i>PI</i> perspective that (P) was more anxious in Y6. Overall, data suggest that social well-being in Y7 is reasonably good, both in school and out. (P) is just slightly less socially anxious in Y7, but this fluctuates. School friendships are all new and certainly fewer than in Y6, but quality is good. Social acceptance in school is also quite good now, but was initially hampered by separation from old Y6 friends, even though he was happy to move on from them.

Nick	Small group of close friends (one with SplD, rest no SEN). Fewer friends than in Y6, as had to start afresh with total change of peers <i>PTI</i> . Quality is 'harmonious. (TA) <i>SENIQ</i> . 'He hasn't got many [school]friends this year, but [they are] nice friends <i>PTI</i> . 'I haven't got a <i>best</i> friend yet ... just ... nice good friends' <i>PI</i> .	'Popular ... He is core within his regular group' (TA) <i>SENIQ</i> . 'He's always been popular but ... quite shy' – and doesn't fit in with boys at Scouts <i>PTI</i> . Sees self as more popular in secondary <i>PI</i> . <i>T1</i> and <i>T2 PQ</i> scores were identical, fairly good and above the scale midpoint. <i>T1 TQ</i> was fairly good. <i>T2 TQ</i> was mediocre.	'He's said once or twice he's had no-one, but [not] voiced to me lately that he's lonely' <i>PTI</i> . <i>RO</i> noted positive classroom interaction with peers, but five of his initiations went unheard due to his poor attention gaining strategies.	Slight decrease from <i>T1</i> to <i>T2 PQ</i> . On current anxiety, 'Um, it's quite unlikely, but in primary you'd worry if your friends fell out ... whether they still liked me and that' <i>PI</i> . But on voicing anxiety at home, 'Yes, cos one of his close friends also has a best friend ... [and he was worried about upsetting things]' <i>PTI</i> .	Findings are highly consistent across domains, roles and data types, and are stable between Y6 and Y7. Overall, data strongly suggest high levels of social well-being in Y6, and even higher levels in Y7. This applies both in school and out.
Will	Best friend from Y6 has SplD, rest no SEN - '... has three or four close mates [plus larger group of regular friends] ... <i>Very</i> harmonious' and no 'convenience' friends(TA) <i>SENIQ</i> . Has best and regular friends - 'Friends are the ones he has a warm relationship with, others he's friendly with - it's different' <i>PTI</i> . Although friends are mainly without SEN ('He doesn't magnetise to kids with similar difficulties' <i>PTI</i>), 'I don't find that an issue ... Just if you get on with them really' <i>PI</i> .	'Popular – <i>very</i> , in his group' (TA) <i>SENIQ</i> . <i>T1</i> and <i>T2 PQ</i> scores were very good - near and at top of the scale respectively. <i>T1 TQ</i> was good. <i>T2 TQ</i> was excellent – at the top of the scale. Sees self as more popular this year <i>PI</i> . 'I haven't noticed a change ... [but] probably not at [small village primary], as there's only five kids there!' <i>PTI</i> . Evidence of reciprocal friend choice as work partner <i>PI</i> . On feeling comfortable about working with other peers based on seating plan, 'Yeah, I don't mind' <i>PI</i> . <i>T2 PQ</i> and <i>T2 TQ</i> excellent.	Claims no problems joining an on-going interaction <i>PI</i> . At breaktimes, 'He's always out and about and full of it' (TA) <i>SENIQ</i> . '... he is always with friends' (SNCoth) <i>SENIQ</i> . 'Goes up to town with his friends ... They're all a circle' <i>PTI</i> . <i>RO</i> noted highly positive interactions with peers and no qualitative differences between these and the interactions of other group members.	Slight decrease from <i>T1</i> to <i>T2 PQ</i> – <i>T1</i> was already low.No parental concerns about social anxiety in either school <i>PTI</i> .	<i>PTI</i> and <i>SENIQ</i> data are consistent on the very limited number of close friendships. In <i>PI</i> , there is implicit support for this, though (P) does not state it directly. (P) social perception <i>T2 PQ</i> shows a sharp decline from <i>T1</i> , but <i>TQ</i> is better than at <i>T1</i> . Anxiety data are broadly compatible across <i>T1 and T2 PQ, PI</i> and <i>PTI</i> . <i>RO, SENIQ</i> and <i>PI</i> are fairly consistent on day to day acceptance and participation in class groups. (FT) <i>T2 TQ</i> is divergent from these on popularity (rated high), but convergent on the difficulty in making friends. Overall, data suggest that social well-being is slightly better in Y7 in some respects, but worse in others. Having one quality friendship in school (and one outside) is clearly an improvement. Also, social acceptance within the tutor group is presumably good enough to warrant the high (FT) popularity rating. However, wider peer acceptance and (P) social participation do seem rather superficial, and rejection by a few former Y6 peers has actually intensified since transition.
