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**The Viewpoints of Early Years Practitioners on Strategies to
Support Children with Speech, Language and Communication
Needs:
A Q Methodological Study**

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Acronyms

Below is a list of acronyms commonly used within this thesis.

AS	Autistic Spectrum
EAL	English as an Additional Language
ECM	Every Child Matters
EHCP	Education, Health and Care Plan
EP	Educational Psychologist
EPS	Educational Psychology Service
EPPE	Effective Pre-School and Primary Education Project
EYFS	Early Years Foundation Stage
EYP	Early Years Practitioners
LA	Local Authority
NGT	Nominal Group Technique
NHS	National Health Service
SEBD	Social, emotional and behavioural difficulties
SEN	Special Educational Needs
SES	Socio-Economic Status
SENCo	Special Educational Needs Coordinator
SL&C	Speech, Language and Communication
SLCN	Speech, Language and Communication Needs
SLT	Speech and Language Therapist
TEP	Trainee Educational Psychologist
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund

Glossary of terms

School Action (SA): is a term referring to when a school implements additional support for an individual as there is evidence that a child is not making progress at school and there is a need for action to be taken to meet learning difficulties. SA can include the involvement of extra teachers and may also require the use of different learning materials, special equipment or a different teaching strategy

School Action Plus (SA+): is used where SA has not been able to help the child make adequate progress and the education setting will seek external advice. (SA and SA+ have since been replaced by the term SEN support).

Statement of educational needs: is a formal document detailing a child's learning difficulties and the help that will be given. This has since been replaced with an Education Health Care Plan (EHCP).

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Abstract

Acquiring language is understood to be a key part of a child's development (Siraj-Blatchford & Clarke, 2003), impacting skills including literacy and behaviour. The number of children identified as having speech, language and communication needs has been increasing by 4-6 percent each year since 2011 and is the most common primary need of children with on the SEN register (Whitaker, 2014). Early intervention is argued to have the greatest impact on the outcomes for children, as well as being the most cost-effective (Law et al., 2001). However, there has been a call to improve the provision for children with these needs due to the variability of the provision children receive (Bercow, 2008). Due to the diverse workforce, as well as the recognised importance of practitioners viewpoints, there has been a call for research into the viewpoints of early years practitioners regarding strategies to support children with SLCN (Marshall & Lewis, 2014).

The present research uses a Q methodological research approach (Stephenson, 1953) to explore the viewpoints of 42 early years practitioners on strategies to support children with speech, language and communication needs. Q methodology utilises the advantages of both qualitative and quantitative research methods and creates open communication around complex topics in order to clarify participants' views and explore subjective and diverse viewpoints.

The data generated by Q methodology was analysed using a by-person factor analysis. Three distinct viewpoints were identified within the group of early years practitioners who participated in the research. These viewpoints were:

- One: Tailor interventions and seek professionals' advice
- Two: Emphasis on stand-alone strategies, alter instructional language and don't use visuals
- Three: Understand a child's background and utilise environmental strategies

Follow-up interviews were carried out to strengthen the validity of the findings and explore what has informed the viewpoints captured, as well as to identify what helps and hinders practitioners working in line with their viewpoint. Numerous implications

for professional practice have been identified that could support the effective implementation of strategies to support children with SLCN.

1.0 Introduction

The aim of this research is to explore what Early Years Practitioners (EYPs) view as effective in supporting children with speech language and communication needs (SLCN) in the early years.

Acquiring language is understood to be a key part of a child's development (Siraj-Blatchford & Clarke, 2003) and impacts on a wide range of key skills including literacy and behaviour. The number of children identified as having SLCN has been increasing by 4-6 percent each year since 2011 and is the most common primary need of children on the SEN register (Whitaker, 2014), with 40 percent of children with a statement of educational needs having SLCN (Law et al., 2001). It is argued that early intervention is key to supporting children with these needs, as it has the greatest impact and has been found to be most cost-effective. There has been a call to improve and reduce the variability of provision (Bercow, 2008), which is argued to be in part due to the diverse workforce and range of qualifications held by staff. There has been an emphasis placed on Educational Psychologists (EPs) role in early intervention and prevention (Department for Education and Employment, 2000), as well as in supporting professionals to understand complex difficulties and child development. The EP role may include training, multi-agency work and preventative interventions within this area, as well as providing a psychological insight into child development and the environmental context (Shannon & Posada, 2007).

Research has indicated the importance of gaining practitioners viewpoints on supporting children with SLCN, though little research has been carried out in the area (Marshall & Lewis, 2014). It could therefore be argued that the viewpoints of EYPs regarding supporting children with SLCN will impact on the engagement and delivery of strategies to support these children, and EPs are well placed to carry out this exploration.

This research will explore the viewpoints of early years practitioners with regards to strategies to support children with SLCN.

1.1 Professional and Personal Motivations for Research

A primary stakeholder in this research is the Local Authority (LA) where the Researcher was on placement as a trainee educational psychologist (TEP) for the duration of the research. The focus LA had recently rolled out a screening and intervention tool across all early years settings due to the prevalence of SLCN within the borough. The LA was keen for research into practice within early years to be carried out to further their understanding of provision and practice within the LA.

This research will investigate how strategies to support children with SLCN are viewed by EYPs, exploring how these views differ and how these different viewpoints may impact upon practice and collaboration with professionals. Findings may offer insight into how future strategies are developed and delivered in a way that is likely to be fully supported by EYPs.

The personal motivation of the researcher for this research stems from her professional background working with young children in early years settings. The number of children with SLCN accessing early years settings appeared to be increasing and the range of strategies available seemed vast. These factors coupled with the diversity of the workforce and exposure to training resulted in children receiving variable support. This led to a professional curiosity regarding how EYPs view strategies and whether further insight into their viewpoints could promote a more successful implementation of strategies to support children with SLCN.

Q methodology appeared to be an appropriate approach to explore these viewpoints as it aims to reduce the influence of the researcher, by co-constructing the narrative and reality explored. It also openly expresses participants' views and addresses the often inherent power imbalance in research studies.

1.2 Overview of the Thesis

The research will be presented in the following structure:

- **Chapter 2: Literature Review** – The Literature Review explores existing research regarding SLCN, the impact of SLCN and the importance of assessment and intervention. A systematic literature review has been carried out with a focus on the views of EYPs, which informs the research question.
- **Chapter 3: Methodology** – The Methodology Chapter explains the epistemological stance adopted by the Researcher, the aims, origin and process of Q methodology, alternative research designs, quality criteria for qualitative and quantitative research, the procedure followed for this research and ethical considerations.
- **Chapter 4: Results** – The Results Chapter presents the analysis and interpretation of the data, and the subsequent viewpoints. Findings are outlined and also presented in relation to follow up interviews with a sample of participants.
- **Chapter 5: Discussion** – The Discussion Chapter summarises the main findings of the research and considers these in relation to key research reviewed within the Literature Review. The strength and limitations of the research are discussed in relation to the quality criteria for qualitative and quantitative designs and Q methodology. The implications for professional practice and future research are also considered. Finally, the main findings of the research are summarised and the unique contribution of the research is examined in the conclusions.

2 LITERATURE REVIEW

2.1 Introduction

In 2014 the most common primary need of children that had a statement of education needs or were at School Action Plus was SLCN, and this number has been increasing by 4-6 percent each year since 2011 (Whitaker, 2014). It has also been reported that children with SLCN achieving a 'good level of development' on the Early Years Foundation Stage (EYFS) profile (DfE, 2014) was just 16 percent compared to 56 percent for children without Special Educational Needs (SEN) (Simes, 2014). 40 percent of children with statements of SEN have SLCN (Law et al., 2001) and SLCN is the primary need for 10 percent of children with a statement. Therefore a high proportion of the children an Educational Psychologist (EP) is involved with will have SLCN and their educational settings will need support in how to best meet their needs. This is particularly important as collaboration between health and education professionals can impact on outcomes for these children (McConnellogue, 2011).

The Better Communication Research Programme (Department for Children, Schools, & Families, 2008) identifies that children's speech, language and communication skills should be developed by all professionals working with children. To achieve this practitioners need an awareness of SLCN in order to be able to identify need, support and refer to specialist services if necessary. The high rate of SLCN in early years, combined with the importance of early intervention and all professionals supporting speech, language and communication development, highlights the important role Educational Psychologists must play in supporting these children. Understanding Early Years Practitioners' (EYP) viewpoints on SLCN would allow EPs to utilise their facilitation skills in order to enable systemic change, which could be key to more positive outcomes.

Language development involves four different components; phonology, semantics, syntax and pragmatics, these are independent of one another but all four are required to master language acquisition (Barrett & Hammond, 2008). Speech, language and communication (SL&C) includes a wide range of skills which can impact on receptive, expressive and pragmatic language. Mroz (2006) carried out a study to explore EYP's understanding and knowledge, as well as the type of training they had accessed. In order

to explore this in more detail six areas of language development were identified; comprehension, attention and listening skills, the relationship between play and language development, speech sound development, expressive language and the use of language in social contexts. Nursery teachers were found to be more likely to have received SLCN training (30%) than reception teachers (18%). The sample of participants indicated receiving most input regarding play and language and receiving least input on speech sound development. However, 26 percent reported receiving no training at all. This training is also reflected in practitioner's reported confidence within the six areas, with confidence regarding attention and listening skills being highest. The reception teachers also reported lower confidence than nursery teachers in all areas, except speech sound development. Once again, this may be a reflection of the reported access to training being higher within nursery staff.

The complexity of skills required to master language acquisition, combined with the limited access to training and expressed need for further input from staff in a range of research (Letts & Hall, 2003; Mroz & Letts, 2008; Sadler, 2005), suggests that EYPs' conceptualisation of SLCN is likely to be highly informed by their experiences and exposure to needs, as well as the knowledge base and ethos of the staff within the wider setting. Therefore not only is SLCN a complex term but practitioners' understanding of the term is also likely to be highly variable.

There is limited research into Early Years Practitioners' perceptions, attributions and viewpoints with regard to SLCN despite research indicating the important role played by teacher attitudes, beliefs and expectations of pupils with special educational needs (Sadler, 2005) and current research indicates that it would be a valuable area for further exploration (Marshall & Lewis, 2014; McCartney, Ellis, Boyle, Turnbull, & Kerr, 2010; Mroz & Letts, 2008). It is argued that practitioners' expressed viewpoints may impact on child language outcomes. Understanding EYP views on SLCN may have implications for service delivery and how training can be tailored to best meet the needs of these practitioners, and ultimately children with SLCN (Marshall & Lewis, 2014).

Speech and language therapists (SLTs) are usually applying a consultative model of practice, replacing direct therapy with advice to teachers and support staff, especially in

mainstream provision (Lindsay, Dockrell, Mackie, & Letchford, 2005; McCartney et al., 2010). Therefore it is argued that understanding EYPs' views on SLCN will help identify how to foster this collaborative approach and ultimately improve outcomes for children with SLCN.

The qualifications and experience held by Early Years Practitioners varies greatly and reported levels of training for EYP is low (Mroz & Hall, 2003). However, there has been an increase in staff with at least a Level 3 qualification (in full day care settings), from 84 percent in 2011 to 87 percent in 2013 (Brind et al., 2014). It is highly likely that the wide range of skill and experience levels within this workforce will generate a wide range of viewpoints as to their role in supporting children with speech, language and communication needs. Exploring current practitioners' viewpoints of what facilitates effective delivery of speech and language interventions, and what acts as barriers, may help identify where further support needs to be provided and multi-agency relationships can be strengthened. Herbel-Eisenmann, Drake, and Cirillo (2009) argue that it is important to engage staff in reviewing current practice to ensure that the results are meaningful.

The literature review will explore key influences on speech, language and communication development, including socio-economic status and how SLCN affects other areas of development and achievement. The current provision within education, including patterns of intervention will also be explored. Finally it is argued that early intervention supported by EPs is essential for supporting children with SLCN, in order to provide a holistic and collaborative approach from education and health in meeting these needs. As highlighted by Law and Durkin (2000), it is important that this intervention is integrated within the curriculum, which becomes increasingly challenging as children progress school with age.

2.2 Importance of Speech Language and Communication

“There is no doubt about the importance that language plays in the lives of children”

Siraj-Blatchford and Clarke (2003, p. 20)

2.2.1 Development of Speech, Language and Communication

The underpinning theories of language development will be discussed within this section, however, this will not be an in-depth exploration or critique of the various models. This decision has been taken as the research carried out does not focus on identifying which theory is most appropriate but rather what strategies are perceived to be effective by practitioners, therefore only key areas that are pertinent to this research are explored.

It is widely accepted that the early years is a critical period for development, especially SL&C, which underpins many other areas of children’s development. Being able to process speech (receptive language) in order to understand others as well as being able to express ideas and interact with others (expressive language) are fundamental skills of a child’s development (Freeman & Hartshorne, 2009). The early years are often understood to be a sensitive window, as it is a period of rapid neurological development, and it has been suggested that the period from birth to 3 years old is a critical period for intellectual and social development (Ward, 1999). Therefore, the years prior to a child starting school are a critical period for their visual, language and emotional development (Freeman & Hartshorne, 2009). The fundamental importance of language development within the early years and later outcomes has also been highlighted through longitudinal research (Potter, 2007).

It has long been acknowledged that human infants are predisposed to learning language, Chomsky (1959) and Holzman (1997) suggest we are also predisposed to teach language. The process of how children acquire language is now widely understood to be more than purely an innate tendency for language to develop, but rather that the environment and quantity and quality of adult-child interactions play vital roles (Bruner, 1983). The interactionist perspective taken by key psychologists such as Vygotsky (1978), suggest

that social interactions provide the basis for language development. Lenneberg, Chomsky, and Marx (1967) offer support for this stance by stating that infants are programmed to develop language, though to occur satisfactorily the physiology of the child must be appropriate and the environment must provide quality stimulus. The social learning theory also supports the concept that language develops through modelling, conditioning and reinforcement, as well as 'abstract modelling' as suggested by Bandura (1977). It is also suggested that adult-child speech has specific properties that facilitate language development, this includes repetition, short simple utterances and a slow rate, all of which assist attention, perception, arousal and comprehension (Bickford-Smith, Wijayatilake, & Woods, 2005; Knight, Studdert-Kennedy, & Hurford, 2000; Siraj-Blatchford & Clarke, 2003; Weare, 2007). This approach, however, is undermined by the development of language despite poor modelling and it has been identified that much parental correction is focussed on factual elements rather than grammatical aspects, therefore suggesting that language development is more than modelling and reinforcement alone (Crain, 2015).

It is noted that child led, shared attention with key adults in a supportive environment has been identified as beneficial to verbal comprehension development (Bruner, 1983; Vygotsky, 1978). A study on late talking toddlers reported that although within-child skills, such as hearing, cognitive processing and working memory, are important, the interactions between the caregiver and child are of crucial importance (Freeman & Hartshorne, 2009; Springate, Atkinson, Straw, Lamont, & Grayson, 2008). However, it is not just the amount of oral language input but rather the content of this language, and access to a range of language that has been found to relate to intellectual development as well as language development (Freeman & Hartshorne, 2009).

2.2.2 Speech, Language and Communication, Literacy and Behaviour

The centrality of communication to achieving, both within education, as well as wider life outcomes, is represented by its recognition within the United Nations Children's Fund (UNICEF), United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Health Organisation's ten core life skills (Bercow, 2008). Communication is therefore a fundamental human right. This is also apparent within UK policy and government reviews of Early Years Provision. Though the Every Child Matters (ECM) agenda is no longer current government policy it continues to underpin much of the practice within the early years environment. The Bercow review, a review of services for children and young people with SLCN commissioned by the government in 2007, suggests that SL&C skills underpin all five outcomes of the ECM agenda, and an inability to effectively communicate puts children and young people at increased risk of poor outcomes (Bercow, 2008).

Research demonstrates that good communication, language and literacy at a young age has the highest correlation with academic outcomes at seven years (Freeman & Hartshorne, 2009). This is understood to be because children with SLCN particularly struggle to access the curriculum since almost all aspects of the school life are language based (Dockrell, Sylva, Huxford, & Roberts, 2008; Locke, Ginsborg, & Peers, 2002). Children with speech, language and communication needs have also been found to be at increased risk of developing social, emotional and behavioural difficulties (SEBD), likely due to their inability to effectively interact with others, as well as difficulties accessing the curriculum (Brownlie et al., 2004; Lindsay, Dockrell, & Strand, 2007). Children start to develop social competence within the first few weeks of their life and continue to develop as a life-long process. This can be supported by parents and early years practitioners, through one-to-one and small group activities, and language plays a major role even during the early stages of this development (Siraj-Blatchford & Clarke, 2003).

The impact of SLCN on social, emotional and behavioural needs is important, and must not be underestimated. It is argued emotional and social intelligence have more influence on personal, educational and career success than 'intelligence' in its

conventional form (Goleman, 1996) and it has become increasingly understood that social and emotional skills are central to positive development, social groups, society and effective education. Communication is valued highly within wider society, indicated by 61 percent of employers identifying communication as the most important 'soft skill' (Morgan, 2008). It is therefore essential to support children with SLCN as early as possible to prevent difficulties with social and emotional development, which in turn create difficulties in a wide range of areas (Weare, 2007). Evidence suggests that language is a better predictor of later behaviour needs than the opposite causal direction, indicating that SLCN can impact on SEBD (Petersen et al., 2013).

2.3 What are Speech, Language and Communication Needs (SLCN)?

The Bercow Review (2008) reports that SLCN covers a wide range of difficulties related to all aspects of communication in children and young people, including difficulties with fluency, forming sounds and words, formulating sentences, understanding what others say, and using language socially. SLCN are associated with a wide range of factors including neurodevelopmental difficulties, sensory impairments and social and emotional needs.

SLCN is the most common childhood difficulty (Mroz, 2006; Ward, 1999) and it is estimated that approximately seven percent of five year olds in England have significant difficulties with speech and/or language, and are likely to need specialist or targeted intervention at key points in their development. It is also believed that if language impairments continue beyond the age of 6 years they often continue into adult life (McCartney, Ellis, & Boyle, 2009). Further to this, approximately 50 percent of children in socio-economically disadvantaged populations have significantly lower speech and language skills than children of their age in other socio-economic environments. It is essential that these children have access to early years provision which target these learning needs and can support in specific targeted intervention if required (Bercow, 2008). Therefore, research into how best to support children with SLCN from an early age is considered to be essential to improve outcomes.

2.4 SLCN and achievement

An increasing body of research is evidencing the importance of strong speaking and listening skills to supporting children's reading acquisition (Bercow, 2008; Rose, 2006) and the size of a child's vocabulary is argued to be the best predictor of later reading success (Potter, 2007). Research carried out by A. Gallagher, Frith, and Snowling (2000) as well as Hatcher and Hulme (1999) demonstrated that verbal ability was also a significant predictor of reading comprehension. This is of particular concern as Locke, Ginsborg, and Peers (2002) argue that efficient literacy skills are universally seen as one of the fundamental goals of society, with a strong link between literacy and employment. Although further understanding is required regarding the interrelationship between oracy and literacy, it is widely accepted that early spoken skills underpin reading and writing skills (Letts & Hall, 2003). It is suggested that literacy development and future school success are most effectively supported through the development of oral language skills during the preschool period (Potter, 2007). The main areas of difficulty for children with SLCN are the acquisition of literacy skills as well as SEBD, though statistics also show a significant gap between children and young people with SLCN and their peers with regards to wider educational achievement (McConnellogue, 2011).

2.5 SLCN and Socio-Economic Status

A range of research has lent support to the argument that low socio-economic status (SES) is linked to underachievement (Potter, 2007), the importance of which is demonstrated in the range of government initiatives to help redress the imbalance, such as the Narrowing the Gap programme (Springate et al., 2008) and the introduction of free preschool places for 2 year olds in areas of deprivation (Georgeson et al., 2014). Children from a low SES are more likely to have poor language skills in comparison to peers from high SES (Locke, Ginsborg, & Peers, 2002). Although the environment is acknowledged to play a vital role in this, it remains uncertain what element of the environment is most related to these needs (Marshall & Lewis, 2014), though an

evidence-based consensus is developing for attributing outcomes to the fact that better experiences in the early years are crucial to raising educational outcomes.

EYP report increasing numbers of children have poor linguistic skills in areas of socio-economic deprivation, and feel these children require extensive support to further develop their language acquisition (Locke, Ginsborg, & Peers, 2002). It is argued that in order to address the achievement gap in literacy and numeracy between low and high SES groups, resources should be utilised to target SL&C skills rather than more subject specific prescriptive teaching guidelines (Locke, Ginsborg, & Peers, 2002).

In a study by Locke, Ginsborg, and Peers (2002) including 223 (106 boys) children aged between 3:1 and 4:8 attending nurseries situated in areas of social and economic deprivation (as indicated by the proportion of children eligible for free school meals) results indicated that the vast majority of children's language performance was well below their expected level for their chronological age. Boys' receptive language was found to be statistically significantly lower than girls'. Expressive language, though lower, was not found to be significantly so. Boys' overall language scores were significantly lower than girls. Nearly half of all participants experienced moderate to severe receptive or expressive difficulties and well over half experienced moderate to severe overall language delay. The participants' language scores were also compared to their general cognitive abilities (as assessed by the British Ability Scales II) and their language scores were also found to be statistically significantly lower than their cognitive ability. Overall the participants' general cognitive abilities were in line with the general population, though many performed well below the expected level for speech and language, indicating that the SLCN are not attributed to cognitive ability within this population (Locke, Ginsborg, & Peers, 2002).

This study lends support to the argument that children from low SES have impoverished SL&C as well as the fact the boys are outperformed by girls in this area. If these language needs are not addressed appropriately these children are at risk of making poor educational progress, which in turn may result in them being classified as having special educational needs at a later stage.

2.6 Collaborative Working

40 percent of children with statements of SEN have SLCN (Law et al., 2001) and SLCN is the primary need of 10 percent of children with a statement. Therefore a high proportion of the children an EP is involved with will have SLCN and their educational settings will need support in how to best meet their needs. Further to this, a study carried out by McConnellogue (2011) indicated that 62.8 percent of new referrals to the Educational Psychology Service (EPS), regardless of the reason for referral, were identified as having or had SLCN, further demonstrating the rationale for collaborative working between SLTs and EPs in the identification and support of needs. This is particularly important as collaboration between health and education professionals can impact on outcomes for these children (McConnellogue, 2011; O'Keeffe & McDowell, 2004).

Close working relationships and an understanding of each profession's remit and knowledge is required to ensure children access the support required. Despite an emphasis on collaborative working, such as the joint professional development framework (Freeman & Hartshorne, 2009) there are few studies exploring the relationship between EPs and SLTs (Law & Durkin, 2000). Law and Durkin (2000) call for a consistent and coherent communication system between EPs, SLTs and teachers to enhance early assessment and intervention. Though EPs and SLTs both employ hypothesis testing approaches to assessment, drawing on a range of sources (Division of Educational & Child Psychology, 1999), EPs' recommendations are more likely to consider the interaction of the systemic, group and individual factors than SLTs' approach, which remains relatively child focused (Law & Durkin, 2000).

It is essential that collaborative working is further developed, especially as EPs play a pivotal role in children and young people accessing specialist provision and education healthcare plans (EHCP) as they carry out the statutory assessment. Further to this the Berrow review (2008) recommends a holistic approach to supporting children, drawing on person centred planning, which EPs may have a vital role in facilitating.

Bercow argues that operating in isolation results in misunderstandings which can be infuriating for parents, and families are keen to see joint working between professionals. Bercow also identified that within the 1070 responses received from professionals including EYPs and SLTs in answering the question “do health and education services work together?” 28 percent said “rarely”, 63 percent said “sometimes” and just 19 percent said “all or most of the time” (Bercow, 2008). The difficulties in delivering collaborative, joined up work to children with SLCN are in part due to SLTs being based within health services whilst other professionals, including EPs and teachers, are based in education, as is much of the practice and intervention (Law et al., 2001). As the greater part of provision for children and young people with SLCN is required to be delivered within the curriculum, collaborative working between EPs and SLTs may be essential in facilitating this. It may be most appropriate for joint assessment of a child with SLCN and SEBD or literacy needs to ensure the expertise of both professions are drawn upon to make sure a comprehensive, accurate, assessment of needs is gained (Stringer & Lozano, 2007).

Bottling and Resling (2007) argue that despite the identified rationale for collaboration between EPs and SLTs the services often remain separate and often don’t share information which may inform the practice within each profession. This is also supported by a study carried out by Farrell et al. (2006) into multiagency working which found that SLTs were not a service EPs were regularly involved with. Palikara, Lindsay, Cullen, and Dockrell (2007) also stated that over 50 percent of EPs reported not collaborating with SLTs. However, it is suggested that joint working between education, health and social care is most well established in the early years (Freeman & Hartshorne, 2009). Parents of children with SLCN that were most satisfied with provision accessed by their child also perceived that professionals were collaborating effectively, demonstrating the importance and impact of collaborative working for families (Law et al., 2001). If EYPs provide good practice for all, some of the stresses currently placed on SLT services could be relieved, resulting in more collaborative working with more complex cases being possible.

Law et al. (2001) highlight that although SLT services hold the prime responsibility for specialist services relating to SLCN the ultimate responsibility lies with education. Law

and Durkin (2000) argue that provision for children with SLCN should be embedded in the curriculum, which becomes increasingly difficult as the child gets older (Lindsay & Dockrell, 2004), once again highlighting the importance of both a collaborative approach and early intervention. It is therefore within the remit of EPs to help support educational settings in meeting the needs of children with SLCN.

One of the strongest arguments for collaborative working is the high correlation of SLCN and other needs, including academic achievement and SEBD. This complexity results in later involvement from a wide range of professionals. If collaborative working is commonplace then children are more likely to be supported more appropriately and effectively at the earliest stage possible, which is likely to reduce the possibility of misdiagnosis.

2.7 Early Identification and Intervention

“Early identification means recognising a child’s difficulties quickly, both as early as possible in his or her life, and as soon as possible after the difficulty becomes apparent. Early intervention means making a prompt intervention to support the child and family alike” Bercow (2008, p. 24)

There is a strong opinion regarding the importance of early intervention and the danger of its absence (Barrett & Hammond, 2008). Early intervention is strongly advocated for language development as it has the greatest impact as well as being most cost-effective (Freeman & Hartshorne, 2009), this being reflected in government policy (Bercow, 2008). It is argued that intervention in the early years is crucial to effectively improving outcomes, especially for those from lower socio-economic backgrounds (Field, 2010). Official guidance indicates that early identification of SLCN is essential to prompt remedial action as there may be serious academic and emotional and behavioural consequences if the needs remain unaddressed (Department for Education, 1994).