Eve	Five or six superficial friends when it suits them to have her around (SNCoth) <i>SENIQ</i> . 'Pleased to have one good friend [but] I thought, oh gosh, she's not going to hold on to her ...	'Accepted ' but seems superficial (SNCoth) <i>SENIQ</i> . Hangs out daily with same group <i>PI</i> . <i>T1 PQ</i> score was good – towards top of the scale. <i>T2</i> was below the scale	Sometimes drawn in but can't participate well as doesn't follow chat <i>PI</i> . On feeling left out of classroom interactions, 'Part' <i>PI</i> . <i>RO</i> noted peer responses to (P) were helpful, but 'utilitarian', not leading to	Some decrease from <i>T1</i> to <i>T2 PQ</i> – both were moderate. On worry about quarrels, 'Quite, but quite not. Somewhere in middle. Like if we fall	There is some divergence between <i>PI</i> and all other data sources on Y7 friendship - possibly due to (P) overestimating number and quality, but greater consistency on the other two social position domains. <i>T1</i> and <i>T2 PQ</i> and <i>T1 (Y6T) TQ</i> were

	<p>Friendships [in primary] were just awful' (and ended in Y7) <i>PTI</i>. Of the one (new) relationship, 'We're great friends' <i>PI</i>. Outside school, one kind friend through Guides <i>PTI</i>.</p>	<p>midpoint – quite poor. <i>T1 TQ</i> was mediocre. <i>T2 TQ</i> was fairly good. No overt peer exclusion was noted during <i>RO</i>, though no active signs of inclusion either. But rejected by former peers, in person and especially online <i>PTI</i>. Bullying, as stated by mother <i>PI</i>.</p>	<p>conversational development. Mainly, (P) interacted with her friend with SEN; peers interacted separately. Out of school, group participation mainly confined to organised activities, ie. Guides and Gymnastics <i>PTI</i>.</p>	<p>out and they don't be friends' <i>PI</i>.</p>	<p>uniformly low on social perception. The apparent divergence in emphasis between <i>PI</i> and <i>PTI</i> on (P)'s social anxiety is superficial: both seem to suggest the worry is really about aggression, not attitude <i>per se</i>. Overall, data suggest that social well-being in school was poor in Y6 and has deteriorated in Y7, despite (P)'s lower social anxiety ratings and his perception that he has quality friendships. Socialisation out of school also seems comparable with Y6, ie. limited and of poor quality. However, (P) does not appear very concerned about this.</p>
Tom	<p>Only two boys, both with SEN. Friendships are unstable and '... he is not core in any larger group' (TA) <i>SENIQ</i>. On one boy, 'He's a little bit good with me ... He does stick up for me, yes' <i>PI</i>. But, 'He found it difficult ... (and fares) socially not too well' (one of the two friends has bullied him long term and he tolerates it) <i>PTI</i>. On seeing friends out of school, 'No, no. I don't. I just stay home' <i>PI</i>.</p>	<p>'Neutral' if teachers choose groups, otherwise 'ignored' (TA) <i>SENIQ</i>. <i>T1</i> and <i>T2 PQ</i> scores were identical, well below the scale midpoint and poor. <i>T1 TQ</i> score was very poor – at the very bottom of the scale. No <i>T2 TQ</i> data. <i>RO</i> noted that (P) distanced himself from larger groups; he ignored - and was ignored by – the only other table member. A few comments to another boy were not well received. No overt group rejection was witnessed, because he sat alone, but it was mentioned in <i>PI</i>.</p>	<p>Reported it was hard to join in playground interactions, even if his two friends were there <i>PI</i>. On social participation in the support base, 'I guess he'd rather be with an adult. He prefers their company' <i>PTI</i>, confirmed by (TA) <i>SENIQ</i>. Doesn't want to join any school clubs <i>PI</i>, despite staff encouraging him <i>PTI</i>.</p>	<p>Some decrease from <i>T1</i> to <i>T2 PQ</i>, but <i>T1</i> was very high. Worries about physical bullying, not about peer attitudes <i>PTI</i>. But, on worries about disputes with others, 'Yeah, friends generally, as well' <i>PI</i>. Socially worried about clubs, but also uninterested in the ones offered <i>PI</i>.</p>	

Keys 1. Role perspective: (P) = Pupil (PT) = Parent (FT) = Form Tutor (Y6T) = Year 6 Teacher (SNCoth) = Senco/Other SEN Teacher (TA) = Teaching Assistant (R) = Researcher 2. Data type: *PQ* = Pupil questionnaire *TQ* = Teacher questionnaire *SENIQ* = SEN staff interview questionnaire *PI* = Pupil interview *PTI* = Parent interview *RO* = Researcher observation 3. Time of data collection (applies to *PQ* and *TQ* only): *T1* = Time 1 *T2* = Time 2

Table 4.13 Cross-case matrix (SpLD): social well-being in discrete domains across transition, with role perspective and data type

Social well-being domains					
Case	Friendship	Acceptance	Participation	Social Anxiety	Data consistency and transition summary
Luke	<p>'Is in a friendship group of four ... with no other SEN [pupils]' (SNCoth) <i>SENIQ</i>. Quality is 'mainly antagonistic' (TA) <i>SENIQ</i>. But, 'Seems OK. Not millions of friends ... lost momentum with other Y6s, but ... talks about new friendships from his present form ... In Year 6, he was with SEN pupils' (overall, better situation than Y6) <i>PTI</i>. '[More friends now, though] I don't really have one best friend' <i>PI</i>. Sees these school friends out of school <i>PI</i>.</p>	<p>'Neutral' (TA) <i>SENIQ</i>. <i>T1 PQ</i> score was below the scale midpoint and poor. No <i>T1 TQ</i> or <i>T2 PQ/TQ</i> data. <i>RO</i> did not provide evidence of rejection or even reluctant tolerance, either within (P) working group or as he walked around to other table groups. <i>PI</i>.</p>	<p><i>RO</i> observation took place in a room with high ambient noise, which hampered conversation. However, amiable co-working with three regular friends was noted throughout. This involved sharing equipment and mutual help. No qualitative differences were apparent between interactions with (P) and those involving TD peers only. Out of school social participation reported as happy and successful <i>PTI</i>.</p>	<p><i>T1 PQ</i> was quite high. No <i>T2 PQ</i> data available. On Y7 social worries, 'Well, we do have arguments. All friends have to have arguments sometimes' (but claimed not to be unduly anxious about resolving them) <i>PI</i>. No social anxiety or friendship problems raised at home <i>PTI</i>. Does worry about SpLD (SNCoth) <i>SENIQ</i>, but apparently not about SpLD having adverse social consequences <i>PI</i>.</p>	<p>There is consistency between <i>PI</i>, <i>PTI</i> and <i>RO</i> on social acceptance and ease of social participation. <i>PI</i> and <i>PTI</i> are also consistent on friendship improvement since Y6 (<i>T1 PQ</i> rating was low). They seem consistent on low social anxiety in Y7 as well. However, the (P) and (PT) social position data diverge from <i>SENIQ</i> data, which suggest some on-going social difficulties. Overall, data suggest that social well-being is good out of school and has improved in school in Y7, but not in all respects. Anxiety certainly seems less. (P) now has more opportunities to choose friends without SEN and enjoys socialising and working with them. However, the friendships are not always harmonious and lukewarm acceptance by the wider peer group may reflect this.</p>