2.7.1 Identification and Assessment

Teachers report most commonly using “comparison with peers” to identify children with SLCN (Mroz, 2006). However, with the increasing number of peers entering early years settings with impoverished language and communication skills (Locke, Ginsborg, & Peers, 2002) teachers expectations may be falling, resulting in under identification. This is of particular concern in areas of low SES due to the large body of research evidencing the impact of SES on SLCN (Locke, Ginsborg, & Peers, 2002; Mroz, 2006).

The Bercow (2008) review clearly states that in order to provide appropriate support for children to interact socially and participate fully in education careful indication of a diverse range of needs is essential. Early identification can be challenging due to the variation in trajectories of early development, often resulting in impairment being misunderstood, needs being masked by English as an additional language (EAL) or that delay rather than impairment is identified (often due to low SES) (Bercow, 2008). This challenge is reflected in staff’s concerns regarding their knowledge and ability to identify needs (Mroz, 2006). Baseline assessments of children entering school have been introduced to help rectify this, and assessments are carried out in the first seven weeks of the child joining reception. This may result in children being identified as having SLCN when they may just require more time to gain confidence or conversely children may not be identified as having difficulties because they are judged to be shy or needing time to adjust to school (Locke, Ginsborg, & Peers, 2002). Practitioners are also more likely to identify expressive difficulties over receptive language needs, especially in children who present inappropriate or challenging behaviour (Stringer & Lozano, 2007).

Children with SLCN are at a reported risk of developing SEBD, and it is therefore important that when discussing children with behavioural or learning needs early years practitioners must also explore the possibility of an underlying communication need (Mroz, 2006). This is of particular importance as preschool children demonstrating early onset conduct problems are suggested to be at increased risk of school dropout in future years (Webster Stratton & Reid, 2003) and early intervention has been argued to be of considerable benefit to the child and wider community (Carlson, Tiret, Bender, & Benson, 2011).

2.7.2 Early Intervention

The acknowledged “critical period” between 0 to 3 years has strengthened the rationale for early intervention and some suggest that intervention during this period can prevent or manage primary language disabilities (Ward, 1999). It has, however, also been argued that “the earlier the better” may not always be correct, though there continues to be an emphasis on early intervention. As such Hall (1989) highlighted the need for further studies to validate this assertion. Evidence supporting the importance of early intervention can be challenging to gather as some suggest the impact of such intervention can only be seen in the long-term, as demonstrated by Ward’s (1999) study spanning a three year period (Freeman & Hartshorne, 2009).

Evidence has been provided for a sensitive period where relatively small amounts of appropriate intervention can have a large effect, as demonstrated by Ward (1999). In this study children required just 140 minutes of SLT input over four months when treated at 10.6 months old, compared to those receiving treatment at three-years-old within a SLT clinic, needing on average 14 months of treatment. Ward’s (1999) study aimed to evidence the impact of early intervention and hypothesised that children receiving SLT intervention following detection on an SL&C screen aged between 8 and 21 months old (mean 10.6 months) would not show SLCN at the age they would typically be referred to SLT (3 years old). The study used matched experimental and control groups, which were followed up over a two-year period. Participants were assessed using the Receptive Expressive Emergent Language Scales (REEL) at pre, post and follow-up stages. A score of 100 represents an average age ability and scores between 83-89 are categorised as ‘outside normal limits’. Details of the participants and their language scores at each stage of the study can be found in Table 2.1.

Table 2.1: A table representing participants and language scores in Ward's (1999) study

	GROUP ONE						GROUP TWO					
	Receptive and expressive delay associated with generalised listening difficulties						Respond appropriately to environmental sound but fail to develop verbal comprehension					
	Experimental n=49			Control n=49			Experimental n=9			Control n=8		
	Pre	Post	Follow-up	Pre	Post	Follow-up	Pre	Post	Follow-up	Pre	Post	Follow-up
Age (months)	10.4	14.5	38.1	10.8	-	36.2	10.5	14.5	38.4	11.0	-	35.3
Expressive (REEL)	68	93	105	67.2	-	77	67.8	88	106	72.6	-	75
Receptive (REEL)	65.8	99.8	107	67.8	-	79	66	101	104	73	-	77

Children were put into three groups based on need (so intervention could be tailored accordingly) which were matched with control groups. All received equal input. Group three has not been reported here as data were not available for each phase of the research.

The ethical concern of withholding treatment from the control group was rationalised as children would not typically receive support at such a young age and there was little evidence to suggest it would be effective. All children were reassessed one and two years post initial assessment. Children in the experimental groups made on average a 34.5 point increase on their receptive language quotient, and 22.5 on expressive scores, and all children from the experimental group had linguistic scores within normal limits at age three.

The experimental groups received on average 140 minutes of SLT involvement, which is in contrast to the mean amount of 15.5 hours of SLT input when aged 3:01 years in the same local clinic. By the final assessment 30 percent of the control children had been referred to SLT, whereas none of the experimental group had and all but three of the experimental group were within normal linguistic limits age three, whereas just 15 percent of the controls were in this range. This is of particular importance as studies have indicated that the majority of children with detected language delay aged three had problems in school at age eight, and if language impairment continues past the age of six years old it often continues into adult life (McCartney, Ellis, & Boyle, 2009; Young et al., 2002). Therefore improving language prior to three years old may have long-lasting implications.

Even though 70 percent of the control group did not require later referral, suggesting the early intervention for a number of the experimental group may have been unnecessary, the cost implication of delivering preventative intervention within the first year may prove to be beneficial. Further to this although not all were later referred to SLT, just 15 percent of the control group had age-appropriate language, compared to the experimental group. Ward (1999) also suggests that making environmental changes played a key role in preventing language disabilities, which can be actioned by EYPs, and is even more cost-effective.

The study does, however, have a number of limitations. In particular all assessments and interventions were carried out by the same SLTs, which may have caused bias, and statistical analysis was only possible for one of the three experimental groups due to participant size. Therefore the study would be improved by blind assessments as well as a larger sample size.

EPs and SLTs also face challenges regarding accurate assessment of SLCN and associated needs. There is often an expectation for EPs to carry out psychometric assessments, though the validity of such tests is undermined by the overreliance on receptive language, even in those subtests classified as non-verbal. Further to this the EP role is most frequently utilised within a statutory role for identifying what provision a child should access. It is important that EPs support settings in meeting the needs of the child, as EPs work holistically, drawing on systemic, group and individual understanding (Law & Durkin, 2000). The challenges faced by EYPs as well as other professionals in correctly identifying SLCN further highlights the importance of good practice within mainstream provision, allowing early years practitioners to draw on strategies known to be effective without waiting for what can be a lengthy process to access specialist assessment and support .

Parents reported long waits between identification and provision being provided, especially by SLT (Bercow, 2008). If early years settings become more confident in identifying and supporting children with speech language delay and use key strategies in their everyday practice, it will ensure that those requiring low-level intervention receive it in a timely manner and those with more complex needs can be identified more effectively if they are not making progress despite good practice.

2.8 Pre-school Provision and Speech, Language and Communication Needs

2.8.1 Pre-school provision in the UK

It has been understood for some time that children who access preschool in some form have better outcomes when reaching school, with regard to educational attainment and cognitive skills (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2010; Tickell, 2011). It has since been shown that these effects have lasted until children were 11 years old (Sylva et al., 2010). It is suggested that if children do not receive quality intervention in the early years they are at increased risk of lower educational attainment, behavioural, emotional or psychological difficulties, challenges to their mental health and poorer employment prospects (Bercow, 2008; Dunsmuir, Clifford, & Took, 2006; Lindsay & Dockrell, 2012). The Early Childhood Matters Evidence from the Effective Pre-School and Primary Education Project (EPPE) report highlighted that high-quality provision can be an effective intervention to reduce the risk of poor educational outcomes for 'at-risk' groups. In recent years the provision of free entitlement for childcare has been extended to all 'disadvantaged' 2-year-olds to help ensure that "at-risk" groups are not at a disadvantage when entering school (Kington, Gates, & Sammons, 2013). High-quality preschool provision has been found to impact children's intellectual, social and behavioural development, and can benefit children's language skills over the long term, as well as predict vocabulary scores up to the age of 12 (Belsky et al., 2007; Potter, 2007). However, Ofsted (2007) reported that in a third of settings communication, language and literacy, more specifically speaking and listening, were below expected levels for the foundation stage curriculum. With the majority of mothers returning to work within 12 months of having a baby (Freeman & Hartshorne, 2009) high numbers of children are spending their formative years outside the home. There is no evidence suggesting this increased time outside the home and in childcare has a negative impact on language or cognition, research does however suggest that it's the quality rather than quantity of these interactions which is important, further highlighting the importance of high quality childcare (Freeman & Hartshorne, 2009).

2.8.2 Early Years Foundation Stage (EYFS)

The EYFS guidance was created in 2008 and was later reviewed in 2014 with the emphasis on delivering improved outcomes for all children and helping close the achievement gap (Department for Education, 2014). However, during the consultation phase of its development key bodies, including the National Children's Bureau and the National Union of Teachers, raised concerns regarding the lack of developmental theory informing the guidance (Potter, 2007). They also argued for more explicit guidance being provided in this area in order to help practitioners understand how their practice impacts on the development and learning of young children. The guidance predominantly refers to aspirations, with little definition of the knowledge, skills and experience required to fulfil such goals. The EYFS proposes that early years settings should provide time and opportunities to develop spoken language, but doesn't provide guidance on how this time can be facilitated. Poor staff ratios and the need to increase staff's knowledge in this area should be considered. It is argued that without a strong developmental framework underpinning the guidance the impact of the guidance is significantly reduced (Potter, 2007).

Within the UK's nursery provision substantial amount of time is devoted to free play, focusing on practitioner-child interactions, which can be difficult to monitor. It also does not provide exposure to small group activities, which can be used to develop children's confidence and competence of working with others and which provides appropriate opportunities to model underpinning speech and language skills such as turn taking (Locke, Ginsborg, & Peers, 2002).

Potter (2007) argues that in order to raise the educational achievements of disadvantaged children, language and communication skills must be central to the delivery of the EYFS and informed and sustained attempts to improve language and communication must be made. It is therefore essential that EYPs have sufficient knowledge and understanding of how language and communication develop, as well as being aware of the most effective strategies to promote this development.

2.8.3 Early Years Practitioners and Speech Language and Communication Needs

The workforce involved in working with children is large, diverse and complex. They have a critical role in supporting SL&C development and it is therefore essential that this is a competent and skilled workforce (Morgan, 2008). It has been reported that there is a lack of training of school staff in understanding SEN and there is a well-documented gap in teachers' knowledge; surveys have shown 73 percent of teachers receive no SEN training during teacher training that covered SLCN (Morgan, 2008).

Due to the prevalence of SLCN it is likely that all EYPs will work with a child with these needs at some point during their career. It is therefore essential that EYPs have the skills to recognise and support these children, especially due to the acknowledged impact of such difficulties on their social and emotional skills and academic achievement (Mroz, 2006). EYPs play a key role in creating learning environments in which general language skills are promoted as well as identifying and supporting children with potential problems (Letts & Hall, 2003).

A study carried out by Mroz (2006) exploring EYP's knowledge and understanding of SLCN found that despite the curriculum explicitly emphasising the importance of speech language and communication in underpinning all learning, 29 percent of teachers surveyed (N = 89) reported not using any strategies to assess children's speech and language, and 70 percent of these nursery teachers were unable to recognise poor language skills in an example child presented. Mroz (2006) argues this may be a reflection on the lack of clear guidelines within the curriculum, combined with the limited use of regular screening tools. A number of studies report that EYPs have concerns about the lack of training in supporting children with SLCN and their ability to identify these needs (Letts & Hall, 2003; Mroz & Letts, 2008; Sadler, 2005).

A study carried out by Letts and Hall (2003) used questionnaires involving Likert scales targeting key areas of speech and language development to explore the extent to which training enables EYPs to provide appropriate environments to promote language and appropriately identify and support children with SLCN. The sample included 829 early years practitioners from a predominantly urban, working-class background. Although this is a large sample it is not representative of the wider population, this is particularly

important as low SES is correlated with language difficulties. The authors hypothesised that patterns would be identifiable between qualifications, training needs, confidence in identification, strategies used and experience. The results suggested that despite some EYPs accessing training, relatively few felt their needs were fully met, and the majority of the EYPs failed to recognise significant language delays in an example case study. It was also found that experience with children with SLCN depresses confidence. It is possible that the exposure to children with SLCN increases staff's awareness of the complexity, which may make EYPs question their competence in meeting their needs (Letts & Hall, 2003; Sadler, 2005). The main emphasis of the study was on what qualifications and experience EYP's had, and if there are any correlations between these factors as well as confidence levels and identified training needs. Generally, high levels of confidence were reported. As the study required participants to read case studies and identify whether the children would require SLT referral, it helped make it more practical and controlled. However, demand characteristics may undermine the findings. Letts and Hall (2003) argue that there is a need for training that meets the pressures on EYPs, to support them in identifying problems with children's SL&C development and to work optimally to promote development.

In a study carried out by Sadler (2005) approximately 90 percent of the 89 teachers surveyed could not recall having received input on SLCN during their initial teacher training. Further to this, 88 percent of the sample self-rated their knowledge as limited or very limited. The only teacher to rate her knowledge as considerable was a qualified SLT, however, she was one of the 63 percent that rated themselves as "not at all" or "not very" confident in meeting the needs of children with severe SLCN within a mainstream class. No relationship was found between experience of children with SLCN and reported confidence.

These results suggest hands-on experience is not guaranteed to improve practice nor increase confidence and as SLCN is the most common childhood disability, all practitioners working with children should have at least a basic knowledge of how to identify and support children with these needs (Mroz, 2006).

“Not until a significant proportion of nursery staff have the knowledge and skills to assess, monitor and promote the spoken language, and the motivation and opportunity to do so, will we be able to meet the needs not only of the large numbers of children whose language is delayed, but also those with potentially more significant special educational needs”

Locke, Ginsborg, and Peers (2002, p. 14)

2.9 SLCN and support

The demand on SLTs is increasing, in part due to the inclusion of children with SLCN within mainstream provision. Therefore, if support and increasing good practice can be delivered at a whole school/nursery level, then more children can be supported by good practice and early intervention can be achieved (Law et al., 2001). Although direct and indirect intervention has been found to be effective in developing communication in children with persistent SLCN, there is a lack of research identifying what is most effective and what understanding there is yet to be transferred to early years settings. It is important that skilled practitioners are able to tailor their practice to the children's needs as well as select appropriate intervention (Bercow, 2008).

Although Early Intervention is advocated, this may take many forms, including direct versus indirect, group versus individual support, receptive or expressive language focussed, and how many hours are delivered. Each of these themes will be explored in turn below.

2.9.1 Direct versus indirect model of delivery

A number of studies reviewed look predominantly at direct versus indirect delivery (Boyle, McCartney, O'Hare, & Forbes, 2009; A. L. Gallagher & Chiat, 2009; McCartney, Ellis, & Boyle, 2009; Mecrow, Beckwith, & Klee, 2010), whereas others addressed this question through evaluating the effectiveness of school-based interventions (Hutchinson & Clegg, 2011).

In a large randomised control trial evaluating direct versus indirect and individual versus group models of therapy Boyle, McCartney, O'Hare, and Forbes (2009) identified that both direct and indirect approaches generated comparable outcomes for expressive language. However, they also highlighted that the data for receptive language is less clear. Mecrow, Beckwith, and Klee (2010) and Hutchinson and Clegg (2011) also found that children receiving interventions delivered by education staff made significant improvement in expressive language. In contrast to this A. L. Gallagher and Chiat (2009) found a significant difference in expressive language improvements between therapy with a SLT than nursery-based intervention. Though on closer inspection it is evident that the two groups were far from comparable. The nursery-based intervention group received a total of 24 hours of therapy whereas the SLT group received 96 hours. It could then be argued that A. L. Gallagher and Chiat's (2009) study is revealing the effect of the number of hours of therapy a child receives rather than direct versus indirect models, as the authors conclude.

The difference in results across these studies could potentially be accounted for by the differing delivery of indirect interventions, highlighting the importance of staff training in increasing the effectiveness of indirect models of intervention (Hutchinson & Clegg, 2011). McCartney, Ellis, & Boyle, (2009) suggest that indirect models need to be monitored and outcomes measured regularly to ensure a high level of delivery.

2.9.2 Group versus Individual Interventions

A number of studies identified that group interventions were as effective as individual therapy at improving expressive language (Hutchinson & Clegg, 2011). Boyle, McCartney, O'Hare, and Forbes (2009) identify that not only is it a more cost effective method of delivery but there are benefits to the child's self-esteem through increasing their opportunities for social exchanges, peer support and the prevention of over-dependence on adults, which is especially important with the high rate of comorbidity of SLCN and SEBD (Petersen et al., 2013). Group interventions, however, face challenges and careful planning is essential as the dynamics of the group can impact on the outcomes of the sessions (McCartney, Ellis, & Boyle, 2009).

2.9.3 Expressive and Receptive Language Results

There appears to be a difference in the effectiveness of interventions for improving expressive language compared to receptive language. Studies by McCartney, Ellis, and Boyle (2009) and Hutchinson and Clegg (2011) found that although interventions impacted on children's expressive language, no improvements were found in receptive language. In contrast to these results A. L. Gallagher and Chiat (2009) found that in the intense intervention group, delivered by SLT, receptive language improved. This may suggest that the level of intensity of the intervention and/or the skill set of the practitioner plays a key role and warrants further research.

2.9.4 Hours of Intervention

The hours of intervention delivered varied greatly across the studies reviewed, varying from as little as 30 minutes per week for an eight week period (Hutchinson & Clegg, 2011) to 96 hours over a 24 week period (A. L. Gallagher & Chiat, 2009). The most effective amount of intervention is unknown and is likely to be partially dependent on the level of need presented by the children concerned (Mecrow, Beckwith, & Klee, 2010). Law (2000) argues that 6 hours of intervention (which is often the norm within the UK model of delivery) is not enough. However, Hutchinson and Clegg (2011) found significant improvements in children's expressive language based on an intervention delivered by education staff for a total of four hours. As the evidence and conclusions drawn by researchers varies so greatly it appears further research into this area is needed. Although some of the research reviewed does approach the question of optimum hours there are often a number of other important variables, such as the delivery style chosen, which result in a conclusion being hard to draw.

2.9.5 Strategies to support children with SLCN

The literature reviewed highlights key themes and a variety of reported effectiveness of language intervention. However, many questions remain unanswered and no research has been found which explores what specific strategies are reported to be most effective.

The importance of adopting theory-based interventions that have been found to be effective is acknowledged and highlighted by research (Carlson, Tiet, Bender, & Benson, 2011). Understanding the effectiveness of intervention in the real world requires attention being paid to the contextual variables, including the views of those delivering the intervention in order to identify the facilitators and barriers to effective delivery (Kratochwill & Shernoff, 2004; Rones & Hoagwood, 2000). It is suggested that intervention must be more than specific programmes and a pervasive approach is recommended (Lindsay et al., 2008). Further to this it is argued the most effective programmes build on the individual needs, interests and identities of each child (Siraj-Blatchford & Clarke, 2003). Law et al. (2001) recommend that the greater part of the provision for school-age children with speech and language needs should be embedded within the curriculum and take the child's educational context into consideration. The EP therefore has a vital role in facilitating both a holistic view of the child, including environmental and systemic factors, as well as advising on how these needs can be met within the wider curriculum.

2.10 Attitudes

It is acknowledged that differences in context may account for difference in language acquisition and development. Part of that context are the teachers' beliefs and attitudes that inform their practice, and so impact on children's educational experiences.

The role of practitioners' attitudes, beliefs and expectations of children with special needs has been highlighted over a number of years (Sadler, 2005; Webster & McConnell, 1987). By exploring underlying beliefs that inform teachers' practice, information may be gained as to why varying contexts differentially mediate children's learning (Wiebe

Berry, 2006). Herbel-Eisenmann, Drake, and Cirillo (2009) also agree that it's important to understand teachers' perspectives when looking at supporting children, though it is typical within educational research that explorations of practice are carried out by outsiders (Cochran-Smith & Lytle, 1993). Indeed Cochran-Smith and Lytle (1993) and argue that involving educators in such investigations may generate better understanding of current practice, which in turn may impact children's outcomes. Baker, Kupersmidt, Voegler-Lee, Arnold and Willoughby (2010) suggest that to fully achieve the potential of preventative intervention, better understanding of implementation issues is needed.

Most intervention research emphasises mean differences between treatment and control groups, although such research masks implementation variability. These differences in implementation are likely to affect child outcomes as even evidence-based interventions which are not implemented effectively are unlikely to work (Roulstone, Wren, Bakopoulou, & Lindsay, 2012). The acknowledged importance of research into the impact of the effective implementation on educational outcomes is gaining increasing attention. A study carried out by Pence, Justice, and Wiggins (2008) reported that the delivery of an intervention by teachers never reached fidelity levels, suggesting that children are likely to receive different amounts of intervention based on the practitioner participation, resulting in differing outcomes for those children exposed to such interventions. Programme implementation can be affected by the perceived need for intervention, how compatible it is with practitioner beliefs, their familiarity with the principles underpinning the intervention, as well as practitioner and child characteristics (Durlak & DuPre, 2008; Han, Catron, Weiss, & Marciel, 2005). As such the acceptability of an intervention is best understood as a dynamic concept that changes over time (Turan, Ostrosky, Halle, & DeStefano, 2004).

Wiebe Berry (2006) suggests well researched interventions may be less effective if the practitioner embraces different epistemologies to those underpinning the intervention. Engaging practitioners in identifying what they view as effective can help inform future provision and ensure their viewpoints are acknowledged and reflected in the training and intervention suggested, which is more likely to ensure the intervention is effective.

“Despite the importance of teachers in fostering language learning, there is little research on their perspectives” (McCartney et al., 2010, p. 360).

2.11 Rationale for the Research Question

The systematic literature review which will be presented in Section 2.12 was informed by the research reviewed above and was used to systematically identify what research has been carried out to explore the perspective of practitioners on how to effectively support children with SLCN within a mainstream environment. This focus was identified by an emphasis within the literature on naturalistic practice by EYPs and the acknowledged importance of context, yet a distinct lack of research into the views and attitudes of this workforce. Further to this was the limited information presented on what strategies should be utilised within intervention by these practitioners. All of the above informed the development of the research question: “what viewpoints are held by early years practitioners in effectively supporting children with SLCN”.

2.12 Systematic Literature Review

The purpose of a systematic literature review (SLR) is to locate, appraise and synthesise evidence from research to provide empirical awareness to a scientific research question. They also aim to reduce the bias of studies through careful reporting of findings and methodologies employed (Petticrew & Roberts, 2008).

2.12.1 Methodology

2.12.1.1 Search strategy

Initial search: Searches were conducted to identify studies relating to SLCN, strategies and views of EYPs, on two databases; PsycINFO and The Education Resources Information Centre (ERIC) on 17th July 2015. Table 2.2 details the initial search terms used in both databases and the yields for PsycINFO. This included four concepts; SLCN, EYP, intervention and views. Each concept was broadened to include common synonyms and terminology. The systematic search returned 108 articles, 16 of which were duplicates. Studies published in a peer-reviewed journal since 2000 were included in this review. The following inclusion and exclusion criteria were applied:

Inclusion Criteria: Views of staff, mainstream environment, SLCN focussed, strategies, early years

Exclusion Criteria: Specialist provision, specialist staff, not of preschool age

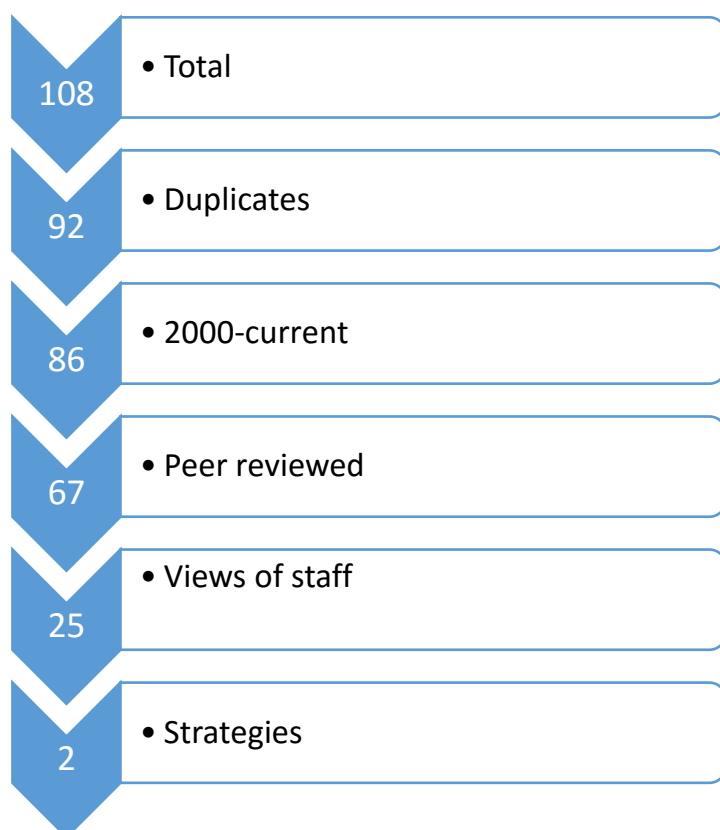
The impact of the above criteria is demonstrated in Figure 2.1. This resulted in 2 papers being included from the original 108 generated through PsychINFO and ERIC searches. The reference list of Marshall and Lewis (2014) was examined to identify additional research that had not been identified within the searches. Through reviewing this paper it highlighted that there were a number of papers which had not been identified through the initial search, indicating that a revision was required in order to capture all relevant articles. A review of keywords and abstracts of the papers accepted indicated that not all papers referenced concept four (views). Therefore the search was amended accordingly. A summary of these results can be found in Table 2.3.