Amy	<p>Few friends in school, nearly all with SEN. Two without, but very prone to disputes (TA) <i>SENIQ</i>. More friends 'at the moment' (one new), but year started badly as key member of staff absent, so pre-transition communication broke down <i>PTI</i>. Of long-term best friend with SEN, '...we've never even broken up or anything, Never once ... cos we had loads of stuff in</p>	<p>'Rejected' by most TD peers (TA) <i>SENIQ</i>. <i>T1 PQ</i> score was just above the scale midpoint and fair. <i>T1 TQ</i> score was mediocre. No <i>T2 PQ</i> or <i>TQ</i> data. During <i>RO</i>, (P) chose to sit alone, but joined group at teacher request. No overt group rejection was noted, but neither did peers seem to welcome her presence. Some dismissive behaviour reported by (P) in PE <i>PI</i>. On popularity, compared with Y6, 'I'd say more now – eighteen on the net</p>	<p>Classroom peers did not engage (P) in conversation and their responses to her were neutral and minimal <i>RO</i>. On exclusion in other lessons, 'Yes, in English ... I start to feel left out because they start saying I don't [understand what to do]' <i>PI</i>. Social participation at lunch only in support room with SEN peers <i>PI</i>. This occurs daily (TA) <i>SENIQ</i>. Keen but muddled about attending after-school clubs <i>PI</i>. 'She did</p>	<p><i>T1 PQ</i> was quite low. No <i>T2 PQ</i> data are available. But, 'In [primary school], I was always worried about my friends and [the headteacher] was always having to get involved, cos I think she's taking her away from me and I was right' <i>PI</i>. In relation to Y7, overt bullying was worrying and mild forms were tolerated, including throwing doughnuts <i>PI</i>. Did mention SpLD, but not overtly as a source of social anxiety <i>PI</i>.</p>	<p>There is quite strong consistency between Y7 data sources on overall social position with peers without SEN. But some inconsistency is apparent within (P) data sources on Y6 social anxiety; <i>T1 PQ</i> rating suggested quite low anxiety, but <i>PI</i>, looking back on Y6, suggested that (P) did suffer a lot of anxiety then. In Y7, both (P) and (PT) data suggest fear of victimisation. <i>PTI</i> mentioned that (P) was 'worried' about peers hacking into her social network account and <i>PI</i> highlighted the need to pair up with old friend to 'protect each other'. Overall, data suggest that social well-being in Y7 is</p>

	common' <i>PI</i> . Out of school, (P) sees the new friend for mutual visits and older aged friends at Sea Cadets <i>PTI</i> .	she chats to [but not much face to face]' <i>PTI</i> . 'I think about the same [popularity level], cos I haven't really changed at all' <i>PI</i> .	netball, but seems confused about time' <i>PTI</i> . But at Sea Cadets, staff really facilitate her participation and offer good range of activities. <i>PTI</i> .		similar to Y6, remains complex and is possibly a little poorer. For example, <i>T1</i> (Y6T) <i>TQ</i> rating of social position was mediocre, whereas <i>SENIQ</i> rating was very poor. There are on-going difficulties in social acceptance by most peers and in ease of making friends with them. One or two nascent friendships are apparent, but their durability is uncertain. Social anxiety has shifted from worry about losing friends to fear of physical abuse and verbal threats. Out of school, social well-being remains better than in school – again, similar to Y6, but still highly facilitated by adults.