Table 2.2: A table to show initial search terms used on both PsychINFO and ERIC and yields from PsychINFO

Concept One		Concept Two		Concept Three		Concept Four	
SLCN		EYP		Intervention		Views	
1. speech and language delay	373	7. Early years practitioner*	78	14. Support	355734	21. View*	252561
2. Speech, language and communication needs	83	8. education* practitioner*	348	15. "Early intervention"	13985	22. Belie*	169744
3. Language Delay	1177	9. Staff	61299	16. Small-group language intervention	1	23. Perspective*	216110
4. Language impair*	4935	10. Teacher	10032	17. Evidence-based practice	14230	24. Perceive*	183568
5. SLCN	25	11. nursery nurse	8	18. Strateg*	256545	25. Perception*	381765
		12. early years professional*	41	19. Intervene*	281168	26. Attribut*	104794
						27. Opinion*	44762
						28. Viewpoint	11426
						29. Attitude*	353094
						30. Outlook*	4674
						31. Standpoint*	7624
6 = 1 or 2 or 3 or 4 or 5	6044	13 = 7 or 8 or 9 or 10 or 11 or 12	157525	20= 14 or 15 or 16 or 17 or 18 or 19	781503	32= 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31	1226023
6 and 13 and 20 and 32	44						

PsychINFO = 44, ERIC = 62, TOTAL = 108

Figure 2.1: A figure to demonstrate the inclusion and exclusion criteria applied to the initial search



The two papers meeting inclusion criteria were also generated by the second search and therefore are included in the summary below.

Second search: The search was carried out in line with the initial search and the same inclusion and exclusion criteria were applied. The details of the subsequent search can be found in Table 2.4.

The second systematic search returned 467 articles, 48 of which were duplicates. Figure 2.2 visually depicts the search yields and impact of the exclusion and inclusion criteria applied.

Table 2.3: A table to show the second search terms used on both PsychINFO and ERIC and yields from PsychINFO

Concept 1		Concept 2		Concept 3	
SLCN		EYP		Intervention	
1. speech and language delay	373	7. Early years practitioner*	78	14. Support	355734
2. Speech, language and communication needs	83	8. education* practitioner*	348	15. "Early intervention"	13985
3. Language Delay	1177	9. Staff	61299	16. Small-group language intervention	1
4. Language impair*	4935	10. Teacher	10032	17. Evidence-based practice	14230
5. SLCN	25	11. nursery nurse	8	18. Strateg*	256545
		12. early years professional*	41	19. Interven*	281168
6 = 1 or 2 or 3 or 4 or 5	6044	13 = 7 or 8 or 9 or 10 or 11 or 12	157525	20= 14 or 15 or 16 or 17 or 18 or 19	781503
6 and 13 and 20	120				

PsychINFO = 120, ERIC = 347, TOTAL = 467

Figure 2.2: A figure to demonstrate the inclusion and exclusion criteria applied to the second search



Second search: As this search did not specify views each of the 233 peer reviewed articles' abstracts were manually reviewed to identify whether practitioners views were explored.

Of the eight papers that met the inclusion criteria four were excluded based on the exclusion criteria; two were specialist staff or provision and a further two were not of preschool age.

The four papers generated by the SLR are summarised in Table 2.4 and reviewed in turn.

Table 2.4: A table presenting a summary of the papers meeting inclusion and exclusion criteria

Study	Participant type	Experience	n	Age of children	Country	Setting	Methodology	Analysis
1. Marshall and Lewis (2014)	4 Sure Start leaders 3 SLTs 3 Health Visitors 1 SENCo 1 Assistant SLT	8 m – 11 years experience in current role	12	0-5:11 years	UK	Health Centres Schools Sure Starts Nurseries Community	Semi-structured interviews Convenience sample	Thematic analysis (including thematic framework)
2. Mroz and Letts (2008)	Nursery Nurses Teachers Child Care Practitioners	Not reported	50	0-5 years	UK	Schools Nurseries	Interviews Purposive sample	Grounded Theory
3. Shaughnessy and Sanger (2005)	Kindergarten teachers (Qualifications 65% BA/BS, 34.5% MA/MS/Med)	83% of staff had over 5 years experience	484	5-6 years	USA	Schools	Questionnaires including Likert scales Purposive sample	Likert means
4. Turan, Ostrosky, Halle, and DeStefano (2004)	38 Preschool staff 28 Elementary teachers (All participants had a minimum of one year headship experience)	11.32 years Range 1-27	66	4 years 8 years	USA	Preschools Schools	Structured analogue (vignettes) Convenience sample	Statistical analysis

2.12.2 Studies identified in SLR

2.12.2.1 Marshall & Lewis (2014)

The purpose of the study was to identify EYP's beliefs about the impact of the environment on children's language development as well as how they reported assessing and intervening if they were concerned that a child had SLCN.

Participants and Procedure

Marshall and Lewis (2014) conducted a small-scale exploratory study which used one-to-one semi-structured interviews, utilising open questioning and purposive sampling of twelve participants (3 SLTs, 3 health visitors, 4 SureStart leads, 1 Special Educational Needs Coordinator (SENCo), 1 assistant SLT). Though the study's aim was to explore EYPs' views, the participants in the study arguably do not reflect EYPs as only five of the 12 participants were early years practitioners. In fact, all were in a leadership role and the sample was therefore not a true representation of the workforce engaged in day to day practice. The study focussed on children aged 0-5:11 years. The transcripts of interviews were verified by participants, and the findings were mapped onto the key areas explored through the semi structured interviews.

Results and Analysis

Environmental Themes

Participants identified a range of themes within 'environmental factors', including;

1. People around the child

The quality of interactions as well as the level of attention paid to the child were identified as integral to the child's development.

2. Physical objects environment

More than half the participants mentioned the physical location of the child, such as an overreliance on a highchair or pushchair, restricting exploration of the child's environment. Books were viewed very positively as was access to a range of toys and support by adult language was also emphasised.

3. Auditory environment, including language

All participants identified a language rich environment is important to developing SL&C, including adults talking to children and the amount of background noise in the home. Further to this there were mixed views on the use of television, some viewed it as a distraction, whereas others viewed it positively when used appropriately with a focus on educational input.

4. Available opportunities for the child

Participants believed that experiences such as going to the park were important, as was play, especially when supported by an adult.

The influence and importance of differing factors and strategies were not always distinguished between typically developing children and those at risk or currently delayed.

Intervention and Strategies

Key themes which were highlighted within intervention included a sensitive approach with parents, as well as providing advice and modelling strategies for them, and individualising intervention. Participants believed that interaction between practitioners and children was important, whilst modifying interactions according to the child's needs was essential. Strategies listed included; gaining eye contact, turn taking, gaining attention, sitting face-to-face and making specific time with the child.

Conclusion and Limitations

There are a number of considerations which limit the conclusions drawn. As mentioned, the participants are not reflective of EYPs and therefore the validity and generalisability is restricted. A thematic framework was used which was structured by the questions posed by the researcher, and the analysis was therefore less reflexive to the emerging themes. Other developing themes may have been missed as they did not fit with the research question. Further to this the data generated within each theme was not grouped by professionals and therefore there may be an over representation of groups of professionals within certain themes, but this is not identifiable from the data presented.

Despite the above limitations the study demonstrated that participants viewed both the children, and the setting they access, as a central influence on speech and language development. They acknowledge that language acquisition is not only a result of a child's intrinsic ability, but a complex interaction between social, physical and linguistic contextual influences. These beliefs will inevitably influence the interventions and strategies delivered by these professionals. The participants were also able to identify some key strategies which they found to be effective with children with SLCN, though this was not explored in depth.

2.12.2.2 Mroz & Letts (2008)

The principal aim of the study was to explore the knowledge, pedagogical understanding and confidence of EYP within SLCN. Further to this they explored EYPs' perceptions of their role and responsibility in identifying and supporting children with SLCN.

Participants and Procedure

50 participants from a total of 181 volunteers who had indicated they were happy to be interviewed during the questionnaire phase of a link study were selected (27.6 percent) (Mroz, Hall, Santer, & Letts, 2002). This population varied to that of the 181 questionnaire responses as practitioners from day nurseries and playgroups were more likely to apply than school staff. Participants were categorised into low, medium or high confidence groups, as indicated by their response to six questions in the previous link study. Participants with low confidence were of a similar proportion to high confidence practitioners, though those with medium confidence were found to be less likely to volunteer for this study. The 50 participants were selected to represent the original profile of participants in the questionnaire study, rather than fit the profile of those that had volunteered. As such four selection parameters were used; type of setting, level of confidence, role/job title, regional authority.

The researchers attempted to get an even balance between teachers, nursery nurses and other practitioners as well as excluding managers that didn't work directly with children on a day-to-day basis. The interview schedule was informed by key themes that

arose from the questionnaires of the previous study (Mroz, Hall, Santer, & Letts, 2002). Although it was not a pre-requisite to participate, all participants had experience of working with a child with SCLN. This categorisation of experience, as well as the likelihood that those opting to engage in the research were more likely to have had some experience, may account for why all participants had experience. Alternatively it could be a representation of how many children are experiencing some SCLN needs, this being especially relevant in settings placed within low SES communities.

Results and Analysis

Grounded theory was used to analyse the data. The categories were generated from the research question and the emerging interview themes. Intercoders were used, as well as checks by one researcher for consistency, followed by checks by the researchers post analysis for internal consistency. Finally the participants reviewed a draft of the research and were invited to feedback, further increasing validity.

Children discussed

The majority of the children discussed during the interviews were identified as having SCLN beyond the age of three (64 percent), half of these being aged three to four, the other half four to five. 24 percent were identified between two to three years and 12 percent had been identified prior to two years old. This may be a reflection of the demographic of children with SCLN or the participants interviewed, as half of the practitioners worked in nursery schools and reception classes, and thus with the older age bracket. Further to this three years old is a typical age for SLT referral (Ward, 1999).

Strategies used

31 of the 50 interviewees reported working one-to-one with a child with SCLN, though what this entailed was not always clear. Favoured strategies included modelling (as identified by 16 practitioners), use of peers (15), and games (14). Three staff did not report using any strategies, 22 of the remaining 47 reported that they generated the strategies entirely themselves, 25 consulted with others, including employing strategies previously identified by SLTs and EPs, and 12 generated strategies with SLTs directly. The study found no relationship between seniority of staff, training received or complexity

of need, whether strategies were generated individually (22) or in collaboration (25). 15 of the 50 cases discussed had SLT involvement.

Conclusion and Limitations

The fact that over half the participants (60 percent) opted to talk about a child with complex needs indicates that EYPs regularly have to support children with such needs, Mroz and Letts (2008) suggest that this is likely to be at least every three years for EYPs. It is potentially concerning that despite the majority reflecting on complex needs, only 12 reported having directly generated strategies with an SLT. 15 children were identified by the interviewee alone, once again demonstrating the importance of early years practitioners' knowledge. A strength of the study is the use of EYPs and the removal of participants that don't regularly work directly with the children, resulting in a more representative sample. The study demonstrates diversity of approaches to both identification and support of children with SLCN. EYPs appear highly motivated to support these children and will apparently draw on whatever resources and support is available. However, inevitably this may lead to inadequacies in provision, potentially resulting in many children with SLCN entering school at disadvantage, as is also suggested by Bercow (2008), unless appropriate training and support for staff is provided.

2.12.2.3 Shaughnessy & Sanger, 2005

Shaughnessy and Sanger (2005) aimed to explore kindergarten teachers' perceptions of language and literacy, a subsection of which explored perceptions of teacher-delivered interventions.

Participants and Procedure

Questionnaires were sent to 1036 kindergarten teachers in public and private settings in a Midwestern state of America. 484 responses were received (46.68 percent return rate) 97 percent of the sample were female, 65 percent had a BA/BS and 34.5 percent had an MA/MS/MEd. The vast majority of participants (435) indicated that they had

received professional preparation regarding language development in Early Years, either as an undergraduate, graduate or in-service training. 84 percent of the sample were currently supporting children with SLCN and nearly 60 percent had previously worked with such children.

Perceptions were explored through presenting participants with 40 statements that had been generated by reviewing literature and which were agreed upon by four professionals in language development and five professionals in survey research and instrument design. A combination of response formats were included and several items could have more than one response per participant. Demographic and background data were gained followed by 23 likert-type statements addressing participants' perceptions of language and literacy development, roles and responsibilities of SLTs and teacher-delivered classroom interventions. The statements were focussed on the development typically seen in the first five years of life and the eight statements referring to interventions were informed by best practice recommendations.

Results and Analysis

The staff agreed with seven of the eight statements referring to interventions, which are presented in order of most strongly agree below:

1. Coaching the child in conversations with peers
2. Giving one direction at a time
3. Restating the child's idea in correct grammatical form, then having the child repeat the correct form
4. Modelling the correct pronunciation of a word when a child says it incorrectly, then having the child repeat the correct form
5. Rephrasing complex statements in simpler form
6. Explaining new vocabulary before reading a text
7. Giving a child extra time to respond to questions

Staff disagreed that: teachers should support children's language development by asking yes/no questions instead of open-ended ones.

Conclusion and Limitations

The study suggests that participants were knowledgeable about the important role of language development, believed that collaborative working with SLT was essential and that further support was required to ensure effective teacher-delivered interventions. There was an agreement of which strategies would be effective in supporting a child with SLCN and what strategy would be ineffective. However, the number of strategies presented were limited, all were generated by the researches and though they were informed by research they did not represent the views of EYPs.

The response rate suggests that teachers were keen to express their perceptions, however, both qualitative feedback, and the fact that not all items were answered indicated that participants experienced some difficulty with the Likert scale. The demographic of the sample also limits the generalisability of the results, in particular the fact that all participants had a qualification of a BA/BS or above, which is not representative of the EY workforce in the majority of settings in the UK (Brind et al., 2014). The authors also acknowledge that the subjectivity in responding limits the conclusions drawn.

2.12.2.4 Turan, Ostrosky, Halle, & DeStefano (2004)

Turan, Ostrosky, Halle, and DeStefano (2004) aimed to explore whether preschool and elementary teachers preferred a therapeutic (intervention delivered by SLT out of class) or naturalistic (intervention within class by SLT or teacher) approach to intervention. They also explored whether this was different based on whether the child had mild or severe needs.

Participants and Procedure

All participants had a teaching certificate and had been head teacher for at least one year. The preschool teachers had a mean of 11.32 years experience and elementary teachers had 13.48 years. More preschool teachers had experience with supporting children with SLCN than elementary school teachers.

Participants were given vignettes describing children with different levels of language delay (mild and severe) and three intervention strategies (naturalistic teacher implemented, naturalistic SLT implemented and therapeutic). The children presented to preschool teachers were aged four, and aged eight for elementary teachers. The order of the vignettes were randomised and the children's gender was counterbalanced. All participants rated the three interventions for severity on the Language Intervention Rating Profile (LIRP), consisting of 10 items each rated on a four-point Likert scale.

Results and Analysis

A statistically significant difference was found between elementary and preschool teachers' preference of intervention type. Preschool staff demonstrated a preference for naturalistic approaches, which was the opposite to elementary staff ($f(1,64) = 13.49$, $p = .0001$ power of .95). Despite this significance, the three interventions received similar scores on the LIRP, indicating that teachers valued all three approaches relatively equally. However, a relationship between severity and intervention type was not found to be statistically significant. Although statistically significant interaction effects were found, the effect sizes are small. These results are surprising given the emphasis on providing support in the least restrictive, most natural environment (Wolery, 2000).

Teachers valued SLT implemented naturalistic approaches more highly for children with severe language delays, which may be a reflection of their perceived ability or confidence level. The opposite trend was found for children with mild SLCN, though the difference between the whole sample was minimal, ranging from 28.5 to 30.4.

Conclusion and Limitations

There are a number of limitations within this study that must be considered. As the methodology was based on vignettes and participants did not have to implement interventions, or draw heavily on personal experience, participants may not have fully understood the intervention and therefore their views may be different to teachers with first-hand experience of such interventions. Further to this, no detail regarding what each intervention type entailed was provided by the study, therefore this may be a representation of the perception of the intervention described, rather than naturalistic

verses therapeutic as claimed by the study. On average the staff had over eleven years' experience and all participants had been a head teacher for at least a year; they are therefore likely to have different views to practitioners with less experience, which limits the generalisability of the results. The study also did not explore self-reported confidence levels and it is possible that differing levels of confidence may lead to a preference of intervention type which was not covered within this study. Finally the convenience sample, low response rate from elementary teachers (47 percent) and the demographic of the participants (predominantly Caucasian and almost half with a graduate degree) further limits the generalisability of the results. Despite the limitations the study suggests that EYPs prefer SLT led interventions for children with SLCN and pre-school teachers also prefer naturalistic interventions.

2.13 Summary of SLR

Of the four studies reviewed two were from the UK. These are likely to be most generalizable to the present research due to policy, legislation, culture and demographic similarities. Despite having commonality in exploring perceptions/views regarding SLCN strategies there is a wide variance between participants, methodology, analysis and focus. Three of the four studies sample participants who are not representative of the typical workforce, either because of level of qualification (Shaughnessy & Sanger, 2005), experience at senior leadership level (Turan, Ostrosky, Halle, & DeStefano, 2004) or role (Marshall & Lewis, 2014). Therefore the insight gained into typical practitioners' views is arguably limited. Further to this although the studies reference interventions and strategies these are not explored in any depth and the range of strategies is limited. The literature reviewed within the SLR demonstrates the importance of gaining practitioners' views and the range of ways this can be achieved, whilst highlighting the need for a more systematic and in-depth exploration of early years practitioners' viewpoints on effectively supporting children with SLCN and the strategies that can be utilised

Marshall and Lewis (2014) argue that

“There remains a need to test out practitioners’ expressed beliefs and practices and their impact on child language outcomes.” p337

2.14 Unique Contribution

As identified by the studies reviewed above, there is limited research within the UK regarding the viewpoints of Early Years Practitioners regarding SLCN. There is limited research into strategies, even in studies reporting interventions. The studies that do look into EYPs’ views of strategies are very limited in the depth of exploration, have predominantly relied upon rating statements generated solely by the researchers and were carried out with limited numbers of participants. Further to this there is an emphasis on the importance of interventions being carried out in the most unobtrusive, naturalistic environment possible (Wolery, 2000), though with limited research as to what this intervention should look like. The research study carried out aimed to identify strategies within the literature, from key professionals and Early Years Practitioners. All four of the studies reviewed within the SLR used one-to-one interviews or Likert scales. Of the two larger studies both had participants with higher than typical experience or qualifications, which therefore limits generalisability to the target population. Through Q methodology, and the subsequent interviews, a number of views can be identified. A deeper exploration of these identified themes, is also possible. The literature explored, combined with the above rationale and unique contribution led to the generation of the research question: “what viewpoints are held by early years practitioners in effectively supporting children with SLCN”.

3 Methodology

3.1 Introduction to the Methodology

This chapter considers Q methodology as a research approach to explore Early Years Practitioners' views on how to effectively support children with SLCN. The Literature Review provided the context for the current study in order to identify the rationale for this undertaking.

This chapter aims to explore and justify the use of Q methodology. The aims and origins of Q methodology, including an overview of the typical Q methodology procedure is presented as well as how this has been carried within this research. The epistemological standpoint, quality criteria for Q methodology and ethical considerations are also presented.

3.2 The aims and origins of Q Methodology

3.2.1 Aims of Q Methodology

Q methodology aims to reveal various social perspectives and viewpoints existing on a topic by a particular group of individuals (Watts & Stenner, 2005; Webler, Danielson, & Tuler, 2009) and is particularly helpful in providing clarity to research questions that have potentially complex answers. Brown (1996) argues that Q methodology creates structure and form around subjective opinions, though these views are typically unprovable. Q reveals patterns in how people associate opinions through correlations and by person factor analysis (Webler, Danielson, & Tuler, 2009). It is believed that, by using the objective procedures of Q-methodology, subjective behaviour can be made susceptible to reliable investigation.

As it is a helpful approach through which to address complex subject areas it is well situated to explore the complexity of SLCN and the wide range of identified strategies to support children with these needs, as well as identify what viewpoints are held by the practitioners in this area. It does not seek to objectively measure views but rather provides a structure in which to scientifically explore subjectivity.

3.2.2 Origins of Q Methodology

Q methodology is an inverted technique of factor analysis and was invented in 1935 by a British physicist and psychologist William Stephenson as a means of exploring subjective opinion. Evolving from factor analytic theory, it has been applied to a wide field of research including psychology, communication, and behavioural and health sciences (Watts & Stenner, 2012). The development of Q methodology was informed by Stephenson's interest in revealing and examining the subjectivity involved in any situation and as an alternative to traditional qualitative and quantitative empirical methods available at the time (Cross, 2005). Q methodology is the exploration of subjectivity combining qualitative and quantitative methods, providing the rich accounts typically found in qualitative studies whilst utilising mathematical underpinnings of quantum logic techniques, retaining the rigour and transparency found within this quantitative approach (Baker, 2006; Bradley & Miller, 2010).

As opposed to testing hypotheses Q methodology aims to discover hypotheses and takes an abductive approach to research. Abduction is the idea that facts are studied to devise a theory to explain them (Curt, 1994). Abduction differs from deductive research which uses data to test previously formed hypotheses but rather provides a practical technique where the researcher is acknowledged as part of the process and interpretations are made from patterns in the data (Watts & Stenner, 2012). As Q methodology is specifically designed to identify groups of individuals whose overall attitudes are similar, and to explore the differences with those who have other views, it is in line with abductive reasoning (Brown, 1996; LeCouteur & Delfabbro, 2001).

The quantitative element of the methodology is present during data collection and analysis, utilising by-person correlation and factor analysis. The qualitative element is present when the participants are interpreting the statements as to how they fit within their world view and when the factors are being interpreted by the researcher. Ultimately though, Q methodology is focused upon the exploration of human subjectivity (Ellingsen, Størksen, & Stephens, 2010).

3.2.3 Subjectivity

Q Methodology is based on the opinion that subjectivity is everywhere and that it can be systematically measured. It is a robust technique for the measurement of subjective opinions, opposed to other methods such as attitudinal questionnaires, as it allows the researcher to clarify and explain a person's subjective experience by objectifying their perceptions (Cross, 2005). Correlations and by person factor analysis reveal patterns in viewpoints providing a systematic structure to study subjectivity (Webler, Danielson, & Tuler, 2009).

The participants provide their point of view through completing a "Q sort", which involves the sorting and ranking of a "Q set" that includes statements focused on a specific topic. It is acknowledged that each statement will mean different things to different people and how they value these statements will impact on the way in which they rank them based on a subjective, face valid criterion (Watts & Stenner, 2005). Therefore each completed Q sort provides the view on the topic as held by the individual completing the activity. The collected Q sorts are then statistically analysed to search for patterns between participants. The patterns that emerge provide a generalised viewpoint held by a group of people, allowing direct comparisons between viewpoints regardless of the number of people that subscribe to them (McKeown & Thomas, 1988). This exploration demonstrates why Q methodology is described as the scientific study of subjectivity.

3.3 Epistemological standpoint and reflexivity

Epistemology can be described as the nature of knowledge and how the researcher relates to the research subject. A social constructionism view identifies that the researcher and the participants socially construe knowledge through language and interacting with the world, as such both the researcher and participants take an active role in the research project. This active construing leads to a shared understanding of the research topic being collaboratively created (Mertens, 2015).

Social constructionism was established in response to positivism, which is focussed on using scientific methods to find 'facts' and aims to take an objective view of the world. Positivism often aims to predict and explain casual relationships by manipulating and measuring variables. This approach can be criticised for neglecting the context of the research process as well as imposing the researcher's view of the world on participants. The manipulation and measurement of defined variables can generate measurable effects, however, the limitations make it particularly difficult to understand and capture the viewpoints of the participants (Lincoln, Lynham, & Guba, 2011).

A social constructionism approach identifies that social properties are constructed through interactions rather than as a separate, known, entity. It also emphasises the world as that which is lived and felt by those acting in social situations (Schwandt, 2007). The purpose of research informed by a social constructionist epistemology is to understand the various social constructions of meaning and knowledge, as such it is understood that there are as many realities as there are participants. The central aim of research within this epistemology is understanding, and the participants are viewed as helping to construct the reality with the researcher. The values of both the participants and researchers are assumed to exist and this subjectivity is integral to the research (Robson, 2011).

Real world research is often concerned with issues that have an important social dimension and therefore approaches which integrate this social aspect hold high attraction. Constructionism moves away from personal meanings and towards the shared viewpoints that represent the publicly acceptable products, in order to uncover 'social facts' (Dewey 1931, 1985). The main target for social constructionism is to identify the social facts, through attempting to understand the current predominant viewpoints relative to a specific content (Watts & Stenner, 2012). Social constructionist approaches are particularly apt for exploring areas of need that are (at least in part) informed by the social interpretation of need or are less tangible, and as such, harder to define or measure (Robson, 2011). It is argued that SLCN can be in part socially construed as not only does communication serve a social function but it is subject to interpretation which can be informed by the local society and community. For example a child with incorrect grammatical structure of language may be perceived differently

depending on the level of need within the community and the expectations held by the society in which they are involved.

The terms *social constructionism* and *social constructivism* are often used interchangeably, however, there is an important distinction: *social constructivism* usually focuses on the constructions of individuals, whereas *social constructionism* tends to be aimed at describing the constructions of a social groups (Robson, 2011; Watts & Stenner, 2005).

A social constructionist epistemological standpoint was adopted by the researcher, focussed on how groups of Early Years Practitioners construct meaning about the target topic. Q methodology is capable of identifying predominant social viewpoints currently held around a specific area and is therefore in line with the social constructionist standpoint. Within Q methodology social viewpoints are captured through extracting, rotating and interpreting factors from the data collected. The procedure of Q methodology allows social representations to be co-constructed by the researcher and participants (Stainton Rogers & Stainton Rogers, 1990). This demonstrates how social constructionism is a helpful epistemological standpoint to take to understand EYPs' viewpoints using Q methodology.

The epistemology underpinning Q methodology can be viewed in a number of ways within the scientific research community. Whilst some suggest that it is consistent with a post-positivist approach (and is useful in testing hypotheses of prior knowledge), others argue it is in line with a critical post-modernist paradigm (and can help access data, empower and intervene with marginalised groups) (Webler et al, 2009). Within this study Q methodology is used to explore how EYPs might construct their understanding of strategies to support children with SLCN, therefore the most appropriate epistemology remains social constructionist.

3.4 Overview of the Q methodology Process

A lack of understanding regarding Q methodology in comparison to other methods has resulted in a high level of critique and challenge of the methodology. It may be helpful

therefore to provide an overview of the procedure, typically employed with Q methodology, prior to describing how it was used in this specific study (Kitzinger, 1999).

Q methodology procedure can be explained in five broad stages:

- (1) Identifying a concourse on the topic of interest
- (2) Developing a representative set of statements (Q set)
- (3) Specifying the respondents for the study (P set) and the condition of instruction
- (4) Administering the Q sort
- (5) Factor analysing and interpretation

(Brown, 1980)

A detailed explanation of the procedure used in Q methodology will be provided below. The procedure followed for this specific research project will be described later within this chapter.

3.4.1 Identifying a concourse on the topic of interest

The first stage in Q methodology is to create the concourse. The concourse is created with the intention of capturing all the perspectives on the specified topic (Webler, Danielson, & Tuler, 2009). This can also be described as the ‘flow’ of ideas and opinions around the topic of the study (Bradley & Miller, 2010). The items gathered to make up the concourse can be statements, words, pictures, or even smells (Stephenson, 1953). Most Q methodology research utilises statements (Watts & Stenner, 2012), as such from this point this overview will assume statements are used in the Q set. The statements should be what someone has said about the topic or an individual opinion. It is recommended that for a concourse to be most effective it should include a range of sources to make it broadly representative of the focus topic (Watts & Stenner, 2005). Statements can be generated from a heterogeneous range of sources including interviews, focus groups, general conversation, research, scientific texts, newspapers, talk shows and essays (Brown, 1993).

Interviews or focus groups with the target demographic or “P set” can be both an efficient and practical way of developing the concourse as it allows the researcher to ensure all relevant aspects are explored. Arguably the greatest benefit is that the statements come directly from those studied, consequently this minimises the researcher’s influence over the statements included in the Q set (Baker, 2006). When developing Q set statements it is suggested that they be stand-alone sentences that are easy to read and understand which participants should be encouraged to interpret in the context of each other (Webler, Danielson, & Tuler, 2009).

3.4.2 Developing the Q set

A smaller sample of items, which remains representative of the concourse is drawn from the concourse, known as the Q set and optimally contains between 40 and 80 items. It is recommended that this process is done carefully and systematically to ensure a comprehensive set of items is decided upon which provides an accurate representation of the larger concourse. The goal is to generate natural-language statements which must be something that people are likely to have an opinion about (Brown, 1993).

Sexton, Snyder, Wadsworth, Jardine, and Ernest (1998) suggested three ways to refine the concourse to the Q set to ensure appropriate rigour is utilised:

- Q sort to be completed by colleagues or other researchers in target topic and provide feedback
- Pilot the Q set with a small number of participants and then interview them to ascertain their interpretation of the items
- Submit it to a literacy specialist to check for clarity and readability.

Webler, Danielson, and Tuler (2009) suggested an alternative refinement process which can be carried out more independently by the researcher:

- Print each statement out on a piece of paper
- Lay the pieces of paper out on a large surface
- Read each statement and start to group the noticeably similar ones

- Keep related groups in neighbouring areas so it is possible to see when a reorganisation of the piles would be useful
- Continue to reduce the piles, until there is a manageable number

The final Q set should demonstrate good coverage, be broadly representative of the opinion domain and not value-laden or biased towards one viewpoint, so that accurate perspectives can be revealed in the analysis and interpretation stage (Watts & Stenner, 2005).

3.4.3 Specification for the P set and Condition of Instruction

The sample participants in Q methodology are referred to as the P set. Participants should be selected by the researcher because they have something interesting to say about the focus topic (Webler, Danielson, & Tuler, 2009). Whilst it is essential that the focus of the study remains exploratory (and that holding prior assumptions are avoided) which lends itself to opportunistic sampling methods, it is also argued that in order to identify relevant viewpoints careful sampling must be carried out. Further to this it is important that the sample is not unduly homogenous. Therefore purposive sampling methods may need to be utilised to ensure a relevant and sufficiently heterogeneous P set is identified (Watts & Stenner, 2005, 2012). Arguably opportunistic sampling is the most effective approach to ensure that the study remains exploratory. This can then be supported by utilising purposive sampling, if required, to ensure that the sample is appropriately representative of the target group.

The P set is suggested to be between 40 and 60 participants, with some researchers suggesting that fewer than 50 is optimum. It is generally agreed that there should be less participants than statements in the Q set (Van Exel & De Graaf, 2005). This is because large P sets can overlook subtle nuances, complexities and patterns within the data (Watts & Stenner, 2005).

The Condition of Instruction is used to guide the sorting process, when the P set are asked to rank the Q set, and defines the context to which the participant's viewpoint is gathered. It is informed by the research question and should be straightforward and,

where possible, contain one distinct proposition to ensure it is clear and appropriate points of view are gained (Watts & Stenner, 2005).

3.4.4 Administering the Q sort

The ranking procedure in Q methodology is known as the Q sort, it is the technical means of obtaining data for analysis and later factor extraction (Brown, 1980). The aim of the Q sort is for participants to sort statements according to the personal value they assign to each statement and how they fit into their beliefs and understandings (Watts & Stenner, 2005; Webler, Danielson, & Tuler, 2009). Participants are not ordinarily required to rank the entire Q set (from 1 to n), for simplicity and pragmatic reasons. Instead, participants allocate each statement a ranking position in a fixed quasi-normal distribution (illustrated in Figure 3.1) and along a simple, face-valid dimension, such as most to least agree. Commonly an 11 or 13 point scale is used, with ranking value ranging from +6 or +5 for statements which are 'most agreeable', through 'zero', to -5 or -6 for items that are interpreted as 'most disagreeable' creating a model of subjective preferences within the identified discourse (Cross, 2005). This process in practice is simply a convenient means to facilitate participants' rankings of the Q set in order to identify commonly held viewpoints (Watts & Stenner, 2005).

The distribution of the Q sort is developed by the researcher and can be in the form of a free or fixed distribution. There has been a debate regarding the merits and limitations of a fixed versus free distribution within Q sorts. Some argue that free-choice distributions provide the participants with more choice and control over the sorting process. However, it is argued that as no further information can be gained by the researcher based on free-choice distributions the participants are spending additional time on making choices that in reality will not have implications on the analysis of the data. Further to this Brown (1980) argues that based on a 33 statement Q set with a nine point scale, fixed distribution provides many more sorting options than there are people in the world. Therefore though participants may feel they are limited in their responses there are many options and scope for flexibility. From a pragmatic point of view a forced-choice distribution provides data in a more convenient and easily processed form (Block,

2008), it also reveals stable preferences and prevents the tendency of participants to rate more items positively than negatively (Bracken & Fischel, 2006; Watts & Stenner, 2012).

Although Stephenson (1953) advocated a quasi-normal sorting distribution, he also identified that the q-sort could take any form. Brown (1980) carried out a number of statistical comparisons of a range of distributions and found that the distribution effects are virtually nil. It is therefore suggested that the choice of distribution is almost irrelevant as it is the pattern of items within this distribution which is important (Watts & Stenner, 2012).

In order to carry out the Q sort participants are provided with the Q set and initially asked to read each statement to position themselves within the context of the research and familiarise themselves with the statements. Whilst reading the statements the participants are advised to begin sorting the statements into three groups in line with the Condition of Instruction: most agree, least agree and not sure (Brown, 1993). Participants are then required to rank order the Q set in a fixed normal distribution, from their own personal perspective. Each participant's personal interpretation and meaning making results in many different possible patterns of the completed Q sort. A visual depiction of this is presented in Figure 3.1.

Figure 3.1: A figure to show a Q sort taking place



It is advised that consideration should be given to the general shape of the distribution, or kurtosis. The steeper kurtosis is suggested for complex topics as it allows more statements to be placed in the middle, which are those defined as not sure. A flatter kurtosis can be utilised in more simple topics where specific decisions can be made because of increased knowledge. An eleven-point distribution (-5 to +5) is advised for between 40 to 60 statements (Brown, 1980)

Two further processes have been found to be helpful in supporting the procedures within Q methodology, to identify the location of the zero point of interest and for participants to complete a post-activity questionnaire. The zero point of interest requires the participant to draw a line between cards to show the point at which the cards they feel negatively about finish and the cards that they feel positively about start (Webler, Danielson, & Tuler, 2009). Post-activity questionnaires provide further information on the participant's relative ranking of statements and provides an opportunity for elaboration of their point of view (Brown, 1993). These additional processes also inform the analysis and interpretation stage of the factor analysis and viewpoint generation.

3.4.5 Factor analysis and interpretation

The data collected through the Q sort process then undergoes factor analysis and interpretation. Q methodology utilises a by-person correlation and factor analysis procedure, the Q sorts created by the participants are intercorrelated and factor analysed. The initial correlation matrix reflects the configuration of each Q sort to one another as well as the items within the Q set with one another. The factor analysis creates factors onto which the participants 'load' based on their configurations with the Q set. Therefore, two participants loading onto the same factor will have generated similar configurations within their Q set (Øverland, Thorsen, & Størksen, 2012; Watts & Stenner, 2005).

A brief overview of the steps taken within this process is provided below:

- Factor extraction: completed Q sorts are correlated and then factors are extracted. Factors characterise groups of Q sorts that are highly correlated with each other and uncorrelated with others. Significance criteria are derived and applied to the extracted factors by the researcher to identify how many to accept and rotate for further analysis.
- Factor rotation: the identified factors are then rotated to maximise the amount of variance the factor explains as well as ensuring participants are associated with just one factor. This can be carried out using either manual hand rotation by the researcher or automatically using Varimax rotation, or a combination of both.
- Factor arrays: each final factor is represented in an overall Q sort, this summarises the viewpoint held by the participants that make up this factor.
- Factor interpretations: the factor arrays are then interpreted by the researcher and qualitative information gathered from post Q sort questionnaires and interviews are incorporated to represent social viewpoints on the focus topic.

Computer software packages to support the factor extraction, rotation and production of the factor arrays are available. The stages of factor analysis and interpretation will be explored in more detail when describing the findings of the study carried out and will be presented within Chapter 4: Results.

3.4.6 Follow up Data Collection

Follow up interviews can be held with participants post analysis to check the factor interpretations seem accurate and are a fair representation of their views, providing further validity to the results presented. The epistemological standpoint taken by the researcher identifies that the data gathered is a 'snapshot' at that time, as participants' viewpoints change, especially as they are informed by the social world around them which is regularly changing. Q methodology allows the researcher to identify what is currently being said about the target topic, rather than identifying fixed attitudes of individuals. It does not claim to identify viewpoints that are consistent over time with individuals, this is based on the fact that viewpoints are being identified rather than attitudes or personality traits and as such participants are able to express different viewpoints at different times. The only claim being made is that participants did express this item configuration at this particular time. Despite this acknowledgement it is appropriate to expect the emergent shared viewpoints to show consistency over time (Watts & Stenner, 2005).

Alternative research designs to Q methodology that were considered for this research will be briefly considered below.

3.5 Other Research Designs Considered

Quantitative methodologies were considered but rejected for both epistemological and pragmatic reasons. Firstly there is a wealth of research regarding what works with children with SLCN, whether direct or indirect intervention is most effective and individual versus group intervention (Boyle, McCartney, O'Hare, & Forbes, 2009; Department for Children, Schools, & Families, 2008; A. L. Gallagher & Chiat, 2009; Hutchinson & Clegg, 2011; Law, Beecham, & Lindsay, 2012; Mecrow, Beckwith, & Klee, 2010; Roulstone, Wren, Bakopoulou, Goodlad, & Lindsay, 2012). Though further research would further develop this evidence base the unique contribution would be limited. Further to this the term SLCN encompasses a wide range of needs which poses challenges to carrying out rigorous research as matching participants based on needs

would be challenging, though not impossible. These factors led to the decision to explore EYP views, as very little research has been carried out and there has been a call for research in this area (Marshall & Lewis, 2014). Due to the lack of research an exploratory approach appears most fitting. Above all the pragmatic reasonings for disregarding the quantitative methodology is that it is not in line with the epistemological standpoint of the researcher. As previously explored, the social constructionist viewpoint understands the world as a collaboratively generated world which is informed by social norms and viewpoints. Therefore a quantitative methodology would not be in line with this world view. A number of alternative qualitative methods could, however, have been chosen, namely discourse analysis, personal construct psychology or activity theory. The reflections of the researcher regarding alternative methodologies can be found in Appendix One.

Ultimately Q methodology was chosen above those identified as it is a rigorous methodology which emphasises the constructed meanings of individual experiences whilst objectifying participants' viewpoints. This allows the researcher to identify the commonality and patterns within the participant group, whilst retaining the richness of a person's viewpoint and gain as many perspectives as possible.

3.6 Quality Criteria for Q Methodology

As previously explored Q methodology is defined as a qualiquantological approach, combining both qualitative and quantitative approaches to data gathering and analysis (Stainton-Rodgers & Stainton-Rodgers, 1990). The abductive approach employed to explore and interpret the factors presented as 'viewpoints' is the qualitative aspect, whilst quantitative aspects include the fixed quasi-normal distribution of the completed Q sorts and the statistical by-person factor analysis. This combined approach allows the exploration of subjectivity whilst retaining the rigour, transparency and mathematical underpinnings of quantitative approaches (Baker, 2006).

As the methodology encompasses both qualitative and quantitative approaches the relevant quality indicators of each type of research will be explored in turn in the sections to follow.

3.6.1 Quality Indicators for Qualitative Research

Tracy (2010) puts forward an argument for the use of quality criteria for qualitative research. Whilst acknowledging quantitative criteria (including validity, generalisation and reliability) cannot be directly applied to qualitative research Tracy (2010) calls for a language of best practice, which is flexible and contextually situated, in order to frame qualitative work as systematic and structured, if desired. As such she presents eight guidelines to support and improve the reputation of qualitative research, which are summarised in Table 3.1.

Table 3.1: A Table representing quality indicators for qualitative research and how these have been addressed by the researcher

Criteria	Description
Worthy Topic	Research topics often emerge from disciplinary or contextual priorities and should be relevant, timely, significant and interesting.
Rich Rigour	Data collection and analysis should be rigorous which can be demonstrated by collecting sufficient data in an appropriate context, with a suitable sample, clear procedures and transparency regarding the sorting, choosing and organisation of data.
Sincerity	The researcher demonstrates self-reflexivity, transparency, authenticity and genuineness. This relates to the awareness and honesty regarding the researcher's biases and goals.
Credibility	The research should include substantial description and triangulation in order to provide a plausible and persuasive interpretive analysis. Within quantitative research this would align with reliability and replicability.
Resonance	The research should have the ability to meaningfully affect an audience.
Significant contribution	The research should extend knowledge, improve practice or generate future research. This contribution should be demonstrated theoretically, practically, morally, and methodologically.
Ethics	There must be adherence to this throughout the research including at individual, situational and cultural levels.
Meaningful Coherence	This is achieved through identifying the correct method, and the literature, research questions, and results are meaningfully interconnected.

3.6.2 Quality Indicators for Quantitative Research

3.6.2.1 Validity

Validity within a quantitative domain refers to whether the study achieves what it sets out to. Webler, Danielson, and Tuler (2009) identified that the face validity of statements within the Q set can be increased by only editing participants' statements for grammar and where possible using the participant's exact wording. Also consulting with specialists in the focus area to ensure the Q set is representative and broad.

Validity can also be affected by researcher bias, however, a protective element within the methodology is the broad and varied range of statements included in the Q set, reducing the likelihood of socially desirable answers as can be found with individual interviews. The key areas open to bias are;

- which statements make up the Q set;
- who completes the Q sorts; and
- how the analysis is carried out (Webler, Danielson, & Tuler, 2009).

Each of these stages requires value judgement and therefore the bias cannot be eliminated. However, the social constructionist epistemological stance adopted acknowledges and embraces the active engagement of the researcher in co-constructing reality and as such acknowledges the inherent impact of the researcher. It can therefore be argued that issues of validity do not apply to the Q sort as it is identified to be a subjective representation of an individuals' viewpoint.

3.6.2.2 Generalisation

Though Q methodology reveals social perspectives and viewpoints it cannot identify how widely these perspectives are held within a population, therefore the findings cannot be generalised to the wider population (Webler, Danielson, & Tuler, 2009). In order to increase the generalisability of the findings further research would be required. Methods such as questionnaires used on a representative sample would be required to identify how widely these viewpoints are held.

3.6.2.3 Reliability

Reliability refers to the likelihood of the results being replicated if the research were to be carried out on a different occasion. Q methodology has been criticised for its reliability due to small sample sizes, subjectivity of those creating the Q sorts and the unknown reliability of the Q set (Robson, 2011). Van Exel and De Graaf (2005) identify that the most important element of reliability for Q methodology is replicability, specifically; will the same condition of instruction generate schematically reliable factors when delivered to different, though similarly structured, P sets.

Though generally a completed Q sort is acknowledged to be a snapshot of the participant's point of view at that particular moment in time, some researchers have found that completed Q sorts can reveal more stable views. Brown (1980) argues that a key notion underpinning Q methodology is that there are only a limited number of distinct viewpoints on any topic and as such any well-structured Q set and P set should reveal these perspectives. Despite a wide range of personal viewpoints Q has been found to regularly identify a relatively small amount of viewpoints held within the topic area. Dewey's (1931, 1985) belief in social facts helps us to understand why this may be the case; he argues that these facts become integral, substantive and objective part of the environment we encounter. The social facts are therefore likely to have an active influence on personal viewpoints (Watts & Stenner, 2012).

Further to this studies reported by Brown (1980), which administered the same Q set to the same participants at different time points, resulted in correlation coefficients of .80 or higher, suggesting a higher replicability than may be anticipated. The reliability of the study is also increased as participants are encouraged to check back over their expressed viewpoint and make changes if they disagree, which not only provides them with a sense of control but also increases the reliability of the findings (Van Exel & De Graaf, 2005).

Finally the concept of statistical reliability with regards to the ability to generalise the results is of less importance here as Q methodology makes no claims with regards to the percentage of the sample, nor general population, that subscribe to such a viewpoint.

This section has highlighted that, as with all methodologies, Q methodology has limitations though with careful consideration of quality indicators these can be overcome. The following section will provide a systematic account of the procedure followed within the current study to explore practitioners' viewpoints of strategies to effectively support children with SLCN.

3.7 Design

3.7.1 Engaging Stakeholders

In order to ensure that engagement in the study was open to all practitioners in the target LA an email inviting settings to participate was sent to all settings through the LA early years network and an information sheet was provided (Appendix Two). Had the numbers expressing interest in the research surpassed the target sample size then purposive sampling to ensure a broad demographic would have been utilised. However, as anticipated this was not the case, three settings made an expression of interest directly to the researcher and as such were included in the research. In order to identify further participants the area Early Years SENCo identified settings which would be likely to engage in the research as management had shown an interest in developing in this area. This sampling was predominantly opportunistic though also utilised purposive strategies in that charity settings were approached as they were currently not represented by the sample which had demonstrated an interest in the study.

3.7.2 Identifying the concourse

The concourse was generated using a range of sources, as advised by Brown (1993). These will be discussed in turn below.

3.7.2.1 Literature Review

A total of 12 papers informed the concourse, including Government documents and policy, documents from research bodies such as iCAN and the University of Nottingham meta-search engine was used to identify relevant literature regarding strategies to support preschool aged children with SLCN. This returned results from electronic databases: Ovid PsycINFO; ASSIA Applied Sciences Index and Abstracts; and The ISI Web of Knowledge. See Appendix Three for a full list of the documents reviewed.

3.7.2.2 Three focus groups with Early Years Practitioners

Focus groups typically rely on the interaction within the group, opposed to a question-and-answer format as in an interview (Krueger & Casey, 2009) as well as promoting and encouraging collaborative responses as hearing others' suggestions can encourage self-reflection. This interaction is designed to elicit more viewpoints than researcher led interviews (Mertens, 2015).

Carrying out focus groups within practitioners' settings may increase participants' confidence to share views but it may also increase the likelihood of 'group think'. Focus groups are also susceptible to the dynamics of hierarchies as well as extreme views predominating the discussion (Robson, 2011). Despite these shortcomings focus groups were selected over interviews for this study. The initial stages of nominal group technique (NGT) were used to structure and facilitate each group (Stewart, Shamdasani, & Rook, 2007). This methodology was drawn upon to negate some of the limitations identified above and ensure the breadth and depth of the concourse was captured, minority voices were heard, as well as to gather diverse opinions. It also reduce the likelihood of the group being biased by strong characters or hierarchical structures or creating a group unity (de Ruyter, 1996).

Sample

Three focus groups took place in a children's centre, charity and private setting with 6, 4 and 2 participants respectively, all of which were female, in May and June 2015. The purpose of the focus group was to identify a broad range of strategies to support children with SLCN within mainstream early years settings in the focus LA. The participants also provided demographic data to allow analysis of the sample.

A summary of the demographic of the groups are presented in Table 3.2.

Table 3.2: A table to show the demographic characteristic of the focus groups (n=12)

Demographic Characteristic	Category	Number of Participants	Percentage of Total N
Age	16-20	0	0%
	21-30	7	58%
	31-40	2	17%
	41-50	1	8%
	51+	2	17%
Years of Experience	0-1	1	8%
	2 - 5	4	33%
	6 -10	1	8%
	11-15	4	33%
	16-20		0%
	20-25		0%
	25+	2	17%
Qualification	Level 3	7	58%
	Level 5	0	0%
	Level 6	1	8%
	Level 7	4	33%
	None	0	0%

Procedure

All focus groups were held within the participants' settings in a room free from distraction and lasted between 30 and 50 minutes.

In order to ensure that all participants felt able to share their views and that minority voices were heard participants were encouraged to generate boundaries and rules before engaging in any discussions to create a safe environment which fostered open discussions. The researcher introduced the rules below if they were not initially raised by the participants:

- confidentiality for all participants and experiences discussed, no child to be identified by name
- respect for all viewpoints and non-judgemental of others views
- listen to others' views and do not interrupt
- comfortable sharing – share only what you feel comfortable to
- anyone is allowed to remove themselves from the group at any stage without judgement

NGT is regarded to have four stages (de Ruyter, 1996). These will now be outlined to explain how they were used for the focus groups in this research:

- The researcher presented the topic to the group and asked the question “How can an Early Years Practitioner support a child with SLCN?”. The question was intentionally worded to not include ‘interventions’ as it was felt that this would limit the strategies generated. As the purpose was to explore all levels of support and intervention it was essential that the practitioners felt able to identify environmental, whole setting, small group and individual strategies as well as formal and informal strategies. The participants were encouraged to consider this question independently and record their responses on a piece of paper. It was emphasised that there was no right or wrong answers and the focus of the research was EYPs' subjective viewpoints.
- The participants were then asked to share a strategy from their list and the researcher recorded this, verbatim where possible. Initially participants were

invited to share their views and the researcher then ensured that all participants had been provided with an opportunity to contribute. This was repeated until all strategies had been shared. Participants were encouraged to record any further strategies that occurred to them based on the discussion and share these as appropriate

- The researcher and the group then reviewed the strategies to ensure they had been recorded accurately and remove any duplication.
- The final stage of the NGT involves voting and ranking each of the generated strategies, however, due to the subsequent ranking to be carried out within the Q sort, this section was omitted.

Many of the participants also independently volunteered to hand in their personal record sheets (though this was not requested of them) which allowed the researcher to check that no strategies had been missed or inaccurately captured.

3.7.2.3 Focus Group held with domain specific professionals

A further focus group was held with three paediatric SLTs to identify any further strategies and ensure a broad and deep concourse was identified.

Sample

The focus group consisted of three paediatric SLTs, who had between one and a half to four and half years' experience, which were opportunity sampled and who had opted-in to the research. The research proposal was submitted to the NHS research board and further documentation was completed in order to meet the NHS research criteria (Appendix Four).

Procedure

The focus groups were carried out as outlined for the EYP focus group.

3.7.3 Concourse Summary

It was felt that the concourse generated was broadly representative of the strategies to support preschool children with SLCN due to the range of sources utilised (Brown, 1993; Watts & Stenner, 2005). This resulted in an initial set of 299 statements. Each statement gathered was recorded (accompanied by its source) in a Word document (Appendix Five).

3.7.4 Developing the Q set

To ensure a representative and accurate Q set was captured a rigorous and systematic process was undertaken, which was carried out over a number of steps:

Each statement from the concourse was printed on a piece of paper and numbered. The researcher and three TEPs undertaking their doctoral training then gradually refined the statements as outlined by Webler, Danielson, and Tuler (2009). They were encouraged to maintain the breadth of the concourse whilst refining and clarifying the concourse. The researcher was available to clarify any unclear statements and answer any questions held. This resulted in the concourse being refined to 60 statements.

Discussions were also held regarding the wording of the statements. Oppenheim's (1992) criteria for questionnaire design, interviewing and attitude measurement guidance was used.

This included editing statements to:

- improve intelligibility and reduce ambiguity;
- ensure each statement contained a single idea;
- remove duplications; and
- use phrasing that sounded naturalistic rather than formal.

This Q set was then piloted on an EP in the focus LA who had an understanding of Q methodology. The EP was asked to follow the Q sorting instructions and process that

the researcher had created to check that the instructions and all statements were clear, and the Q set was broadly representative. The EP was asked to identify if there were any statements that they felt lacked clarity, were repeated or any missing statements.

The EP identified two statements that appeared to be repeats, leading to their removal, three statements were reworded to add clarity and a further statement was rephrased from a negative 'do not give verbal reprimands'. It was agreed that this statement was hard to rank based on the condition of the instruction as well as other statements being phrased positively. These changes resulted in a final Q set of 58 (Appendix Six). This process helped identify that the items were appropriate for the research and that no key statements appeared to be missing. The EP also identified that as the strategies were so varied and broad the sort may depend on the type of need the child presents with, such that different strategies are more/less appropriate for communication opposed to speech or language. This observation highlights the complexity of the research area and also the breadth of strategies available for meeting the needs of this population. This information informed the post Q sort questionnaire, to include a question regarding if a participant had held a particular child or area of difficulty in mind.

3.7.5 P Set

The P set included 42 participants from seven settings, including children's centres, charity and private settings. Two of the three settings involved in the focus groups engaged in the Q sort as well as a further five settings which were opportunity sampled. All participants met the inclusion criteria:

- Early Years Practitioners that work with children aged 0-60 months; and
- Have experience of working with children with SLCN (with or without formal diagnosis), directly or indirectly.

The characteristics of the settings sampled are shown in Table 3:3, which shows that the children's centres were similar in size but varied in the number of children accessing funded places and the percentage of children with SEN. The private settings varied

greatly in size, though had similar proportions of children with SEN and EAL. All settings were rated as either 'Good' or 'Outstanding' in their most recent Ofsted inspection. Data is presented in bands to ensure confidentiality.