Oly	Friendship quality is good with TD peers. 'He has about six close friends. They are definitely not pupils with SEN.' (SNCoth) <i>SENIQ</i> , confirmed by <i>PI</i> . On wider friendship group, 'About ten to fifteen ... I quite often work with them if we work in pairs' <i>PI</i> . Making new friends in Y7 seen as easy, and on fallouts, 'No, not at all really' <i>PI</i> . On opportunities for mixed-age friendships out of school, 'Um, yeah. Quite good!' <i>PI</i> .	'Popular - <i>definitely</i> ' (TA) <i>SENIQ</i> . But <i>T1 PQ</i> score was extremely poor, at the very bottom end of the scale. <i>T1 TQ</i> score was fair. No <i>T2 PQ</i> or <i>TQ</i> data. On comparison with Y6, 'Probably more popular here' (both number of regular friends and generally fitting in) <i>PI</i> . On experience of bullying, 'Er, a tiny bit at my old school, but not much [and] not here at all' <i>PI</i> . Very brief <i>RO</i> of practical work with three close friends; (P) appeared to be fully accepted by this group. On feeling comfortable about working with other peers, based on seating plan, 'Yeah, it's fine ... I don't mind' <i>PI</i> .	No qualitative differences were noted between interactions with (P) and those involving peers only. Both generated a balance of conversational turns about the task <i>RO</i> . (P) confirmed that social participation was easily sustained, both in class and at breaktimes <i>PI</i> . Uses internet successfully and regularly for social contact with a range of friends <i>PI</i> .	<i>T1 PQ</i> was moderate. No <i>T2 PQ</i> data are available. On worries about falling out or fitting in in Y7, 'No, not at all really' <i>PI</i> . Did express worries about SpLD, but not about any adverse social consequences <i>PI</i> . No <i>PTI</i> data are available for comparison.	There is strong consistency between Y7 data sources on all social position domains. However, social anxiety data for Y7 are confined to a single data source – <i>PI</i> . Overall, data suggest that social well-being is much higher in Y7, in all respects. There is a marked decrease in social anxiety and very good self and staff perception of (P)'s social position. In Y6, (P)'s own poor social position rating seemed to be situation-specific (evidence from <i>PI</i> data). However, (Y6T) rating was much better than (P)'s own rating.
Kyle	Friendships are 'harmonious. There are no peer relationship problems. Most close friends do not have SEN, but he doesn't seem to make that distinction' (TA) <i>SENIQ</i> : 'I've got a lot more	'Popular – yes, <i>definitely</i> ... He's a well-rounded boy socially' (TA) <i>SENIQ</i> . <i>T1 PQ</i> score was at the scale midpoint and fair. <i>T1 TQ</i> score was excellent – at the top of the scale. No <i>T2 PQ</i> or <i>TQ</i> data. On comparison	No qualitative differences were noted between interactions with (P) and those involving peers only. All interactions with (P) were positive, with ready 'take-up' of his contributions <i>RO</i> . 'He mixes very	<i>T1 PQ</i> was moderate. No <i>T2 PQ</i> data are available. On worry, reflected that losing friends could be bad, because they might put others off as well <i>PI</i> . However, bullying due to SpLD did not seem to worry (P) socially – the culprit was from outside his social group and his negative	There is strong consistency between (TA) and (P) on all social position domains in Y7 and with (R) on social acceptance and social participation. (PT) is somewhat divergent with others on social position in school, though consistent with (P) on lack of neighbourhood friendships that do not involve