Table 3.3: A table to show the demographic characteristic of the settings sampled

Setting	Number of children on roll	Number of staff employed	Ofsted rating	Percentage of two year olds accessing free places	Percentage of three and four year olds accessing free places	Percentage of children with SEN	Percentage of children with EAL
A (Children's Centre)	50-60	10-15	Good	90-100%	80-90%	20-30%	10-20%
B (Children's Centre)	50-60	10-15	Outstanding	50-60%	90-100%	0-10%	0-10%
C (Children's Centre)	50-60	10-15	Good	90-100%	80-90%	30-40%	0-10%
D (Private)	80-90	10-15	Good	20-30%	90-100%	0-10%	0-10%
E (Private)	200-220	20-25	Outstanding	10-20%	90-100%	0-10%	0-10%
F (Private)	120-140	10-15	Outstanding	50-60%	80-90%	0-10%	0-10%
G (Charity)	30-40	5-10	Good	90-100%	60-70%	0-10%	0-10%

Participants were sampled using an opportunistic sampling technique. A lead member of staff in each setting was identified and liaised with throughout the research schedule to maximise participation, including telephone and email communication to ascertain the most suitable times to carry out each phase of the research. The information sheet for the study, including expectations and implications for the settings was provided electronically to each setting as well as a participant specific information sheet for all practitioners within the setting (Appendix seven).

42 EYPs (all of which were female) completed the Q sort between June and October 2015. The demographic characteristics of the P set are shown in Table 3.4, in terms of age, years of experience and level of qualification. Further information regarding the typical qualifications included in each 'Level' are presented in Appendix Eight.

Table 3.4: A table to show the demographic characteristic of the P set (n=42)

Demographic Characteristic	Category	Number of Participants	Percentage of P set
Age <i>Average: 31.93</i>	16-20	7	17%
	21-30	17	40%
	31-40	8	19%
	41-50	6	14%
	51+	4	10%
Years of Experience <i>Average: 9.78</i>	0-1	5	12%
	2 - 5	11	26%
	6 -10	12	29%
	11-15	7	17%
	16-20	4	10%
	20-25	0	0%
	25+	3	7%
Qualification	Level 3	29	69%
	Level 5	1	2%
	Level 6	7	17%
	Level 7	2	5%
	None	3	7%
Experience with SLCN	Yes	38	90.5%
	No	4	9.5%

Consideration was given to the kurtosis of the quasi-normal distribution grid that the participants were asked to sort the statements in. An 11-point scale from -5 to +5 was appropriate for this kurtosis and Q set size (Watts & Stenner, 2012). A distribution was chosen that was not extremely steep or extremely shallow because whilst the participants may have knowledge of the area it is also a complex topic, as well as the researcher not wanting to induce anxiety in their decision-making. This can be seen in Figure 3.2.

Least agree		Most agree									
	1	2	3	4	5	6	7	8	9	10	11
(2)											(2)
	(4)									(4)	
		(6)	(6)				(6)	(6)			
				(7)		(7)					
					(8)						

The Q sorts were administered on seven separate days, either individually or in small groups of up to seven. The location also varied dependent on the setting and included empty classrooms, leadership offices, staff rooms and community rooms. Liaison took place with all settings beforehand to ensure there was adequate space to carry out the activity.

The Condition of Instruction was framed to answer the research question: 'This strategy would be most effective in supporting a child with speech, language and communication needs', whilst being straightforward and with one distinct proposition (Watts & Stenner, 2005).

When delivered in a group the participants were encouraged not to discuss their responses to ensure they did not influence others interpretation. The researcher was present throughout to provide assistance if the participants had any questions with regards to the process, individual statements or the research. The participants were reassured that there was no right or wrong answer and that they could reorder the statements as they wished throughout the process.

The following materials were used to support the administration of the Q sort:

- a participant information sheet (Appendix Seven);
- a general instruction sheet (Appendix Nine);
- a participant consent form (Appendix Ten);
- a participant demographic questionnaire (Appendix 11)
- an activity instruction sheet (Appendix 12)
- Q set statements individually printed on 58 numbered cards sized 6 cm by 2.5 cm;
- a strip presenting the activity statement, 'This strategy would be most effective in supporting a child with speech, language and communication needs', and 11 columns underneath with numbers on that instructed the number of cards to place beneath; and
- a post Q sort activity questionnaire (Appendix 13).

The Ethical Considerations section will provide further information on the information provided to all participants. Each participant was provided with a plastic, sealable folder containing all materials in order. The researcher verbally provided a brief background to the research and motivation behind the study to all participants, this was in line with the information provided in the information sheets but was provided verbally to ensure understanding and therefore informed consent could be gained. Verbal instructions were also provided to all staff members with an emphasis on the fact that the activity is based on the participant's opinions and there is no right or wrong answer, and as such each statement should be sorted in terms of what matters to them at that time, with a recognition that their view may change. Participants were then asked to sort the statements of strategies from most to least agree in a fixed distribution grid.

When the participants had completed their Q sorts the researcher recorded the position of each statement on a blank fixed distribution grid on A4 paper by writing the number of each statement into the corresponding boxes on the blank grid (Appendix 14). The grid and the sorting strip were labelled as 1-11 instead of -5 to +5 to help demonstrate that just because a statement was not ranked highly did not mean that it was not valued, but rather that it was not valued **as highly** as other statements. Participants were then asked to draw their zero point of interest on the A4 paper, this was explained as where the statements that they disagreed with finished and the statements that they agreed with began. The average zero point of interest for the P set was -3 (or 3 as it appeared on their grid).

A post-sorting questionnaire was then provided, which contained the following questions:

- Which statement did you agree with most and why?
- Which statement did you disagree with most and why?
- Are there any comments that you would like to see added to the activity?
- Are there any comments that you did not understand or did not make sense to you?
- Whilst completing the Q sort did you focus on the strategies to support speech, language and communication needs equally or did you focus more on one area?

- Did you bring to mind a certain child you have worked with in the past whilst carrying out the Q Sort?
If so please could you provide brief details of their needs below (please do not refer to any child by name)
- Any other comments?

This information provided further qualitative data to inform the interpretation of the factors and check the validity of the Q set.

3.7.7 Factor Analysis and Interpretation

The steps presented in section 3.4.5 were followed in this stage of the research. PQ Method version 2.35 (Schmolck, 2014) was used to support this. Further details of this stage and the findings are provided in detail in Chapter 4.

3.8 Procedure for follow up interviews

The three participants loading highest on to each of the three factors were identified and invited to engage in the final phase of the research. Where a participant was no longer available the fourth highest loading participant was approached. Unfortunately only two participants were available for Factor Two so a reduced amount of data has been gathered for this viewpoint. Interviews were held in a private room, free from distraction. It was reiterated that the responses would be included in the research, though confidentiality was assured.

The purpose of the interviews was to provide further validity to the viewpoints by taking them back to the participants as well as identifying if the viewpoints held were in line with how they practice, identified facilitators and barriers to working in this way and if there is any specific policy or training which has informed their viewpoint. Once again the participants were reassured that there was no right or wrong answer and that their viewpoint may have changed and that was okay.

The participants were presented with the brief overview of each factor and asked six questions;

1. Which viewpoint do you agree with most?
2. Are you able to/do you work in this way?
- 3a. What helps you work in this way?
- 3b. What prevents you working in this way?
4. Are there any statements that particularly stand out (positive and negative)?
5. What has informed your viewpoint – policy, training, other practitioners, experience?
6. Anything else to add

Participants were asked if they wanted to be informed of which viewpoint they had loaded onto after question one, all participants chose to be informed at this stage.

The researcher wrote down their responses to each of the questions and reviewed them with the participant to ensure it had been accurately captured and no responses had been missed. Once the interview was complete the participants were asked if they were still happy to provide consent that their data be used and also if they would like a summary of the findings once the research was completed.

3.9 Ethical Considerations

Ethical considerations were principal to this research. This was consistent with:

- The British Psychological Society Code of Human Research Ethics (BPS, 2014);
- British Psychological Society: Division of Educational and Child Psychology *Professional Practice Guidelines* (BPS, 2002).
- University of Nottingham Code of Research Conduct and Research Ethics (University of Nottingham, 2013).

The University of Nottingham Ethics Committee approved the research prior to any data collection (Appendix 15). Further to this an NHS ethics submission was made in order to engage with the SLTs (Appendix Four).

These ethical considerations included the following key ethical considerations of informed consent, confidentiality, debrief and minimising potential harm, each of which will be discussed below.

3.9.1 Informed Consent

Informed consent was gained from key stakeholders and all participants. Discussions were held with management staff in the setting, as stakeholders in the research, to provide information about participation in the research, including time and resource commitments and provide opportunities to ask questions. This was supported with stakeholder information sheets (Appendix Two). Once management had consented to engaging in the research participant information sheets and consent forms were provided.

Informed consent was gained from participants for the focus groups, Q sort and follow up interviews. Participants were provided with an information sheet for the research, outlining; how the data would be used, confidentiality of information, anonymity, data protection and the right to withdraw (Appendix Seven). Participants were then asked to complete a consent form to agree to take part in the research (Appendix Ten). At the beginning of each research activity participants were provided with a verbal summary of how their data would be handled, that confidentiality would be maintained throughout, and their right to withdraw. Further to this at the end of each session the participant was asked if they still consented to engage in the research and have their results included in the analysis.

3.9.2 Confidentiality

Confidentiality was ensured for all participants. Each participant was provided with a research reference number so their data could be matched across phases of the study without being identified by name. Any example cases discussed at the focus group or follow up interview stage were discussed anonymously, no names were used or recorded to ensure that no child was identifiable. The reporting of results, including demographic data, has been considered as to ensure that no individual practitioner can be identified.

3.9.3 Minimising potential harm

In order to ensure that all participants felt safe and able to share their professional knowledge and experiences boundaries and rules were discussed and agreed at the start of the session. The participants were encouraged to generate these as a group to ensure they felt all areas were covered and they represent their concerns, the researcher added to these if required to ensure all appropriate areas were covered (see section 3.7.2b for further details).

No 'follow-up' counselling sessions were formally provided, however, the researcher was available throughout each session and contact details were provided for any questions or further support required had participants experienced any distress. There was also a nominated point of contact for support within the setting (either the manager or SENCo).

3.9.4 Debrief

Debriefing was essential and the researcher ensured that it was understood that the results were snapshot viewpoints and not personality types that are permanent. All participants were provided with a debrief sheet with details of the research rationale and contact details for the Researcher and her supervisors (Appendix 16). Summary

reports of the results of the research will be provided to all stakeholders and participants.

3.10 Research Schedule

The timeline followed within this research is presented in table 3.5.

Table 3.5: A table to show the research schedule followed in this research

Month and Year	Action
October 2014	Discussions with stakeholders
December 2014	Submission of Research Proposal
March and April 2015	Submission of Ethics Approval Form
April to June 2015	Development of the concourse.
May to June 2015	Focus Groups
June 2015	Refine concourse and pilot of Q set
July to October 2015	Q Sort Data Collection
November to December 2015	Q Data Analysis
January 2016	Follow up interviews

3.11 Summary of the Methodology

This chapter has discussed Q methodology and how it has been carried out within this research. The details of the analysis and results of the study will be provided in the following section 4. Results.

4 Results

4.1 Introduction to the Results

This chapter will present the results generated from the Q methodological approach, as described in Chapter 3. An overview of factor analysis within Q methodology will be discussed before outlining the factor extractions, rotations and subsequent factor arrays. The factor interpretations will then be presented, including data gathered from the follow up interviews. Finally the validity of these viewpoints will be discussed.

The data analysis process will be described in detail as Q methodology analysis and interpretation are subjective processes, by providing a transparent account of this process the researcher's reasoning can be demonstrated.

4.2 Overview of Factor Analysis in Q Methodology

Within Q methodology by-person correlations and factor analysis identifies collections of similar ways of viewing variables rather than identifying collections of variables. Q methodology makes no claim to reduce data by identifying and combining sets of dependent variables, it employs by-person factor analysis to identify *groups of participants* who make sense of a collection of statements in a comparable way, therefore making the Q sorts the variables (Watts & Stenner, 2012).

The correlations matrix generated through the analysis reflects the relationship of each configuration to one another (between each Q sort), not the relationship between each item within the Q sort. This demonstrates the Gestalt approach to data analysis that underpins Q methodology. The factors are then generated by grouping Q sorts that are highly correlated, further analysis of these factors allows identification of the participants sharing an overall common viewpoint (Brown, 1993; Watts & Stenner, 2005).

42 completed Q sorts were generated by the P set within this study and by-person correlation and factor analysis was carried out on the data. The computer programme

PQMethod version 2.35 was used to support the data analysis (Schmolck, 2014). This is free to download from the Internet at;

<http://schmolck.userweb.mwn.de/qmethod/downpqwin.htm>.

Prior to analysis of the Q sort statements, the Q sort design of the fixed distribution grid and the individual Q sorts are manually inputted to PQMethod. The following aspects of the data analysis can then be conducted using PQMethod:

- generate by-person correlation matrix
- extract factors from the matrix
- rotate the factors (using Varimax and/or hand rotation)
- generate factor arrays

Once the above steps have been completed the factor arrays are then used by the researcher to interpret viewpoints, supported by the qualitative information gathered from the post Q sort questionnaires.

4.3 Factor Extraction

The first stage of analysis using PQMethod intercorrelates the Q sorts and creates a correlation matrix which captures all the variance within the sample and identifies the Q sorts which share greatest similarity and difference. This is followed by factor extraction, which can be carried out using Centroid Factor Analysis (CFA) or Principal Component Analysis (PCA). The impact of either approach is unlikely to be significant (McKeown & Thomas, 1988) and both methods produce very similar results (Watts & Stenner, 2012). CFA is in line with an abductive logic, whereas PCA produces a single, mathematical best solution. This reduces the opportunity for the researcher to fully explore the data and rotations based on theoretically informed understanding or in an investigatory fashion, and for these reasons CFA is seen as the preferred type of factor extraction (Stephenson, 1953; Watts & Stenner, 2012). As such CFA is the chosen method of factor extraction within this study.

Seven factors were extracted using CFA. Seven factors were initially chosen for two reasons; firstly as an initial guide it is recommended that one factor should be extracted for every six to eight participants, in this study that would indicate that between five and seven factors should be extracted. Secondly it is helpful to extract more factors initially so these can be explored and refined based on a number of criteria (as discussed in sections 4.3.1 to 4.3.3 below)

The communalities for each Q sort, the Eigenvalues and explained variance of each of the seven initially extracted factors are presented in table 4.1, the two highest loading Q sorts for each factor have been emboldened.

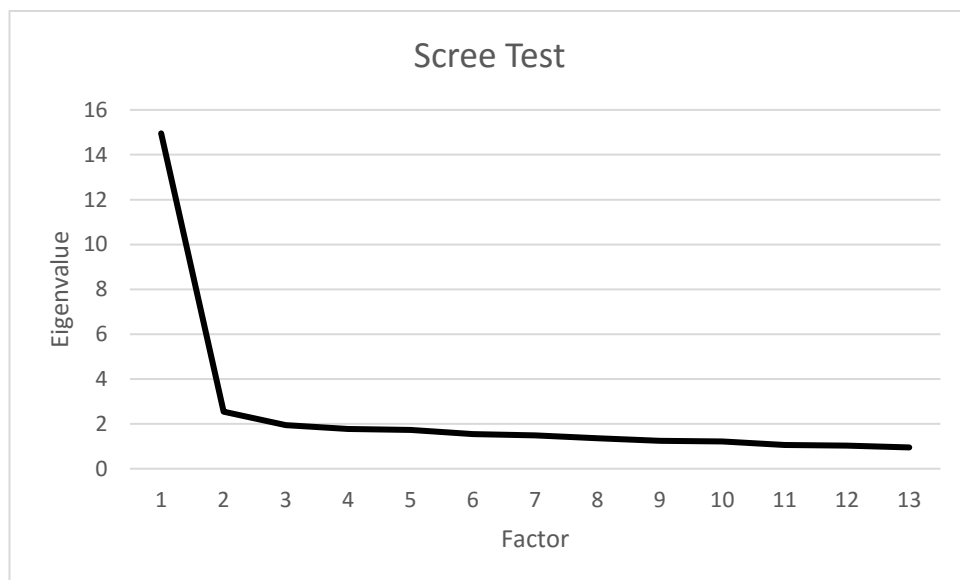
Table 4.1: A Table representing the unrotated extracted factors

Q Sort	1	2	3	4	5	6	7
1	0.5902	-0.1473	-0.3472	-0.1751	0.0833	0.0408	-0.0046
2	0.5111	-0.0457	0.0272	0.1206	0.0099	-0.1594	-0.2332
3	0.4854	0.0824	0.0773	0.0723	0.0103	0.1273	-0.0281
4	0.7547	0.1071	-0.2352	-0.1140	0.0430	-0.0455	-0.0087
5	0.6210	0.2366	0.0261	0.0452	0.0337	-0.4094	0.0626
6	0.5759	0.1051	-0.2715	0.2146	0.0793	-0.3210	0.1044
7	0.5623	0.0144	0.1954	-0.2806	0.0410	0.1145	0.2048
8	0.6347	0.0611	-0.0513	-0.1590	0.0097	0.0720	0.0259
9	0.5610	-0.0227	-0.1380	-0.0093	0.0120	0.0712	-0.1476
10	0.7322	0.1134	-0.0099	0.1180	0.0191	0.0023	-0.3172
11	0.5406	0.0845	-0.2445	0.1498	0.0515	0.1147	0.4077
12	0.6696	0.2842	0.1021	-0.0454	0.0463	0.0866	-0.1450
13	0.6390	0.2527	0.2021	-0.1508	0.0558	0.1274	0.0935
14	0.6205	-0.4883	-0.2024	0.0597	0.1339	-0.0791	-0.0091
15	0.5035	0.0155	0.0875	0.2432	0.0367	-0.1217	0.1657
16	0.7371	0.1180	-0.0254	-0.2077	0.0240	0.1204	0.1760
17	0.5115	-0.0620	0.0890	0.1306	0.0134	0.1001	0.3319
18	0.6819	0.2302	-0.2085	-0.1524	0.0633	-0.1583	0.1497
19	0.6311	0.2855	0.2072	0.1710	0.0797	0.1433	-0.1493
20	0.5756	0.3362	0.1076	0.1021	0.0725	-0.1569	0.1672
21	0.6407	0.3842	-0.1674	0.2080	0.1279	-0.1464	0.2829
22	0.5544	-0.2011	-0.2477	-0.0452	0.0494	-0.0780	-0.1657
23	0.3841	-0.4997	0.4003	-0.0432	0.1796	-0.0242	0.1833
24	0.3309	-0.3718	-0.0886	0.1532	0.0790	0.0186	-0.2203
25	0.5343	0.0935	0.0781	0.2600	0.0468	-0.1056	-0.2200
26	0.6691	-0.0200	0.0212	0.0879	0.0056	0.2221	-0.0110
27	0.5729	-0.1212	0.0987	0.1627	0.0230	0.2110	-0.0318
28	0.4706	0.2273	-0.0892	0.2187	0.0658	0.0499	0.1380
29	0.5770	0.0313	-0.2433	0.1022	0.0438	0.2071	-0.2213
30	0.5155	-0.3013	0.0009	0.1924	0.0590	0.1253	0.0132
31	0.8203	0.0555	-0.1207	-0.1742	0.0216	-0.0492	0.0577
32	0.2678	-0.1622	0.2310	-0.1684	0.0349	-0.3738	-0.3829
33	0.4575	-0.2869	0.1108	-0.2598	0.0583	-0.2718	0.0307
34	0.6742	-0.1094	0.0938	-0.1419	0.0094	0.0248	0.1871
35	0.3155	0.1416	0.1045	-0.3364	0.0580	0.1956	-0.0212
36	0.6330	-0.3929	0.0549	-0.0004	0.0633	-0.1201	-0.0470
37	0.5440	0.1436	-0.3013	-0.3353	0.1097	0.1106	-0.1657
38	0.7521	0.1813	0.0716	-0.1473	0.0256	0.2195	0.0410
39	0.6165	0.0370	-0.1253	0.1157	0.0220	0.0597	-0.0523
40	0.5285	0.0365	0.3252	0.2325	0.0756	0.0910	-0.1442
41	0.4710	-0.3227	0.2250	-0.1119	0.0614	0.0491	0.0628
42	0.5751	0.1362	0.2396	-0.1679	0.0401	-0.1329	-0.1489
EGV	14.3273	2.0025	1.3524	1.2323	0.1689	1.0483	1.2471
Ex. V	34%	5%	3%	3%	0%	2%	3%

4.3.1 Scree Test

The Scree Test was developed to graphically plot Eigenvalues (Cattell, 1966). The Eigenvalues are represented along the vertical axis whilst the factors are presented on the horizontal axis. When the slope of the chart begins to level out then this is when the factors to be accepted ends, the factors to the left of the levelling are then accepted. The logic being that this helps differentiate between the meaningful and less meaningful factors. Though it is acknowledged to be a subjective measure it provides guidance which can be used alongside further criterion, as described in the subsequent sections. It is suggested that PCA methods should be conducted to generate Eigenvalues at this stage, prior to any data analysis, to support the Scree Test (Watts & Stenner, 2012). Figure 4.1 represents the plotting of Eigenvalues generated using PCA.

Figure 4.1: A figure to show the Scree Test plot graph



The Scree test indicates an initial change after two factors and also a further levelling out after three factors. It would therefore suggest either a two or three factor solution as the line changes again at four factors and beyond.

4.3.2 The Kaiser-Guttman Criterion

This criterion utilises the Eigenvalues for each factor. Eigenvalues provide an indication of the strength and potential explanatory power of the extracted factor. The explained variance is also highly linked to the Eigenvalue (Watts & Stenner, 2012).

It is suggested that a factor with an Eigenvalue of 1.00 or above should be retained, as an Eigenvalue of less than 1.00 represents less than one Q sort and would therefore not provide a reduction in data.

It is evident from table 4.1 that all factors, other than factor five, have an Eigenvalue above 1.00. Therefore factor five should be discarded, retaining the remaining six factors for rotation.

Although this criterion is a useful starting point in identifying which factors to rotate, it is widely acknowledged that this criterion often results in the acceptance of overly large numbers of factors being accepted, particularly within large data sets (Watts & Stenner, 2012)

4.3.3 Humphrey's rule

This criterion is made up of two elements, two or more significantly loading Q sort on a factor and whether the cross-product of the two highest loadings Q sort exceeds twice the standard error. These will be presented in turn below.

4.3.3.1 Two or more significantly loading Q sorts on a factor

This rule stipulates that there must be at least two significantly loading Q sorts on the factors, put another way at least two participants must be represented by the factor. This is based on the assumption that a social narrative cannot be mathematically distinguished from an individual perspective (Watts & Stenner, 2012).

To ascertain the level of **significance** required at a 0.01 level the following equation is used (Brown, 1980):

$$= 2.58 \times (1 \div \sqrt{\text{number of items in the Q set}})$$

This was applied to this research

$$= 2.58 \times (1 \div \sqrt{58})$$

$$= 2.58 \times (1 \div 7.6158)$$

$$= 2.58 \times 0.131$$

$$= \pm 0.34 \text{ (rounded to two decimal places)}$$

4.3.3.2 Standard Error

The second aspect of Humphrey's rule identifies a factor as significant if the cross-product of its two highest loadings exceed twice the standard error.

The standard error is calculated as followed

$$= 1 \div (\sqrt{\text{number of items in the Q set}})$$

This was applied to this research

$$= 1 \div (\sqrt{58})$$

$$= 1 \div 7.6158$$

$$= 0.13 \text{ (rounded to two decimal places)}$$

This identifies that the cross-product must exceed 0.26 in order to meet the criteria.

Based on this criteria only factor one would be extracted. However, Watts and Stenner (2012) state that the same rule can be applied less strictly by insisting that the cross-products only exceed the standard error. Based on this criteria all factors except four and five would be accepted.

4.3.4 Summary of Factor Extraction

A summary of the criteria applied, as well as the explained variance is presented in Table 4.2. Dependent on the criterion used between six and three factors should be extracted. Factor Three only has two significantly loading factors, one of which is only just above the significance level, however, it is essential that whilst identifying statistically significant factors that explain a high amount of variance the smaller nuances within the viewpoints are not overlooked. Therefore, in line with the abductive approach taken to the analysis process, and the indication from the Scree Test and Humphrey's rule, a two and three factor solution was explored further.

Table 4.2: A table to summarise the Kaiser-Guttman criterion, Humphrey's rule analysis and explained variance, (based on a significance level of 0.34 and a standard error score of 0.13)

	Scree	Kaiser- Guttman		Humphrey's rule			Twice standard error (0.26)	Standard error(0.13)	Explained variance	Number of criteria met
				2 or more sig. loadings (0.34)	Cross product					
1	✓	14.3273	✓	0.8230 0.7547	0.619	✓		✓	34%	4
2	✓	2.0025	✓	0.4883 0.4997	0.244			✓	5%	3
3	✓	1.3524	✓	0.4003 0.3472	0.139			✓	3%	3
4		1.2323	✓	0.3364 0.3353	0.1128				3%	1
5		0.1689		-	-	-		-	0%	0
6		1.0483	✓	0.4094 0.3738	0.153			✓	2%	2
7		1.2471	✓	0.4077 0.3829	0.156			✓	3%	2

4.4 Factor Rotation

Factors can be rotated using two methods: manual or Varimax. Varimax rotation uses an algorithm that aims to associate each individual with just one factor, whilst maximising the variance explained on as few factors as possible. Varimax rotation carried out on PQMethod can generate these rotations automatically. This method of rotation can reduce the impact of researcher judgment by making the analysis straightforward and transparent, and can be helpful for less experienced Q

methodologists (Webler, Danielson, & Tuler, 2009). Manual rotation is led by the researcher and is best utilised to test hypotheses about how certain individuals' perspectives relate, or to focus on individual Q sorts which are believed to hold a particular interest (Webler, Danielson, & Tuler, 2009). As a social constructionist stance has been taken within this research, no hypotheses are held at the start of the research as it is exploratory in nature, therefore the sole use of manual rotation would be inappropriate as there are no hypotheses to test.

These two methods of rotation can, however, be used together complementarily. With Varimax rotation being used initially, providing transparency and ensuring a minimum number of factors are identified, and manual rotation then being utilised to ensure that as many Q sorts as possible are loaded on to a factor. By identifying the rotations which maximise the number of Q sorts that significantly load on to a single factor, it ensures that as many individual views as possible are represented (Watts & Stenner, 2012).

For this data analysis, both a three and two factor solution were rotated using Varimax rotation to ensure that the most appropriate factor solution was presented.

Section 4.3.2 explained that the level of significance for a Q sort to load on a factor for this study was calculated to be ± 0.34 . Watts and Stenner (2012) discuss using a more stringent criterion for including sorts. A higher factor loading can be used as a threshold to ensure that included sorts are more typical of the factor, and it also helps reduce the number of Q sorts that load onto more than one factors, known as confounded Q sorts. The significance level was raised to ± 0.40 for this research to ensure the maximum number of Q sorts load onto a factor, and therefore represent the most practitioners' views. A summary of the explained variance and number of participants represented by each factor solution pre and post rotation (from two to seven factors), as well as the impact of the raised significance level can be found in Appendix 17.