	<p>friends ... two [best], about ten close friends and about five away (ie, regular) friends' <i>PI</i>. Keeps friends – makes up quarrels easily <i>PI</i>. 'He's OK. Not too bad on the whole ... He's kept some of [old Y6 friends]. Some are scattered over different classes' <i>PTI</i>. On seeing friends out of school, 'Not really. Just from his ACT and football club ... Doesn't see them out of those though' <i>PTI</i>. 'Not really, cos I don't go to the [local football] club' <i>PI</i>.</p>	<p>with Y6, 'I would say it's about the same' <i>PTI</i>. Self report is of better popularity in Y7, as more choice <i>PI</i>. One experience of bullying <i>PI</i>. <i>RO</i> was of cookery with two close friends - (P) appeared to be fully accepted by these peers. On whether working with other peers feels socially comfortable, 'Yes, usually' <i>PI</i>. But out of school, football friendships aren't 'best friends', as they attend a different school <i>PI</i>.</p>	<p>well generally ... with pupils with and without SEN' (TA) <i>SENIQ</i>. (P) confirmed that social mixing was particularly easy in school - peers draw him into outdoor games and his regular friends attend the same school clubs <i>PI</i>.</p>	<p>evaluation did not matter to (P) <i>PI</i>. No social anxiety is voiced at home <i>PTI</i>.</p>	<p>hobbies. Overall, data suggest that social position was considered very high by staff in Y6 and has remained very high across all domains in Y7. The excellent (Y6T) and <i>SENIQ</i> social ratings bear this out. However, a few points are noteworthy. (P)'s social self-perception in <i>T1 PQ</i> was notably lower than <i>T1 TQ</i> and (PT) drew attention to early post-transition problems caused by upward change of subject sets. But (P) clearly overcomes setbacks easily and is socially very successful in and out of school, despite one bullying situation and a lack of casual socialisation locally. The social anxiety data are also of interest. Although moderately rated in Y6 <i>PQ</i>, (P)'s reflections on social anxiety in Y7 seem more hypothetical than actual.</p>
Zoe	<p>Friendships are 'mainly harmonious – no evidence of any major problems ... Not a huge group of friends, but gets on well with her close circle ... These friends do not have SEN' (SNCoth) <i>SENIQ</i>. On new friendships, 'Quite a lot, actually. From PE, tutor group and that' <i>PI</i>. On closeness, 'I've got several best friends, including [Y6 best friend]' - also seen out of school <i>PI</i>. On ease of making friends, 'Harder in September, but now easier', and welcomes school size and seating plans' <i>PI</i>.</p>	<p>'Accepted' (SNCoth) <i>SENIQ</i>. Evidence of reciprocal nomination as work partners <i>PI</i>. <i>T1 PQ</i> score was below the midpoint of the scale and rather poor. <i>T1 TQ</i> score was quite good. No <i>T2 PQ</i> or <i>TQ</i> data. On comparing popularity with Y6, sees Y7 as more successful <i>PI</i>. <i>RO</i> (Art) was of (P) with a table group of six girls, including closer friends, none with SEN. (P) appeared to be fully accepted on equal terms by the whole group.</p>	<p>No qualitative differences were noted between peer interactions with and without (P). She participated frequently in talk about work and other matters, with equal 'take-up' by peers of her conversational bids <i>RO</i>. (P) confirmed she never felt left out of group conversations in or out of class <i>PI</i>. Organised 'big group' activities out of school were not favoured, but regularly joins school friends in free time and sometimes contacts them on MSN <i>PI</i>.</p>	<p><i>T1 PQ</i> was moderate and anxiety about friendship was voiced to (R) at that time. No <i>T2 PQ</i> data available. On whether this anxiety has persisted in Y7, 'Not any more. My mum and my big sister in 6th form told me it would be easy after a few days here ... An old enemy is now my friend' <i>PI</i>. Slight worries about school work were raised, but not in relation to social position, and SpLD status itself was not raised overtly <i>PI</i>.