The **three** factor solution had 29 Q sorts loading onto one of three factors, which explained 42 percent of variance. Nine of the Q sorts were confounded and four Q sorts did not load significantly on any factor; these are known as non-significant Q sorts.

The **two** factor solution had 33 Q sorts loading onto one of two factors, which explained 39 percent of variance, four Q sorts were confounded and five were non-significant.

There are merits to both a two and three factor solution; whilst three factors accounts for more variance the two factor solution represents more participants. It is suggested that identifying the solution with the highest number of Q sorts loading onto a factor is desirable as it represents more views from the P set (Stainton Rogers & Stainton Rogers, 1990), however, it is also argued that the factors should account for as much of the variability captured in the correlation matrix as possible (Brown, 1980). For these reasons analysis of both solutions was continued to ensure the best solution was achieved for the data and the purpose of this study.

Manual rotation was then employed to explore each of these factor solutions and identify if further rotation would result in any of these confounding or non-significant Q sorts loading onto a single factor. Manual rotation was used to rotate factor one +5 degrees in the two factor solution and factors one and three +5 degrees in the three factor solution (see Appendix 17 for further details). These rotations were guided by highlighting the confounded or non-significant factors and identifying whether rotation would allow them to load on a single factor. This process was done before any interpretation of the factors to ensure the researcher maintained an abductive approach and no prior knowledge biased the manual rotation.

Post rotation the **three** factor solution included 31 participants with 42 percent of the variance being explained. The **two** factor solution included 37 participants, explaining 39 percent of the study variance. As previously identified a high level of explained variance is positive and the final set of factors should account for as much factor variance as possible (Watts & Stenner, 2012). Between 35 percent and 40 percent or more variance is commonly agreed to be an acceptable solution (Kline, 2014).

To support the decision making process Webler, Danielson, and Tuler's (2009) criteria for good factor solutions was applied at this stage:

- Simplicity – the minimum factors should be retained that provide the opportunity for interesting information.
- Clarity – Non-significant and confounding Q sorts should be minimised and as many Q sorts as possible should load on a factor.
- Distinctiveness – lower correlations between factors are regarded as superior, higher correlations indicate accounts are similar. However, there may still be important points of difference.
- Stability – participant accounts that are similar and consequently cluster together.

Table 4.3 and 4.4 show the correlation between the factors for a three and two factor solution post hand rotation. Correlation strengths can be considered as follows:

- 0.1 to 0.3 should be seen as weak.
- 0.4 to 0.6 as moderate.
- 0.7 to 0.9 as strong.

(Dancey & Reidy, 2014)

Table 4.3: A table showing correlations between each factor for a three factor solution post hand rotation

	1	2	3
1	1.0000	0.5255	0.6931
2	0.5255	1.0000	0.4849
3	0.6931	0.4849	1.0000

Table 4.4: A table showing correlations between each factor for a two factor solution post hand rotation

	1	2
1	1.0000	0.5998
2	0.5998	1.0000

From reviewing Table 4.3 it is apparent that there is moderate correlation between the three factors, suggesting a distinction between the factors and subsequent viewpoints. The correlation between Viewpoint One and Three is bordering a high correlation, however, the acceptance of Viewpoint Three allows a high level of variance to be accounted for and ensures that the small differences between viewpoints have been explored. The correlation for a two factor solution is also moderate.

An argument could be made for either a three or two factor solution, depending on whether greater value is placed on explaining more variance or capturing more participants' views. A three factor solution was decided upon to explain a higher percent of variance and to ensure that any subtle differences were captured as well as preventing a polarisation of viewpoints in the two factor solution. As such the remainder of the results section will discuss the accepted three factor solution.

Based on the following criteria a three factor solution appeared to be the best fit for this data:

- A study variance of 42 percent
- An Eigenvalue higher than 1.00 for each factor
- Agreement with the Scree Test in figure 4.1
- A cross product higher than the standard error
- At least two significantly loading Q sorts
- A moderate correlation between each factor

The final factor solution is displayed in Table 4.5, the 31 Q sorts which load significantly on a factor, at the increased significance level of ± 0.40 , are indicated with an 'X' and emboldened, those in *italics* show the confounded Q sorts that loaded significantly on more than one factor and the remainder were non-significant.

Table 4.5: A table to show the final three factor solution with significantly loading factors

1	0.2201	0.2409	0.6197X
2	0.3454	0.2891	0.2473
3	0.4228X	0.2008	0.1711
4	0.5318	0.1732	0.5687
5	0.5997X	0.1248	0.2589
6	0.3913	0.0742	0.5077X
7	0.4728X	0.3408	0.1222
8	0.3993X	0.3252	0.3794
9	0.3432	0.2231	0.4083X
10	0.5910X	0.2560	0.3664
11	0.2563	0.2142	0.4976X
12	0.6882X	0.1446	0.2122
13	0.6783X	0.1979	0.1173
14	0.0750	0.5793	0.5686
15	0.3972X	0.2650	0.1826
16	0.5924X	0.2481	0.3812
17	0.3551	0.3288	0.1981
18	0.5650	0.0562	0.4889
19	0.6947X	0.1713	0.1037
20	0.6551X	0.0627	0.1509
21	0.6446	-0.0631	0.4082
22	0.1925	0.3085	0.5262X
23	0.0896	0.7389X	-0.0588
24	-0.0234	0.4025X	0.3050
25	0.4650X	0.2158	0.1937
26	0.4725X	0.3417	0.3294
27	0.3652	0.4073X	0.2311
28	0.4499X	0.0103	0.2803
29	0.3550	0.1434	0.4965X
30	0.1808	0.4752X	0.3130
31	0.5828	0.2938	0.5143
32	0.1634	0.3518	-0.0307
33	0.1831	0.4847X	0.1884
34	0.4434	0.4442	0.2853
35	0.3469	0.0869	0.0513
36	0.2248	0.6245X	0.3428
37	0.3830	0.0166	0.5102X
38	0.6734X	0.2491	0.2970
39	0.4241	0.2093	0.4165
40	0.5034X	0.3645	-0.0081
41	0.2066	0.5683X	0.1049
42	0.5719X	0.2730	0.0718

4.5 Factor Arrays

The next stage of the data analysis is the production of a factor array for each factor. This uses the z scores for each individual item to produce a best estimate Q sort, which provides an exemplar Q sort for the viewpoint of that factor. A weighted average is used, with participants who correlate more strongly with a factor having more influence on the factor array.

Z scores are said to be a useful analysis method as they provide continuous, scale data, which is richer than the ordinal data provided by the factor arrays, which only represent how every statement has been ranked by each factor. It has been argued that factor interpretation can in fact be carried out using Z scores alone (Zambelli & Bonni, 2004). However, factor arrays stay true to the holism of the data as well as being in line with data collection which creates better ease of interpretation for the audience (Brown, 1980; Watts & Stenner, 2012).

The z scores and factor arrays, including the rank position ascribed, for each of the three factors for this research are shown in Table 4.6. The factor arrays are shown in fixed normal distribution grid form in Figures 4.2 to 4.4.

Table 4.6: A table to show the z scores and factor arrays for each factor

		Factor One		Factor Two		Factor Three	
Statement		z-score	Rank	z-score	Rank	z-score	Rank
1	Explore real objects, such as in a feely bag, to encourage children to use labelling and descriptive words	0.009	0	-0.416	-2	0.061	0
2	Focus on the child's interests and adapt activities to include their interests	1.655	4	0.281	1	0.824	3
3	Provide access to a quiet and calm space throughout the day including communication friendly spaces	-0.208	-1	0.295	1	-0.199	-1
4	Use symbols, pictures or photos to label resources in the environment	0.314	1	-0.179	-1	0.328	1
5	Use simple words	1.033	3	0.918	3	-0.137	-1
6	If a child doesn't often speak, don't draw attention to them when they do	-1.72	-4	0.836	3	0.454	1
7	Verbally label objects and actions to increase vocabulary	0.038	0	0.044	0	0.306	0
8	Ask the child to repeat instructions to check understanding	-1.607	-4	-0.673	-2	-1.602	-4
9	Provide a language rich environment and expose the child to lots of language	0.751	2	0.171	0	1.441	4
10	Directly teach vocabulary and useful phrases	-1.254	-3	-0.734	-2	-2.022	-4
11	Provide objects of reference to support verbal understanding, such as showing a child a nappy when they need changing	0.314	1	0.419	1	-0.466	-2
12	Increase gesture and non-verbal communication	-1.042	-3	0.536	2	-0.366	-1
13	Reduce auditory distractions including background noise	-0.14	0	-0.396	-1	-0.598	-2
14	Encourage and support children in role-play, modelling appropriate language	-0.23	-1	0.69	2	0.959	3
15	Understand the child's background and home circumstances and the impact of this on SLC skills	0.545	1	-0.155	-1	1.46	5
16	Reduce visual distractions including novel objects, when engaging in speech and language activities	-0.43	-2	-0.425	-2	0.165	0
17	Gain eye contact before speaking to a child	1.693	4	1.747	5	-0.048	0

Table 4.6 continued: A table to show the z scores and factor arrays for each factor

18	Careful assessment of needs, including identifying hearing impairment or bilingual needs	1.452	4	0.344	1	1.43	4
19	Use visual aids to support understanding of verbal information and instructions	0.851	3	-0.786	-2	0.0000	0
20	Copy child's utterances to model the structure of conversation	-0.758	-2	0.623	2	-0.07	-1
21	Teach underpinning skills of speaking and listening, including turn taking	-0.785	-2	-0.797	-3	0.415	1
22	Deliver interventions through fun and engaging games	1.105	3	0.463	2	0.396	1
23	Remodelling the child's speech into a correct sentence without correcting them or asking them to repeat it back	-0.225	-1	1.179	3	0.612	2
24	Create strong routines and clear boundaries	-0.357	-1	-0.272	-1	0.584	1
25	Use visual timetables, choosing boards and now and next boards	0.237	1	-1.741	-4	-0.815	-3
26	Provide the child with choices within activities to encourage them to engage	0.338	1	0.417	1	0.899	3
27	Use a high level of repetition of key language, including over learning and repetition in stories	-0.035	0	1.82	5	-0.127	-1
28	Match language use to the child's ability level and provide stretch. Such as when remodelling a child's sentence add one additional word	-0.121	0	-0.195	-1	0.72	2
29	Descriptive commenting, commenting on what a child is doing whilst playing	-0.139	0	0.289	1	0.579	1
30	Provide opportunities for the child to communicate such as making choices or putting something out of reach which they have to request verbally	-0.486	-2	-0.712	-2	0.435	1
31	Provide the child with additional time to process verbal information and respond	0.597	2	0.181	0	0.735	3
32	Use singing to develop language	0.222	1	0.241	1	0.589	2
33	Watch television that is educational	-1.965	-5	-2.498	-5	-2.257	-5
34	Use stories to model language and encourage engagement with language. Supported by physical props or puppets	-0.401	-1	0.114	0	0.647	2

Table 4.6 continued: A table to show the z scores and factor arrays for each factor

35	Reduce verbal reprimands	-1.007	-3	-1.845	-4	-1.91	-4
36	Film children telling stories for them to watch themselves back to increase confidence and review their own skills	-1.371	-3	-1.778	-4	-1.21	-3
37	Restate the child's sentence correctly and ask them to repeat it back	-1.761	-5	0.182	0	-2.238	-5
38	Gain the child's attention, such as saying their name, before talking to them	0.993	3	1.736	4	0.735	2
39	Provide one instruction at a time	0.857	3	1.62	4	-0.378	-2
40	Spending special time talking to a child, that is not academic related or asking lots of questions	0.183	0	0.488	2	0.87	3
41	For staff to access training in core skills and supporting children with SLCN	1.331	3	-0.011	0	1.39	4
42	Go on sound walks where children have to identify sounds in the environment and identify the source	-0.862	-2	-0.982	-3	-0.938	-3
43	Playing with tone and pitch of your voice, repeating their speech in different ways.	-0.785	-2	-0.161	-1	-0.779	-2
44	Reduce language into manageable chunks	0.671	2	0.708	2	-0.818	-3
45	Encourage play with instruments to encourage the child to link sounds with their source, including barrier games	-0.904	-3	-0.833	-3	-0.201	-1
46	Use signing, such as Makaton, to support language	0.75	2	-0.279	-1	1.001	3
47	Adjust your speech so it is easier to hear, such as speaking louder and/or slower	0.579	1	0.916	3	-0.702	-2
48	Small group activities based on the child's age and ability, and differentiate accordingly	0.733	2	-0.119	0	0.633	2
49	Acknowledge all attempts to communicate, even if they are demands (though not necessarily carrying out the demand)	-0.026	0	1.466	3	0.139	0
50	Introduce phonic awareness, encourage children to copy actions and correspond sounds to letters	-0.207	-1	-0.116	0	-0.606	-2
51	Provide movement breaks during sessions	-0.972	-3	-1.825	-4	-1.408	-3

Table 4.6 *continued*: A table to show the z scores and factor arrays for each factor

52	Communicate with parents to involve them in their child's learning and development, including sharing and modelling strategies	1.863	5	1.494	4	2.324	5
53	Develop oro-motor skills, such as making noises in front of a mirror to raise awareness of sound production	-0.289	-1	-0.823	-3	-0.172	-1
54	Overview/plenary end of taught session	-1.607	-4	-1.992	-5	-1.61	-4
55	When talking to a child get down to their level, be face-to-face and close	1.343	4	1.494	4	0.27	0
56	Use short sentences and reduce instructions to key information carrying words	0.797	2	0.908	3	0.159	0
57	Sorting objects into categories to develop awareness of semantics	-1.681	-4	-0.99	-3	-1.209	-3
58	Seek advice from professionals, such as SLT	2.122	5	-0.886	-3	1.327	4

4.6 Response to post-sort questionnaire

All participants that completed a Q sort also completed a post-sort questionnaire, the results of which have been interweaved into the factor interpretations to provide a rich account of each factor.

All participants were asked to rate their confidence level with regards to meeting the needs of children with SLCN as either low, medium or high. 31 percent of the sample rated themselves as having low confidence, 52 percent rated themselves as medium and 17 percent rated themselves as having a high level of confidence.

4.7 Factor Interpretations

Factor interpretation utilises the factor arrays to produce a holistic summary for each viewpoint. The researcher needs to rely on their familiarity with the topic to evaluate whether the factor is meaningful, and create a convincing explanation of the results (Webler, Danielson, & Tuler, 2009). In order to ensure the interpretation was transparent and systematic in an attempt to overcome inadvertent researcher bias the following steps were taken.

Firstly, crib sheets as recommended by (Watts & Stenner, 2012) were generated for each factor, including the following information:

- the highest ranked items;
- the lowest ranked items;
- the items ranked higher in the focus factor than other factors;
- the items ranked lower in the focus factor than other factors;
- any additionally highly ranked or useful items; and
- demographic information of the participants completing the significantly loading Q sorts for that factor.

The completed crib sheets used for the factor interpretations can be found in Appendix 18.

Distinguishing statements for each factor were identified in the PQ method data output once the best factor solution was chosen. These statements refer to those that a particular factor has ranked in a significantly different way to all the other factors. These distinguishing statements were then used to inform the factor interpretations. The distinguishing statements for each factor have been incorporated into each of the factor arrays and are marked by a dark border, see figures 4.2 to 4.4.

The factor interpretations, or viewpoint, for the three factors will be presented with:

a) Demographic information

To ensure confidentiality and prevent the identification of participants the demographic data is presented in overall bands for age and years of experience, see table 4.7 for a summary of the demographic.

b) Specific ranking position

To ensure clarity and transparency in these reports, the specific ranking position of a statement in the relevant factor arrays are referenced. This will be presented as: (Statement number: Ranking position in normal distribution grid) eg (4: +5).

It is important to note that a relatively low ranking does not indicate that the factor does not value this statement but rather that it is in relation to the other statements. Further to this, as discussed in section 3.7.6, a zero does not necessarily represent the zero point for the individual Q sort. For this reason the distinguishing statements, which identify the items that have been ranked significantly differently, can help overcome an overreliance on the ranked number alone.

c) Qualitative interpretation

Qualitative interpretations will be supported with quotes from participants gathered during the post-sort questionnaires. The participant that made the

statement is indicated by their Q sort number, represented as 'P1' (as appropriate). Unless otherwise stated the statements were all generated from the post-sort questionnaires.

d) A brief summary for each viewpoint

Finally it is essential that the viewpoints are regarded holistically, in line with the Gestalt approach underpinning Q methodology.

Table 4.7: A table presenting demographic information for each viewpoint and the P set as a whole

	Viewpoint One		Viewpoint Two		Viewpoint Three		Pset		National Statistics*
	No.	%	No.	%	No.	%	No.	%	%
Age									
16-19	2	12	2	29	0	0	4	13	1-3
20-24	4	24	0	0	1	14	5	16	11-15
25-39	10	59	2	29	2	29	14	45	45-47
40-49	1	6	2	29	3	43	6	19	20-23
50+	0	0	1	14	1	14	2	6	13-16
Experience									
0-1	3	18	2	29	0	0	5	16	-
2 - 5 y	6	35	0	0	2	29	8	26	-
6 -10 y	4	24	2	29	3	43	9	29	-
11-15 y	3	18	2	29	1	14	6	19	-
16-20 y	1	6	0	0	1	14	2	6	-
20-25 y	0	0	0	0	0	0	0	0	-
25+y	0	0	1	14	0	0	1	3	-
Qualification									
Level 3	15	88	3	43	4	57	22	71	93-95
Level 5	0	0	1	14	0	0	1	3	87-93
Level 6 or above	1	6	1	14	3	43	5	16	13-30
None	1	6	2	29	0	0	3	10	1-4
Setting									
CC	11	65	2	29	5	71	18	58	-
Private	5	29	5	71	2	29	12	39	-
Charity	1	6	0	0	0	0	1	3	-
SLCN experience									
Yes	15	88	5	71	7	100	27	87	-
No	2	12	2	29	0	0	4	13	-

** National Statistics have been taken from Brind et al. (2014) and represent a range dependent on whether staff were from full sessional care within or outside a children's centre.*

4.7.1 Factor One Viewpoint: Tailor interventions and seek professionals' advice

4.7.1.1 Demographic of group

The demographics of the participants who loaded onto Viewpoint One include:

- More participants from children's centres and fewer from private setting than for the sample as a whole, though the number of participants from charity settings is roughly indicative of the overall sample;
- 94 percent of participants are aged between 16 and 40 which is higher than both the study sample and the national average;
- A higher proportion of staff aged under 25 than both the P-set and national average;
- 88 percent hold a level three qualification, which is in line with the national average, but not the P-set as a whole. The proportion of participants with no qualifications was below that of the P-set but above the national average;
- The number of participants holding a level six qualification or above is lower than both the P-set and national average; and
- 35 percent of the participants self-rated their confidence as low, 59 percent as medium, and 6 percent as high, which is broadly in line with the overall sample, though more participants rated their confidence as high in the overall sample (17 percent).

This indicates that this group of participants are younger than the overall sample, and national average, and are under represented by practitioners with a qualification of level six or above and those from private settings.

4.7.1.2 Viewpoint interpretation: Tailor interventions and seek professionals' advice

This viewpoint values advice from professionals, such as SLT (58: +5). This is to "give you a starting point to go further" (P42), "to provide appropriate strategies to the children and understand the child's specific needs fully" (P12), provide "advice... and the training to extend our knowledge" (P7) and because professionals "know more about that area than you might do" (P16). Holders of this viewpoint also value communicating with

parents to involve them in their child's learning and development, including sharing and modelling strategies (52: +5) and also value careful assessment of needs, including identifying hearing impairment or bilingual needs (18: +4). They rank understanding the child's background and home circumstances and the impact of this on SLC skills (15: +1) lower.

They place an importance on focussing on the child's interests and adapting activities accordingly (2: +4) and delivering these interventions through fun and engaging games (22: +3). This is because "the child is more likely to be responsive to learning if they are interested" (P28) and it "will help to engage the child and grab their attention, which will enable the remaining strategies to be carried out" (P10).

The viewpoint also values visual aids to support understanding of verbal information and instructions (19: +3), visual timetables, choosing boards and 'now and next' boards (25: +1). They rank reducing verbal reprimands (35: -3) higher than the other two factors and see value in providing a language rich environment and exposing the child to lots of language (9: +2), providing one instruction at a time (39: +3).

The viewpoint does not highly value modelling language within the normal classroom environment and commenting techniques (20: -2, 14: -1, 34: -1, 29: 0). Remodelling the child's speech into a correct sentence without correcting them or asking them to repeat it back (23: -1) was not viewed as an effective strategy "because they would learn nothing from this" (P40). They value gaining eye contact before speaking to a child (17: +4). "So the child knows your speaking to them. Giving them confidence" (P9).

Holders of the viewpoint don't value 'not drawing attention to a child who does not regularly speak when they do' (6: -4) preferring to "offer praise and attention to a child who offers any language or sound" (P12), "if a child doesn't speak, then by not acknowledging them when they do may stop them from doing it again. However, it is important to not embarrass the child by making too much of a fuss" (P38); "if a child is shy or conscious about speaking this could possibly cause the child to refuse to speak in the future" (P10) and "they may lose confidence again and choose not to speak as they may be embarrassed" (P25).

They also did not feel increasing gesture and non-verbal communication (12: -3) was very effective as it “is discouraging the child to speak” (P26). Finally along with watching educational television (33: -5) they ranked restating the child’s sentence correctly and asking them to repeat it back as the least effective strategies (37: -5).

The factor array for Viewpoint One is presented in Figure 4.2. Statements ranked higher by this factor than any other are presented in pink, those ranked lower by this factor than any other are presented in blue and distinguishing factors are presented with a border around them (this key is also applied to Figures 4.3 and 4.4).

Figure 4.2: A figure presenting the factor array for Viewpoint One

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
52. Communicate with parents to involve them in their child's learning and development	2. Focus on the child's interests and adapt activities to interests	41. For staff to access training in core skills and supporting children with SLCN	56. Use short sentences and reduce instructions to key information carrying words	47. Adjust your speech so it is easier to hear, such as speaking louder and/or slower	40. Spending special time talking to a child, that is not academic related	50. Introduce phonic awareness	16. Reduce visual distractions when engaging in speech and language activities	45. Encourage play with instruments to encourage the child to link sounds with their source	8. Ask the child to repeat instructions to check understanding	37. Restate the child's sentence correctly and ask them to repeat it back
58. Seek advice from professionals, such as SLT	17. Gain eye contact before speaking to a child	22. Deliver interventions through fun and engaging games	9. Provide a language rich environment and expose the child to lots of language	15. Understand the child's background and home circumstances	7. Verbally label objects and actions to increase vocabulary	3. Provide access to a quiet and calm space throughout the day	30. Provide opportunities for the child to communicate	51. Provide movement breaks during sessions	54. Overview/plenary end of taught session	33. Watch television that is educational
	18. Careful assessment of needs	5. Use simple words	46. Use signing, such as Makaton, to support language	26. Provide the child with choices within activities	1. Explore real objects to encourage children to use labelling and descriptive words	23. Remodelling the child's speech into a correct sentence without correcting them	20. Copy child's utterances to model the structure of conversation	35. Reduce verbal reprimands	57. Sorting objects into categories to develop awareness of semantics	
	55. When talking to a child get down to their level, be face-to-face and close	38. Gain the child's attention, such as saying their name, before talking to them	48. Small group activities based on the child's age and ability, and differentiate	4. Use symbols, pictures or photos to label resources in the environment	49. Acknowledge all attempts to communicate, even if they are demands	14. Encourage and support children in role-play, modelling language	21. Teach underpinning skills of speaking and listening, including turn taking	12. Increase gesture and non-verbal communication	6. If a child doesn't often speak, don't draw attention to them when they do	
		39. Provide one instruction at a time	44. Reduce language into manageable chunks	11. Provide objects of reference to support verbal understanding	27. Use a high level of repetition of key language, including over learning and stories	53. Develop oro-motor skills, such as making noises in front of a mirror	43. Playing with tone and pitch of your voice, repeating their speech in different ways	10. Directly teach vocabulary and useful phrases		
		19. Use visual aids to support understanding of verbal information and instructions	31. Provide the child with additional time to process verbal information and respond	25. Use visual timetables, choosing boards and now and next boards	28. Match language use to the child's ability level and provide stretch	24. Create strong routines and clear boundaries	42. Go on sound walks where children have to identify sounds in the environment	36. Film children telling stories for them to watch themselves back		
				32. Use singing to develop language	29. Descriptive commenting, commenting on what a child is doing	34. Use stories to model language and supported by physical props				
					13. Reduce auditory distractions including background noise					

4.7.1.3 Summary of Viewpoint One: Tailor interventions and seek professionals' advice

Viewpoint one values professionals' advice to help identify effective strategies and interventions which can be informed and tailored to the child's interests to increase engagement.

This viewpoint also values visual aids and does not rank modelling and commenting strategies within the learning environment highly.

Holders of this viewpoint believe that children who rarely speak should receive praise, rather than not drawing attention to them when they speak and feel that asking a child to repeat back a correctly modelled sentence is ineffective.

4.7.2 Factor 2 Viewpoint Interpretation: Emphasis on stand-alone strategies - alter instructional language and don't use visuals

4.7.2.1 Demographic of group

The demographics of the participants who loaded onto Viewpoint Two include:

- More participants from private setting than children's centres than for the sample as a whole, and no charity settings are represented;
- 57 percent of participants are aged between 16 and 40 which is lower than P-set but in line with the national average;
- A higher proportion of staff aged under 25 than the P-set and national average.
- A higher proportion of staff aged 40 and above than the P-set, though in line with national averages;
- 43 percent hold a level three qualification, which is below both the P-set and national average;
- The proportion of participants with no qualifications is higher than both the P-set and the national average;
- The number of participants holding a level six qualification or above is lower than the study sample but in line with the low end of the national average; and
- 43 percent of the participants self-rated their confidence as low, 43 percent as medium, and 14 percent as high, which is broadly in line with the overall sample, though within the overall sample less participants rated their confidence as low (31 percent).

This indicates that this group of participants are older than the overall sample, however, the youngest age bracket is also overrepresented. This group is underrepresented by qualified staff, at both level three and level six, and includes a high proportion of staff with no qualifications. Finally the group includes more private settings than children's centres and does not represent any charity participant views.

4.7.2.2 Viewpoint Interpretation: Emphasis on stand-alone strategies - alter instructional language and don't use visuals

Viewpoint two values using a high level of repetition of key language, including over learning and repetition in stories (27: +5) because “lots of repetition helps the child to pick up key words” (P23) and it “is important so the child can pick up and learn proper uses and pronunciation of useful and important words” (P41). The viewpoint also value gaining the child’s attention through eye contact or saying their name (17: +5, 38: +4). Participants felt it “shows interest in the child” (P36) and “because for any child to listen you must gain their attention first” (P27).

This viewpoint values strategies to aid understanding, such as reducing instructions to key information carrying words (56: +3), providing one instruction at a time (39: +4), adjusting your speech so it is easier to hear, such as speaking louder and/or slower (47: +3) and asking the child to repeat instructions to check understanding (8: -2). A high value is placed on modelling strategies such as copying child’s utterances to model the structure of conversation (20: +2), remodelling the child’s speech into a correct sentence without correcting them or asking them to repeat it back (23: +3) and restating the child’s sentence correctly and asking them to repeat it back (37: 0).

Holders of this viewpoint believe that you should acknowledge all attempts to communicate, even if they are demands (49: +3) and increase gesture and non-verbal communication (12: +2). They also believe that if a child doesn’t often speak, you shouldn’t draw attention to them when they do (6: +3).

Viewpoint two does not highly value visual aids, symbols, visual timetables or signing (4: -1, 19: -2, 25: -4, 46: -1). One participant commented “I have never seen the effectiveness of visual timetables but have seen many other methods work” (P41). They place less emphasis on interventions tailored to children’s interests (2: +1, 48: 0) and do not highly value understanding the child’s background and home circumstances (15: -1) or careful assessment of needs (18: 1). They also do not highly value professional advice (58: -3) or accessing training (41: 0). Along with watching educational television (33: -5) they ranked providing an overview/plenary at the end of the taught session (54: -5) as

the least effective strategy as “young children need to learn in the moment and all opportunities need to be grasped to ensure that the child will engage” (P44).

The factor array for Viewpoint Two is presented in Figure 4.3.

Figure 4.3: A figure presenting the factor array for Viewpoint Two

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
27. Use a high level of repetition of key language, including over learning and stories	38. Gain the child's attention, such as saying their name, before talking to them	49. Acknowledge all attempts to communicate, even if they are demands	44. Reduce language into manageable chunks	11. Provide objects of reference to support verbal understanding	37. Restate the child's sentence correctly and ask them to repeat it back	15. Understand the child's background and home circumstances	1. Explore real objects to encourage children to use labelling and descriptive words	21. Teach underpinning skills of speaking and listening, including turn taking	25. Use visual timetables, choosing boards and now and next boards	54. Overview/plenary end of taught session
17. Gain eye contact before speaking to a child	39. Provide one instruction at a time	47. Adjust your speech so it is easier to hear, such as speaking louder and/or slower	14. Encourage and support children in role-play, modelling language	26. Provide the child with choices within activities	31. Provide the child with additional time to process verbal information and respond	43. Playing with tone and pitch of your voice, repeating their speech in different ways	16. Reduce visual distractions when engaging in speech and language activities	53. Develop oro-motor skills, such as making noises in front of a mirror	36. Film children telling stories for them to watch themselves back	33. Watch television that is educational
	52. Communicate with parents to involve them in their child's learning and development	56. Use short sentences and reduce instructions to key information carrying words	20. Copy child's utterances to model the structure of conversation	18. Careful assessment of needs	9. Provide a language rich environment and expose the child to lots of language	4. Use symbols, pictures or photos to label resources in the environment	8. Ask the child to repeat instructions to check understanding	45. Encourage play with instruments to encourage the child to link sounds with their source	51. Provide movement breaks during sessions	
	55. When talking to a child get down to their level, be face-to-face and close	23. Remodelling the child's speech into a correct sentence without correcting them	12. Increase gesture and non-verbal communication	3. Provide access to a quiet and calm space throughout the day	34. Use stories to model language and supported by physical props	28. Match language use to the child's ability level and provide stretch	30. Provide opportunities for the child to communicate	58. Seek advice from professionals, such as SLT	35. Reduce verbal reprimands	
		5. Use Simple words	40. Spending special time talking to a child, that is not academic related	29. Descriptive commenting, commenting on what a child is doing	7. Verbally label objects and actions to increase vocabulary	24. Create strong routines and clear boundaries	10. Directly teach vocabulary and useful phrases	42. Go on sound walks where children have to identify sounds in the environment		
		6. If a child doesn't often speak, don't draw attention to them when they do	22. Deliver interventions through fun and engaging games	2. Focus on the child's interests and adapt activities to interests	41. For staff to access training in core skills and supporting children with SLCN	46. Use signing, such as Makaton, to support language	19. Use visual aids to support understanding of verbal information and instructions	57. Sorting objects into categories to develop awareness of semantics		
				32. Use singing to develop language	50. Introduce phonic awareness	13. Reduce auditory distractions including background noise				
					48. Small group activities based on the child's age and ability, and differentiate					

4.7.2.3 Summary of Viewpoint Two: Emphasis on stand-alone strategies - alter instructional language and don't use visuals

Viewpoint two highly values the use of repetitive language as well as altering verbal instructions and language to aid understanding and children's ability to follow instructions.

However, they do not highly value visual aids, signing and timetables. They place relatively low emphasis on interventions informed by a child's interests, careful assessment and understanding of the child's background.

They also do not highly value professional input or training but instead utilise strategies such as modelling and commenting in the natural learning environment.

4.7.3 Factor 3 Viewpoint Interpretation: Understand a child's background and utilise environmental strategies

4.7.3.1 Demographic data

The demographics of the participants who loaded onto Viewpoint Three include:

- More participants from children's centres than private setting compared to the P set, and no charity settings are represented;
- 43 percent of participants are aged between 16 and 40 which is lower than P-set but in line with the national average;
- The proportion of staff aged under 25 is in line with the national average, though no participants aged 16-19 are represented;
- A higher proportion of staff aged 40 and above (57 percent) are represented which is above both the P-set and national average;
- 57 percent hold a level three qualification, which is below both the P-set and national average;
- No participants hold no qualifications which is not in line with either the P-set or national average;
- The number of participants holding a level six qualification or above is higher than the both the P-set and national average; and
- 57 percent of the participants self-rated their confidence as low, 29 percent as medium, and 14 percent as high, suggesting that this is the least confident sub-group.

This indicates that this group of participants are older than the overall sample, and do not represent the youngest age bracket of 16-19. The group is overrepresented by staff holding a qualification of level six or above, and does not include any participants with no qualifications. Despite having the highest proportion of level six qualifications 57 percent of the group rated their confidence as low. Finally the group includes more children's centres and does not represent any charity participant views.

4.7.3.2 Factor Interpretation; Understand a child's background and utilise environmental strategies

This viewpoint values understanding the child's background and home circumstances and the impact of these on SLC skills (15: +5): "Assessing children's needs allows you to gain a whole picture of children's development, to link in other areas if needs be, before seeking advice from other professionals" (P37). This is supported by communicating with parents to involve them in their child's learning and development, including sharing and modelling strategies (52: +5): "Having strong parental partnerships will allow a holistic picture of child's needs and development, which will help effective planning to meet their needs as well as consistency between home and setting" (P22). They also value accessing training (41 +4): "If all staff working in early years had some basic knowledge and training there would be a common ground – good practice is important for all children. Sometimes children are missed, but also some children show or identify as being below expected levels but this may be a result of provision they have. It will provide consistency and confidence to staff if they have common training" (P1).

Environmental strategies such as providing a language rich environment and exposing the child to lots of language (9: +4), and creating strong boundaries and routines (24: +1) are valued, as well as teaching underpinning speaking and listening skills (21: +1), matching and stretching children's language (28: +2) and providing opportunities for the child to communicate, such as making choices or putting something out of reach which they have to request verbally (30: +1). This viewpoint also valued careful assessment (18: +4) and seeking professional advice (58: +4) "to make sure we are using the correct strategies for that child" (P9).

Viewpoint three does not highly value strategies to support understanding such as providing one instruction at a time (39: -2), reducing language into smaller chunks (44: -3), simplifying language (47: -2, 56: 0, 5:-1) or providing objects of reference to support verbal understanding (11: -2). They also do not feel that strategies to gain attention before speaking to a child are especially effective (17: 0, 38: 2, 55: 0). Nor do they value directly teaching vocabulary and useful phrases (10: -4).

Restating the child's sentence correctly and asking them to repeat it back (37: -5) was ranked as the least effective strategy as they felt it could draw attention to their needs as it can draw attention to their mistake (P1 and P37) and "language that has been modelled over and over is more beneficial than acknowledging the child has said something wrong" (P22).

The factor array for Viewpoint Three is presented in Figure 4.4.

Figure 4.4: A figure presenting the factor array for Viewpoint Three

+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5
52. Communicate with parents to involve them in their child's learning and development	9. Provide a language rich environment and expose the child to lots of language	46. Use signing, such as Makaton, to support language	38. Gain the child's attention, such as saying their name, before talking to them	24. Create strong routines and clear boundaries	7. Verbally label objects and actions to increase vocabulary	20. Copy child's utterances to model the structure of conversation	39. Provide one instruction at a time	25. Use visual timetables, choosing boards and now and next boards	8. Ask the child to repeat instructions to check understanding	37. Restate the child's sentence correctly and ask them to repeat it back
15. Understand the child's background and home circumstances	18. Careful assessment of needs	14. Encourage and support children in role-play, modelling language	28. Match language use to the child's ability level and provide stretch	29. Descriptive commenting, commenting on what a child is doing	55. When talking to a child get down to their level, be face-to-face and close	5. Use simple words	11. Provide objects of reference to support verbal understanding	44. Reduce language into manageable chunks	54. Overview/plenary end of taught session	33. Watch television that is educational
	41. For staff to access training in core skills and supporting children with SLCN	26. Provide the child with choices within activities	34. Use stories to model language and supported by physical props	6. If a child doesn't often speak, don't draw attention to them when they do	16. Reduce visual distractions when engaging in speech and language activities	27. Use a high level of repetition of key language, including over learning and stories	13. Reduce auditory distractions including background noise	42. Go on sound walks where children have to identify sounds in the environment	35. Reduce verbal reprimands	
	58. Seek advice from professionals, such as SLT	40. Spending special time talking to a child, that is not academic related	48. Small group activities based on the child's age and ability, and differentiate	30. Provide opportunities for the child to communicate	56. Use short sentences and reduce instructions to key information carrying words	53. Develop oro-motor skills, such as making noises in front of a mirror	47. Adjust your speech so it is easier to hear, such as speaking louder and/or slower	57. Sorting objects into categories to develop awareness of semantics	10. Directly teach vocabulary and useful phrases	
		2. Focus on the child's interests and adapt activities to interests	23. Remodelling the child's speech into a correct sentence without correcting them	21. Teach underpinning skills of speaking and listening, including turn taking	49. Acknowledge all attempts to communicate, even if they are demands	3. Provide access to a quiet and calm space throughout the day	50. Introduce phonic awareness	36. Film children telling stories for them to watch themselves back		
		31. Provide the child with additional time to process verbal information and respond	32. Use singing to develop language	22. Deliver interventions through fun and engaging games	1. Explore real objects to encourage children to use labelling and descriptive words	45. Encourage play with instruments to encourage the child to link sounds with their source	43. Playing with tone and pitch of your voice, repeating their speech in different ways	51. Provide movement breaks during sessions		
				4. Use symbols, pictures or photos to label resources in the environment	19. Use visual aids to support understanding of verbal information and instructions	12. Increase gesture and non-verbal communication				
					17. Gain eye contact before speaking to a child					

4.7.3.3 Summary of Viewpoint Three: Understand a child's background and utilise environmental strategies

Viewpoint three highly values understanding the child's background and communicating with parents to gain a greater insight. They also value careful assessment, training and support from professionals.

They place an emphasis on environmental strategies such as language rich environments, creating opportunities to communicate and teaching underpinning skills.

They do not highly value strategies that are focussed on increasing understanding nor gaining a child's attention before communicating with them.

They feel strongly that asking a child to repeat back a correctly modelled sentence is not an effective strategy as it draws attention to their mistake which can discourage the child to speak in the future.

4.8 Consensus Statements

Consensus statements refer to the statements which had some significant levels of agreement between the Q sorts loading on each factor. The following eight statements were identified as consensus statements across the viewpoints at $P > .01$. Rankings for each viewpoint are shown in brackets.

Two of these statements related to noise levels within the environment:

- 3. Provide access to a quiet and calm space throughout the day including communication friendly spaces (-1, 1, -1)
- 13. Reduce auditory distractions including background noise (0, -1, -2)

There were a further six consensus statements which referred to a range of strategies:

- 4. Use symbols, pictures or photos to label resources in the environment (1, -1, 1)
- 26. Provide the child with choices within activities to encourage them to engage (1, 1, 3)
- 31. Provide the child with additional time to process verbal information and respond (2, 0, 3)
- 33. Watch television that is educational (-5, -5, -5)
- 36. Film children telling stories for them to watch themselves back to increase confidence and review their own skills (-3, -4, -3)
- 53. Develop oro-motor skills, such as making noises in front of a mirror to raise awareness of sound production (-1, -3, -1)

Although the ranking may be different between the three viewpoints they are statistically significant because of how they were ranked in relation to other statements, not the ranking alone, once again drawing on a Gestalt approach to analysis. These statements still informed the interpretations because the statement may hold different aspects of meaning from each viewpoint (Webler, Danielson, & Tuler, 2009).

These consensus statements highlight strategies that all participants loading onto the three viewpoints agreed upon, to a statistically significant extent. It is possible that these statements indicate a core understanding which underpins the three viewpoints. The differences between the three viewpoints have been explored and highlighted, the implications of which will be discussed in Section 5.5, though it is important to indicate there are a set of strategies which the participant group agree upon. This core set of strategies can be built upon within training and should be utilised as a platform from which to discuss additional strategies and training. Exploring what has informed the rankings of these strategies may also help further understand the three viewpoints and provides a commonality that can be strengthened and built upon during collaborative working between professionals.

4.9 Non-Significant and Confounding Q sorts

Four Q sorts did not load significantly onto any of the final three factors. These were Q sorts 2, 17, 32, and 35. Their factor loadings can be seen in Table 4.5. The individual Q sorts and questionnaire comments were reviewed to ascertain if any viewpoints had been neglected, and not covered in the three viewpoints that were interpreted from the factors.

All non-significant Q sorts would have significantly loaded onto a factor had the significance level remained at ± 0.34 . This suggests that elements of their viewpoints have therefore been captured by the three viewpoints presented, though their individual Q sorts did not exemplify a factor.

Seven Q sorts were found to be confounded, and loaded significantly on more than one factor. These were Q sorts 4, 14, 18, 21, 31, 34 and 39. The individual Q sorts and questionnaire comments were also reviewed for these participants and failed to draw attention to any further information that would offer understanding to this research, though the majority indicated that communicating with parents, and sharing strategies with them was essential. This was a highly ranked statement in both factor one and three and as such this may be indicated by a number of Q sorts being confounded.

4.10 Follow up Interviews

As outlined in section 3.8 the participants with the highest loading Q sorts were interviewed. The participants were asked to read the summarised viewpoints and indicate which viewpoint they agreed with most. It was again reinforced that there was no right or wrong answer and that it is acknowledged that as the data is a snapshot their viewpoint may change. The interview data have been grouped into themes below, based on the purpose or common theme of the questions or responses.

4.10.1 What helps practitioners working in line with their Viewpoint?

Practitioners from all three viewpoints referred to training as something which helps them work in line with their viewpoint. Viewpoint One referred to engaging with professionals and SLTs, whereas Viewpoint Two participants emphasised drawing on other practitioners' experience and all working in the same way. Collaborating with the team to ensure that good practice and interventions were implemented, as well as staff feeding back on the training they have received, was also mentioned by all viewpoints. Practitioners holding views in line with Viewpoint Two identified that they would use professionals advice but this would be as a last resort, once they had utilised all other strategies. They also reported that sometimes you can intervene too early with specialist support when initial good practice may be sufficient.

One practitioner commented on how SLT visits can be spread out, which initially she was concerned about, but she now feels this provides time to implement strategies before reviewing and evaluating them with the SLT. Viewpoint three stated that sharing information with families was key to ensuring strategies were effective. A number of staff indicated that there ratios are normally good so they find the time to deliver interventions and plan for future work.

4.10.2 What hinders practitioners working in line with their Viewpoint?

Training was mentioned by Viewpoint One and Three, more specifically the lack of access to training, finding it hard to bring in their learning from training and the impact this has on the lack of common knowledge and understanding of all staff. This was also mentioned in relation to the staff ethos; if not all staff were motivated to bring in new practice, or didn't understand the value of strategies (because of lack of knowledge), then this could create a large barrier.

Participants in Viewpoint Two also mentioned the challenges faced when trying to get specialists involved, both because of the paperwork and also that children will be discharged because of non-attendance. Practitioners felt this was particularly challenging as it was often the children that needed the most support that would not access the support because of parenting capacity. The home environment and parent's acknowledgement of their child's needs were also seen as barriers to effective intervention by Viewpoint Two and Three.

4.10.3 What can both help and hinder working in line with their Viewpoint?

There were a number of factors that were raised as both helping and hindering. Time and staff ratios were raised as important, they were a challenge within some settings whilst other practitioners said their staff ratios were good and therefore they found the time for meaningful intervention. Staff ethos was also discussed in a similar way; practitioners that felt there was a good staff ethos of sharing information and working in the same way found this helped them practice in line with their Viewpoint, whereas others highlighted that if staff ethos is poor and people do not value the same strategies then it can be very challenging to create change.

Finally, training featured highly in the discussions regarding helping and hindering factors. Most practitioners identified that they would like to access training or that training has been helpful in the past but also identified that the lack of common training for all was a large barrier. This was found to affect the ability to work collaboratively

with staff, affected the staff ethos and also children received variable support because of it.

4.10.4 What informs practitioners' viewpoints?

Practitioners reported that their viewpoints are informed by a range of factors; training they have accessed (including Makaton and Elklan), the EYFS and childcare qualifications. Experience was valued by most, and some participants identified drawing on the experience and knowledge of the management team or advice they have accessed previously from professionals. Having experience of strategies being used effectively (by themselves or others) was also important so that they could see the impact of various strategies. Finally one practitioner reported that it came down to her personal values and wanting the children she works with to have access to the experiences and nurture her own children are exposed to.

4.11 Validity of the viewpoints

Each participant was asked to read the three summarised viewpoints and indicate which viewpoint they felt best represented their views. This question was not to identify whether the participant still held this view as this is not in line with the epistemology of the researcher. Instead it was to provide triangulation data and further validity to the viewpoint. By taking the factor interpretation back to the participants it provided an opportunity to check the descriptor and interpretation were in line with the viewpoint they were presenting through their completed Q sort. Participants were also asked which statements most stood out to them and these were predominantly in line with the views represented within the Q sort.

4.12 Summary of the Results

The data analysis of the 42 completed Q sorts generated a three factor solution based on a number of statistical criteria. The three factors were then interpreted to create three distinct viewpoints:

1. Tailor interventions and seek professionals' advice
2. Emphasis on stand-alone strategies, alter instructional language and don't use visuals
3. Understand a child's background and utilise environmental strategies

There were eight consensus statements within the three viewpoints, which was expected because of the moderate correlation between the factors.

Follow up interviews, conducted with the participants who loaded highest onto each factor, checked the validity of the interpretation, discussed whether participants work in line with their viewpoints, what supports and hinders them working in this way, as well as what has informed their viewpoint. These interviews provided further validity to the interpretations and results as well as some tentative reliability to the results.

Chapter 5: Discussion, will explore the results presented within this chapter in relation to the research question posed, the literature review in Chapter 2. The strengths and limitations of the methodology as outlined in Chapter 3 will be evaluated, and the results presented in Chapter 4 will be considered in relation to the implications for professional practice and future research. Finally overall conclusions of the research will be drawn.

5 Discussion

5.1 Introduction to Discussion

The aim of this research was to explore viewpoints of early years practitioners regarding strategies to support children with SLCN. Chapter 4 presented the analysis and interpretation of the data, this chapter will discuss these findings in relation to the existing literature, before exploring the strengths and limitations of the research, as well as the implications for professional practice and future research.

5.2 Summary of the Research Findings

A summary of the research findings will be presented and explored with relation to the research question posed.

A Q methodological approach was used to answer the research question “what viewpoints are held by early years practitioners in effectively supporting children with SLCN”. This involved 42 participants who completed a 58-item Q sort of strategies that had been suggested to support children with SLCN.

The study identified three distinct viewpoints within the target population that engaged with the research:

- Viewpoint One: Tailor interventions and seek professionals’ advice
- Viewpoint Two: Emphasis on stand-alone strategies, alter instructional language and don’t use visuals
- Viewpoint Three: Understand a child’s background and utilise environmental strategies

These three distinct viewpoints indicate that there are different viewpoints held amongst the practitioners who participated, about what strategies are most effective in meeting the needs of children with SLCN. This therefore suggests that not all strategies to support these children will be valued equally by all practitioners.

Three simple, clear, distinct and stable viewpoints (Webler, Danielson, & Tuler, 2009) were identified for the factor solution and interpretation in this research. Greater

differentiation between viewpoints has been identified through the use of Q methodology than would have been gained had data collection solely relied on focus groups or interview techniques. Although some participants commented that it was hard to rank statements, because they were all so positive, the factor analysis has allowed differences to be drawn out. It is unlikely that without this level of statistical analysis and number of participants that such differences would have been identified. The decision to raise the significance level from ± 0.34 to ± 0.40 for individual Q sorts to load onto a factor heightened the divergence of the viewpoints. Further to this it ensured the maximum number of Q sorts loaded onto only one factor and increased the number of participants' views captured by the factors accepted.

Six viewpoints could have been statistically viable based on the Kaiser-Guttman criterion and two or more significant loadings, though the cross product exceeding the standard error rate indicated a five factor solution. However, the Scree Test in Section 4.3.1 illustrated that more than three factors should not be interpreted (Cattell, 1966). Although a two factor solution was considered and could have been appropriate it was felt that it would not have represented the full complexity and the qualitative differences that were found between the three viewpoints identified.

Viewpoint One and Viewpoint Three were on the borderline of a moderate to high correlation, which suggests these may be similar. However, the correlation level is still within an acceptable range (Dancey & Reidy, 2014). Exploration of the factor arrays identified a number of distinguishing statements and qualitative analysis highlighted a number of key differences. Specifically, the value placed on environmental strategies and careful assessment and understanding of the child's background by practitioners forming Viewpoint Three. This is in contrast to the direct intervention and visual aids, which were valued by practitioners whose Q sorts formed Viewpoint One.

Despite being distinct viewpoints there were eight consensus statements amongst the viewpoints, identifying strategies that were valued equally between the viewpoints, which are presented in Section 4.8.

The viewpoints have been taken back to participants loading highly on to each viewpoint to strengthen the validity of the interpretations. One participant was able to identify

how their practice had changed since she had completed the Q sort because of gaining experience in working with children with SLCN and accessing support and advice from SLTs. Because of this she believed her viewpoint had changed from one to three. This demonstrates that despite the similarities between these viewpoints, and the moderate correlation between them, there are key differences which the practitioners value.

5.3 Findings in relation to existing research

Key themes within the literature will be explored in relation to the study findings below.

5.3.1 Diverse workforce, with variable training

Within the literature reviewed within Chapter Two it was identified that the workforce is diverse, which is likely to impact on the identification of children with SLCN and also the delivery of interventions (Morgan, 2008). Further to this it is suggested that qualifications vary greatly and training within SLCN is low (Mroz & Hall, 2003). However, national workforce statistics identify that the number of EYPs holding a level three qualification or above has been increasing and has increased from 84 to 87 percent between 2011 and 2013. This heterogeneity of the population was one of the rationales for carrying out this research. As has been identified within the literature, the range of provision and therefore outcomes for children within the early years is highly variable and there is a call for this to improve nationally (Bercow, 2008).

The demographic of this study sample is overall roughly in line with the national statistics reported (Brind et al., 2014). However, the P set is younger than that reported nationally, with 76 percent of this study's sample being up to 40 years old compared to 57 to 65 percent for the national average. The proportion of staff holding a level three qualification or above was 93 percent within the study's population which is in line with full sessional care within children's centres (93 percent) though slightly elevated compared to full sessional care outside of children's centres (87 percent). The number of participants who currently held no early years qualifications (though a number were

working toward them) within this sample was seven percent, which is above the workforce average of four percent. However, this figure within the workforce survey included A levels which were not necessarily focussed upon children or early years (Brind et al., 2014), whereas the research carried out did not. Had this criteria been applied to the current study the number of participants with no qualifications may have reduced.

Within this study the age of participants ranged from 18 to 65 years old, with between three months and 42 years experience, holding between no qualifications up to a Level Seven qualification and 90 percent of the sample had experience of working with children with SLCN. This indicates that, although roughly in line with the national workforce, the participant group are far from homogenous.

This range of age, experience and qualifications as identified within the literature and this study supports the argument that identification and intervention are likely to be variable in part due to the demographic of this workforce. Further to this the three viewpoints identified within this study are not equally represented by all demographics, in particular Viewpoint One includes a high number of young practitioners and is underrepresented by staff with a qualification at Level Six or higher. Viewpoint Two has a high number of both the oldest and youngest age bracket and has a high proportion of staff with no qualifications, whereas Viewpoint Three holds a high number of older participants and is not represented by any 16-20 year olds nor non-qualified staff. The viewpoint is also over represented by staff holding a Level Six qualification, although, 57 percent of the group rated their confidence as low. This data would suggest that, as anticipated, age and qualifications impact on the viewpoints held. However, for conclusions to be drawn regarding this impact further research would need to be carried out.

With regard to accessing SLCN specific training this was not included in the demographic data collected. A number of training approaches or interventions were raised during the focus groups, such as Elklan and WellComm, though these were excluded from the Q set as they were not in line with the other strategies, mainly as they would each include a wide range of sub strategies within them. Viewpoint Three highly ranked staff accessing training to ensure that all staff had the same underlying knowledge regarding SLCN as

well a typical language development. This indicates that in line with Mroz & Hall's (2003) findings many EYPs are underqualified in meeting the needs of children with SLCN. Interestingly the viewpoint which held the highest proportion of staff qualified at Level Six, and also the viewpoint which had no unqualified participants, was the viewpoint which most valued training for staff, which is perhaps in contrast to what would be expected. It could be argued that this group of staff are aware of the complexity of this area of need because of their early years training and as such seek further advice and knowledge.