</p>	<p>There is strong consistency between Y7 data sources on all social position domains. However, social anxiety data for Y7 are confined to a single data source – <i>PI</i>. Overall, data suggest that Y6 social well-being was only fair and was uneven, but has improved in all respects since transition. (Y6T) <i>TQ</i> rating of social position was higher than <i>T1 PQ</i> rating, whereas <i>PI</i> suggested notable improvements in Y7 social position and provided clear reasons for them, ie. a more favourable environment and own improved social skills. Likewise, <i>PI</i> suggested that the social anxiety experienced in Y6 is not an issue in Y7.</p>
Tara	<p>Friendships are 'harmonious' (TA) <i>SENIQ</i>. No friends have SEN (SNCoth) <i>SENIQ</i>. More friends mentioned at home since</p>	<p>'Accepted ... She is core within her group – never on the outside' (TA) <i>SENIQ</i>. 'Always out with a group in her free time' (SNCoth) <i>SENIQ</i>.</p>	<p>Nature of observed lesson precluded much group interaction. However, interaction with partner was humorous and affiliative <i>RO</i>.</p>	<p><i>T1 PQ</i> was somewhat high, notably for fear of negative evaluation (FNE). No <i>T2 PQ</i> data. But, on experiencing social anxiety in Y7, 'No, not really' <i>PI</i>. 'No, none at all' [contrary to</p>	<p>Consistency is high between Y7 data sources across all domains of social position and between <i>PI</i> and <i>PTI</i> for social anxiety in Y7. Overall, data suggest that social position was very good in Y6,</p>

	<p>transition <i>PTI</i>. New peer group seen as mutually friendly and caring and sees making friends in Y7 as a welcome opportunity and easier <i>PI</i>. Out of school, plenty of casual friends too <i>PI</i>.</p>	<p>Evidence of reciprocal nomination as work partners <i>PI</i>. <i>T1 PQ</i> score was fairly good and above the scale midpoint. <i>T1 TQ</i> score was excellent – at the top of the scale. No <i>T2 PQ</i> or <i>TQ</i> data. On comparing popularity with Y6, sees numbers as better in Y7 and quality equally good as Y6 <i>PI</i>. <i>RO</i> was of pair work (Drama); (P) was readily accepted by the girl (not a close friend) invited to work with her.</p>	<p>Prefers and is confident about working with range of partners in different lessons <i>PI</i>. Avid joiner of school clubs, with friends <i>PTI</i>. On ease of unstructured social participation, ‘... quite easy’ <i>PI</i>. Out of school, (P) participates twice weekly in competitive sport with girls of mixed age. ‘She loves it, and music and dancing’ <i>PTI</i>.</p>	<p>expectations] <i>PTI</i>. Just slight work worries voiced <i>PI</i>, but SplD was not mentioned as a socially worrying factor. (PT) confirmed (P) doesn’t worry about this and, ‘with friends ... she sees them [and self] all clever at their own different things’ <i>PTI</i>.</p>	<p>with excellent (Y6T) <i>TQ</i> rating – higher than <i>T1 PQ</i> rating. However, <i>PQ</i> indicated moderately high anxiety levels in Y6. Data point to substantial improvements in social well-being in Y7. The good social position of Y6 has been enhanced by increased friendship and leisure opportunities in Y7, and there is a notable reduction in social anxiety and improved social confidence. Out of school, social well-being also remains excellent.</p>
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Keys 1. Role perspective: (P) = Pupil (PT) = Parent (Y6T) = Year 6 Teacher (SNCoth) = Senco/Other SEN Teacher (TA) = Teaching Assistant (R) = Researcher 2. Data type: *PQ* = Pupil questionnaire *TQ* = Teacher questionnaire *SENIQ* = SEN staff interview questionnaire *PI* = Pupil interview *PTI* = Parent interview *RO* = Researcher observation 3. Time of data collection (applies to *PQ* and *TQ* only): *T1* = Time 1 *T2* = Time 2