5.3.2 Collaborative working

The requirement and importance of collaborative working has been outlined within a range of research (Bercow, 2008; McConnellogue, 2011; O'Keeffe & McDowell, 2004). This includes engagement between EYs settings and professionals and also between professionals, such as SLTs and EPs (Freeman & Hartshorne, 2009). Parents are also reported to value collaborative working, though Bercow (2008) reported that in practice this does not happen regularly.

Two of the statements included within the Q set referred to seeking advice from professionals (58) and communicating with parents (52). Viewpoint One ranked both these statements most highly. Viewpoint Three ranked these statements similarly, though ranked understanding the child's needs and careful assessment more highly than seeking advice from professionals. Advice from professionals was also found to be a distinguishing statement for both these Viewpoints, further emphasising the importance placed on this strategy. In contrast, Viewpoint Two ranked the above strategies lower than Viewpoints One and Three, ranking 'seeking professionals advice' at -3, indicating that they place less value on professionals advice compared to other strategies. It is important to reference once again the demographic of this sub group. There was an overrepresentation of the oldest and youngest age group as well as those holding no relevant qualifications in Viewpoint Two; it could be argued that because of the lack of experience and training for some of this group they may be unaware of the professionals and support available, or have not yet experienced such support. In

contrast to this the staff with a high level of experience within Early Years may no longer feel they need the expertise of external professionals. These findings have implications for EYPs and also professionals hoping to engage with settings, demonstrating that different viewpoints value professional advice and collaborating with parents differently, which may impact on the way practitioners and settings engage with other professionals. This will be discussed further in Section 5.5.

5.3.3 Assessment

It is acknowledged in a range of research that careful assessment and identification of needs is essential in ensuring children receive the most appropriate support in a timely manner (Barrett & Hammond, 2008; Bercow, 2008). Assessment can be challenging due to the variation in developmental trajectories at this young age as well as needs being masked as EAL, or identified as a language delay rather than an impairment (Bercow, 2008). However, despite the recognised need for careful identification Mroz (2006) reported just 29 percent of the participants sampled used assessment regularly in identifying SLCN. In addition to this 70 percent of the participants in the same study were unable to identify SLCN when presented with vignettes of children with SLCN. Due to the comorbidity of SLCN and behavioural needs and later literacy difficulties careful and holistic assessment is required. This is particularly important with regard to children that are engaging in behaviours typically demonstrated by children with SEBD (Mroz, 2006; Stringer & Lozano, 2007).

Viewpoint Three placed a high emphasis on understanding the child's background (15:+5, distinguishing statement) and careful assessment of needs (18+4). Viewpoint One also valued these strategies (15:+1, 18:+4), indicating a value being placed on these elements of identification to inform intervention. In contrast Viewpoint Two ranked the above strategies significantly lower than the other two viewpoints, also making them distinguishing statements for this Viewpoint.

Although these findings are encouraging for the value, and therefore use, of assessments, it does not provide an indication of what these assessments 'look like'.

Mroz (2006) reported that predominantly staff use comparison to peers as their main form of assessment. Although this may help identify those with high levels of needs, it is cautioned against as expectations can drop (Locke, Ginsborg, & Peers, 2002). This is particularly important for staff and children within low SES due to the high prevalence of SLCN within this demographic. Therefore, further research is required if we are to gain a true reflection of the type of assessments carried out and what measures are being used.

These results demonstrate that some viewpoints place a high emphasis on careful assessment and understanding of underlying needs, including EAL, though as indicated by Viewpoint Two, not all practitioners will share this viewpoint and therefore may not be engaging in such assessments. The results do, however, portray a more optimistic view regarding assessment than that found in Mroz's study (2006), wherein just 29 percent of participants engaged in assessment. This may be attributed to the additional assessments introduced by the government, or more specifically to the focus LA, the WellComm screening and intervention introduced borough wide.

5.3.4 Early intervention

Early intervention is highly advocated as it has been argued to generate the biggest impact, and is most cost-effective (Freeman & Hartshorne, 2009), and the absence of early intervention has a large impact on a range of developmental, academic and behavioural areas (Barrett & Hammond, 2008; Department for Education, 1994; Ward, 1999). As it has been advised that intervention is typically delivered by education based professionals it is highly likely that EYPs will be the main professionals delivering intervention (Law & Durkin, 2000). Therefore it is essential that EYPs are aware of the importance of SLCN and how best to support these needs.

The number of strategies generated during the focus groups indicates that the participants had a good awareness of strategies for supporting children with SLCN and were able to identify appropriate strategies. Further to this the strategies were very varied and included environmental, individual and group strategies to support

expressive and receptive language as well as aiding communication. It is therefore argued that this study demonstrates that EYPs have an appreciation for the need to support children at this stage of their development and utilise a wide range of strategies to do this. In addition, 90 percent of the P set indicated that they had experience of working with a child with SLCN, suggesting that working with these children is commonplace in the majority of practitioner's careers. However, no data was gathered regarding EYPs' views specifically on early intervention and their role within it.

5.3.5 Staff concerns regarding knowledge and training

Once again a wide range of research reports that staff hold concerns regarding their knowledge base and their lack of specific training in the area (Letts & Hall, 2003; Mroz, 2006; Potter, 2007). A study carried out by Sadler (2005) found that approximately 90 percent of the teachers surveyed could not recall receiving input on SLCN during their initial teacher training and 88 percent of the sample self-rated their knowledge as 'limited' or 'very limited' and 63 percent rated themselves as 'not at all' or 'not very' confident in meeting the needs of children with severe SLCN within a mainstream environment. Although the number of staff qualified at a Level Three or above is increasing, which should help increase the understanding of child development as a whole, the number of staff that are accessing specific training potentially remains limited. Further to this, it has been suggested that experience of SLCN can in fact decrease confidence, possibly as staff become more aware of the complexity of the needs (Letts & Hall, 2003; Sadler, 2005).

Within this study, despite the high proportion of staff that have experience with SLCN, not all staff are confident in their ability to meet these children's needs, almost a third (31 percent) of the participants rated their confidence level as low and just 17 percent rated their confidence as high, just over half the participants feel they have a medium level of confidence. Therefore although 90 percent of staff have experience in this area this does not mean they feel confident in supporting these children effectively. In addition to this the group with the highest proportion of Level Six qualified practitioners had the lowest confidence.

Different viewpoints were held about the importance of staff accessing training, Viewpoint One and Three highly valued this as a strategy whereas Factor Two valued this less highly and this was found to be a distinguishing statement for this Viewpoint. These findings are also in line with the patterns observed regarding seeking professionals' advice, this could suggest that training and professionals are not highly valued by Viewpoint Two, or as discussed within Section 5.3.2 this may be in part a reflection of the demographic of this sub-group.

5.3.6 Hindrances to good practice

It was identified within the existing research that a concern held amongst staff in meeting children's needs was staff ratios (Potter, 2007). However, within the follow-up interviews, carried out with the eight staff that had loaded highly onto one of the three viewpoints, this concern was not raised. A number of participants reported that staff ratios allowed them to carry out individual or group interventions and, as demonstrated during the data collection process, all settings had the capacity to release at least one member of staff at a time and remain within ratio.

A key hindrance to good practice identified by the participants within this study was staff/setting ethos. They reported finding it hard to bring in good practice and implement strategies if the whole team was not behind them, in particular if the staff were either "disillusioned" or "under qualified". This concern relates in part to the above section concerning staff accessing training. It is important that this staff ethos and knowledge base is acknowledged and accounted for in any training delivered to both whole settings and individuals.

5.3.7 Receptive versus expressive language strategies

It has also been suggested that EYPs are more likely to identify expressive needs than receptive needs (Stringer & Lozano, 2007). Therefore without careful assessments which are tailored to identify such needs then SLCN may be misunderstood or, more

concerning, missed entirely. Viewpoint Two valued a high number of statements which were particularly important for children with receptive language difficulties, including using high levels of repetition of key language (27), providing one instruction at a time (39), increasing gestures and non-verbal communication (12), using shorter sentences (56) and chunking information (44). In total they rated 11 strategies targeting receptive language needs within the top 25 ranked items, 10 of which were ranked higher than either Viewpoint One or Three, four of which were also found to be distinguishing statements. However, they did not highly value visual aids or signing (19, 4, 1, 25, 46), asking the child to repeat instructions to check understanding (8), directly teaching useful phrases (10) or teaching underpinning listening skills (21). This indicates that although they ranked some strategies for receptive language highly there were some that they found less effective. It is unclear as to whether this is for receptive language needs specifically or all SLCN.

5.3.8 Types of strategies

The study has identified a wide range of strategies which can serve as useful guidance for staff working within this area of need. Although different viewpoints are held regarding their usefulness, very few statements were consistently ranked low, except television and providing a plenary. It may be that various strategies are found to be more effective for children with certain areas of need, and this may warrant further exploration, which has impacted on the rankings of statements. Although overall the experience of completing the Q sort was positive for most participants many staff reported that it was challenging to rank statements as they were all positive strategies that could all be utilised depending on the child. This research therefore adds to the evidence base regarding what strategies can be effective in supporting a child with SLCN, based on literature, practitioners' experience and SLTs advice.

5.3.9 SLCN and Socio-Economic Status

As explored within Section 2.5 of the Literature Review there is a high correlation between SLCN and low SES. Though this has not been explored within this research the demographic of the settings sampled were predominantly from areas of low SES. This may be represented by 90 percent of the sample having experienced children with SLCN, therefore this percentage may have been lower had a different sample base been explored.

5.3.10 Summary of Findings in relation to existing research

This section has identified that the findings of this study can be mapped on to the existing research. The themes drawn out within the literature presented in Chapter Two remain pertinent at this stage. Some areas have been explored more thoroughly than others through Q methodology, though as this was exploratory research this is unsurprising. It is of interest that despite the study being exploratory in nature and guided predominantly by the views expressed by participants during the focus study stages of the research, key themes previously identified within the literature have emerged. Through exploring the research findings in relation to the existing literature a number of further areas of research have been identified and are discussed in more detail in Section 5.6.

5.4 Strengths and limitations of the research

A qualiquantological methodology was utilised within this research, which overall has proved appropriate and advantageous. Q methodology was chosen for its usefulness in exploring viewpoints in relation to one another, generating groups of views on a macroscopic level. In line with the reflexive approach adopted throughout the study the limitations, as well as the strengths, of the research design will be considered. The quality indicators for qualitative and quantitative research which were introduced in

Section 3.6.1 and 3.6.2 will be reviewed in light of the completion of the data collection and analysis stages.

5.4.1 Qualitative Quality Indicators

Eight guidelines for quality qualitative research, identified by Tracy (2010), were presented in section 3.6.1 and are returned to now in relation to how each of these criteria were met within this research. These are summarised in Table 5.1 and subsequently discussed in further detail.

Table 5.1: A table to summarise the quality indicators for qualitative research (Tracy, 2010) in relation to this research

Criteria for Quality	Description	Quality criteria in relation to current research
Worthy Topic	Research topics often emerge from disciplinary or contextual priorities and should be relevant, timely, significant and interesting.	• Research base demonstrates importance of SLCN on a range of life skills and achievement • Gap in research identified by literature (Mroz & Letts, 2008)
Rich Rigour	Data collection and analysis should be rigorous which can be demonstrated by collecting sufficient data in an appropriate context, with a suitable sample, clear procedures and transparency regarding the sorting, choosing and organisation of data.	• A structured and systematic approach has been taken, see sections 3.7 and 4.0. • 58 item Q set from range of sources • 42 participants who are engaged in supporting children with SLCN in the early years • Suitable time for participants
Sincerity	The researcher demonstrates self-reflexivity, transparency, authenticity and genuineness. This relates to the awareness and honesty regarding the researcher's biases and goals.	• Transparency in the refinement of the concourse to final Q set • Rationale for decision making at the analysis stage has been presented, see sections 3.7.3 and 4.3 to 4.9

Table 5.1 continued: A table to summarise the quality indicators for qualitative research (Tracy, 2010) in relation to this research.

Credibility	The research should include substantial description and triangulation in order to provide a plausible and persuasive interpretive analysis. Within quantitative research this would align with reliability and replicability.	• Thorough description of the viewpoints and subsequent questionnaires and interviews. • In order to triangulate and ensure validity the data was taken back to participants.
Resonance	The research should have the ability to meaningfully affect an audience.	• The findings have the potential to influence EYPs and also how professionals engage with EYPs.
Significant contribution	The research should extend knowledge, improve practice or generate future research. This contribution should be demonstrated theoretically, practically, morally, and methodologically.	• The study contributes to the knowledge base of views of EYP and identifies possible future research. • As well as providing insight for the focus LA.
Ethics	There must be adherence to this throughout the research including at individual, situational and cultural levels.	• Ethical considerations have been considered throughout and are in line with appropriate governing bodies, see 3.7.2c and 3.9.
Meaningful Coherence	This is achieved through identifying the correct method, and the literature, research questions, and results are meaningfully interconnected.	• The justification for the research question and appropriateness of the methodology have been considered in 2.12, 2.13, 3.2 and 3.5. It is also demonstrated by Q methodology providing three distinct viewpoints.

5.4.1.1 Worthy Topic

Chapter 2 outlined the rationale for this research through a review of relevant literature. It is reported that approximately seven percent of five year olds have SLCN (McCartney, Ellis, & Boyle, 2009) and a high proportion of children with statements of special educational needs have SLCN as a primary need, and this number has been growing since 2011 (Whitaker, 2014). The impact of SLCN on early development and achievement can be demonstrated by just 16 percent of children with SLCN achieving a 'good level of development' on the EYFS, compared with 56 percent of those without (Simes, 2014). Government research and policy identifies that if change and effective practice is to occur, joined up working as well as all professionals understanding the importance of speech, language and communication skills is essential (Bercow, 2008; Department for Children, Schools, & Families, 2008).

It has been identified that the environment and context can impact on language acquisition and this context includes practitioners' views and beliefs (Wiebe Berry, 2006). Further to this it has been suggested that practitioners beliefs and viewpoints can impact on the engagement with, and delivery of, intervention (Durlak & DuPre, 2008; Han, Catron, Weiss, & Marciel, 2005; Wiebe Berry, 2006), which ultimately impacts the intervention and support received by children with SLCN. As Herbel-Eisenmann, Drake, and Cirillo (2009) argue, involving educators in the investigation and exploration of their practice may generate better understanding of current practice and may have a greater impact on children's outcomes, than when this research is 'done to them' by external researchers. The research indicates that it would be useful to explore EYPs' viewpoints in relation to strategies to support children with SLCN as the number of children identified with these needs continues to rise, justifying the exploration of practitioners' viewpoints about strategies to support children with SLCN as a worthy topic.

5.4.1.2 Rich Rigour

The process followed for this Q methodological study followed the guidance provided within the literature relating to this approach. This research used a Q set of 58 items (Brown, 1993), containing statements describing strategies to support children with SLCN, refined from a wider concourse taken from a range of sources (Watts & Stenner, 2005) including literature, government policy and focus groups of EYPs and SLTs. 42 participants completed the Q sort, which is in line with the recommendation to have fewer participants than items in the Q set (Van Exel & De Graaf, 2005).

The use of Nominal Group Technique during the focus groups also ensured that a wide range of views and strategies were identified, whilst ensuring that minority voices were captured. All strategies were recorded during the focus groups and were presented to the group to check accuracy. These statements alongside the literature reviewed, were recorded and refined by the researcher and three Doctoral Trainees.

It is acknowledged that there are a number of concerns about how the participants may have viewed the research activities at the time of data collection. These include their familiarity with the strategies, whether all strategies were reflected in the Q set and whether they felt restrained by the fixed distribution curve.

Information was not gathered on whether the participants had experience of the strategies presented or their confidence in delivering them. Therefore participants may have rated a strategy less favourably because they were unfamiliar with it, rather than because they did not see its value. This may be particularly pertinent for the participants with no qualifications or limited experience.

The concourse was informed by focus groups with practitioners from three settings, of which five participants also completed the Q sort and no participant identified that any strategies were missing. This indicates the Q set was representative of strategies with which the participants were familiar. Also the Q set should be broadly representative and makes no claims to be exhaustive (Watts & Stenner, 2005).

The participants could have felt constrained by the strategies presented within the Q set as well as the forced normal distribution shape of the grid. A number of participants

found it initially challenging to narrow down the number of strategies in the most agree pile but once their familiarity with the strategies and confidence grew they reported finding this more achievable. A number of participants did state that they wished they could have ranked more statements highly, this is represented by 17 participants placing the zero point at between -4 and -3 and a further five placing it between -5 and -4. This may be a representation of the fact that the strategies were overwhelmingly positive or because of the range of strategies and complexity of SLCN. Despite this a number of participants reported that they had enjoyed the activity as it had made them reflect on their practice and reminded them of all the strategies they can implement. Further to this, managers of settings which completed the Q sort were keen for their staff to also complete the activity because they had found it very thought provoking (Participant 36). This is consistent with reports of the Q methodological procedures within the research (Sexton et al., 1998).

The sample used in this study was opportunistic. Therefore participants who volunteered may not be wholly representative of the population, for instance they may have had a personal interest in the area. However, a number of the Q sorts involved participants that were available on the day due to staff ratios which made the sample more randomised than when entirely self-nominated participants and managers were asked to nominate practitioners, including those with high, medium or low levels of experience and training.

5.4.1.3 Sincerity

Procedures for each stage of the research have been reported in a transparent manner. A thorough account of both the proposed methodological procedure for a Q methodological study as well as the process followed in this study in Chapter Three, is included. Further to this, the analysis and interpretation stages of the data analysis are presented in Chapter Four. Where an active decision has been made by the researcher, such as how to refine the concourse or how many factors to accept and their subsequent interpretation, these have been presented clearly and a rationale provided.

5.4.1.4 Credibility

The three viewpoints identified in the analysis and the interpretation presented were incorporated with participant description and reflection. The post-Q sort questionnaires and data from the follow up interviews supplemented the viewpoints, provided triangulation and further validity for the Researcher's interpretation of the viewpoints.

5.4.1.5 Resonance

The identified viewpoints on the complex topic of SLCN arguably have the ability to meaningfully affect an audience, more specifically other EYPs. It also has the capacity to impact how professionals support practitioners in meeting the needs of children with SLCN by holding these identified viewpoints in mind. This will be discussed in greater detail within section 5.6.

5.4.1.6 Significant Contribution

The findings of this research provide a significant contribution to the professional literature by addressing an area which was identified as requiring further exploration by published research (Marshall & Lewis, 2014; McCartney et al., 2010; Wiebe Berry, 2006), as well as by exploring this area utilising a methodology which has not been previously utilised within this area, to the Researcher's knowledge. The significance of this research will be discussed in further detail in Section 5.6.

5.4.1.7 Ethics

Ethical considerations were integral to this research, in particular ensuring informed consent was gained, that confidentiality was maintained throughout, and that participants were appropriately debriefed. The Researcher adhered at all times to ethical guidance as identified in section 3.9.

In addition care has been taken when reporting results that no participant is identifiable. This has been achieved in part by presenting all demographic data collected in bands so no individual or group is identifiable.

5.4.1.8 Meaningful coherence

Section 5.1 outlines how this research has achieved its purpose of answering the research question identified and puts forward an argument for why the methodology was appropriate. Wherever possible connections have been made between the literature, research question posed, findings, interpretations and implications.

5.4.2 Quantitative Quality Indicators

5.4.2.1 Validity

A high degree of validity was sought throughout the research and a number of key steps were taken to maximise this:

- Increase the content validity of the Q set
- Reduce researcher bias
- Minimise social responding of P set

5.4.2.1.1 Content Validity

To improve the content validity of the Q set and check that it was broadly representative (Watts & Stenner, 2005) of strategies to support children with SLCN three Doctoral Trainees, alongside the Researcher, refined the concourse collaboratively. In order to retain further validity the wording of statements were only edited for grammar and reliability, in line with recommendations made by Webler, Danielson, and Tuler (2009). It is argued that the final Q set achieved its aim as it lead to the identification of distinct viewpoints (Webler, Danielson, & Tuler, 2009), suggesting the Q set had content validity. Further to this the participants suggested minimal alterations, when provided with the opportunity to make such suggestions. Finally the participants were encouraged to

review their Q sort and consider reasons for their rankings. This opportunity to review and reflect provided further validity that the final Q sort was an accurate presentation of their viewpoint.

5.4.2.1.2 Researcher Bias in Q Methodology

The limitations often found in direct data collection, such as interviews and focus groups, are overcome by Q methodology through the indirect nature and independent manner in which Q sorts are completed. However, researcher bias is possible at the concourse refinement, data analysis and data interpretation stage. The steps taken to limit researcher bias at the concourse refinement stage have been presented above. In order to limit researcher bias at the data analysis stage the statistical reasoning and criterion utilised have been presented. The stage most vulnerable to researcher bias is the interpretation stage though to address this a transparent and systematic approach was taken, through utilising a crib sheet and identifying defining statements to inform the interpretation (Watts & Stenner, 2012). Further to this the interpretations were then taken back to participants to ensure the interpretations were appropriate and valid. Ultimately the influence of the researcher in the study is embraced by collaboratively construing in line with the social constructionism epistemological stance.

5.4.2.1.3 Social Responding

Social responding could have occurred for the participants who took part in all stages of the research for a number of reasons:

- Although the EYPs were unfamiliar with the Researcher they were aware that the Researcher was a TEP in the Educational Psychology Service for the LA where the settings were based. There was likely to be an understanding that educational psychology professionals in the LA aim to promote inclusion and support in meeting the needs of children with special educational needs.

Therefore it is possible that the participants ranked the statements that they felt the researcher would value most highly.

- As the participants were initially approached through the management team within the setting they may have been conscious of providing responses in line with the views of the setting or that they felt the management would regard as appropriate. To reduce social responding, during all verbal and written communication with participants it was explicitly stated that the Q sort should best represent their individual views and beliefs, reassured that there was no right or wrong answer and that all data was confidential throughout the data collection and subsequent analysis and reporting.
- The Q sorts were carried out individually or in small groups of up to seven. Care was taken so that participants could not easily see each other's Q sorts and so influence each others' ratings, but at times participants did discuss certain statements. This may have created some social responding though as there were so many statements to rank it is likely that the impact was minimal.

5.4.2.2 Generalisation

As an approach Q methodology does not intend to identify viewpoints which can be generalised outside the participants within the study. The viewpoints are a snapshot which captures a moment in time for the individual (Watts & Stenner, 2012). In this research, the participants were EYPs from seven settings in the focus LA. The findings therefore may be helpful for these settings to consider how strategies can be successfully implemented in the future and the viewpoints that may be informing staff's engagement with supporting children with SLCN. Professionals within the focus LA engaging with EYPs may also hold these findings in mind when supporting staff in meeting children's needs or delivering training. Although the external validity of these results are limited, it remains important that external validity is considered.

Exploring the demographic of this research in relation to that identified at a national level provides an insight into the potential external validity. All participants in the study

were female. This is a fair representation of the wider demographic as at a national level male early years practitioners equate to approximately two percent of the workforce. Within this sample size that would equal just under one participant. The age of the demographic is overall younger than that reported within full sessional care within and outside children centres, with 76 percent of this study's sample being up to 40 years old whereas this was between 57-65 percent for the national average. However the proportion of staff holding a level 3 qualification or above was 93 percent within the study's population which is in line with full sessional care within children's centres (93 percent) though slightly elevated compared to full sessional care outside of children's centres (87 percent). The number of participants that currently held no early years qualifications (though a number were working toward them) within this sample was 7 percent, which is above the workforce average of 4 percent, however, this figure within the workforce survey included A levels which were not necessarily focussed upon children or early years. Had this criteria been applied to the current study the number of participants with no qualifications at level three may have reduced (Brind et al., 2014). This exploration of the national and study demographic suggests that the sample is broadly in line with the national averages and therefore would allow for some cautious external validity.

Q methodology aims to illuminate issues which can help inform future research and does not claim to produce generalisable findings in the traditional sense. There is an argument, however, for discussing the transferability of the findings rather than the generalisability as commonly found with positivist epistemology. The strength of qualitative research lies in the ability to capture reality through *in-depth* data gathering and it is argued that thick description of the results and methodology allows the reader to judge the applicability of the research to other settings (Mertens, 2015).

5.4.2.3 Reliability

The epistemological stance adopted by the researcher, social constructionism, promotes an exploratory approach, as such the completed Q sorts are perceived to be a snapshot of a participant's viewpoint at that time. As explored within the methodology section some studies have found a high correlation coefficient when Q sorts have been carried out by the same participant at different times, indicating some reliability to the findings (Van Exel & De Graaf, 2005). As argued within section 3.6.2.3 the most important element of reliability for Q methodology is replicability, and this has been addressed throughout this project by providing a transparent record of the methodology carried out within this research. Further to this once the Q sorts were completed all participants were encouraged to review their completed Q sort and provide further details in the post-sort questionnaire which improves the reliability of the findings.

5.4.3 Appropriateness of Q methodology in answering the research question

Finally, it seems appropriate to explore whether Q methodology was appropriate in answering the research question posed ("what viewpoints are held by early years practitioners in effectively supporting children with SLCN") in light of the above limitations and strengths, as well as to revisit the results in relation to existing research. Further to this there are a number of considerations, including challenges which have not been encompassed within the above limitations and strengths section.

Q methodology was in part chosen for its ability to explore complex or contentious areas (Watts & Stenner, 2012). SLCN is recognised to be a complex area of need due to the broad range of difficulties, including difficulties with fluency, forming sounds and words, formulating sentences, understanding what others say and using language socially (Bercow, 2008). Because of the wide range of difficulties within the area the range of strategies to address these needs is also very broad. The most effective strategy for meeting the needs of a child with SLCN is likely to depend on the type of need a child presents with, therefore the Q sort and ranking incorporated within this may be representative of a focussed area of need within SLCN rather than all areas of SLCN. This

potential limitation was identified at the pilot stage of the Q sort and a question on the post-sort questionnaire was subsequently included to address this concern, and as such all participants were asked if they held a certain type of need or specific child in mind when sorting the statements. All participants stated that they had focussed on all areas of SLCN, though a number of participants had held a certain child in mind whom they provided brief (and anonymous) details of. The understanding of all areas of SLCN may be dependent on knowledge and experience, therefore a participant could be drawing on experience of supporting a child with expressive needs but could be unaware of other aspects of SLCN. This would suggest that the Q sorts overall represent viewpoints with regards to the broad range of SLCN though this concern must be held in mind, especially when exploring the implications for practice.

The strategies identified by the focus groups and therefore the statements contained within the Q set include strategies for children known or suspected to be on the Autistic Spectrum (AS). This in itself is appropriate as a key area of need within AS is communication, however, it may have resulted in more AS focussed strategies such as routine based and visual timetable strategies being included than if this area of need had been excluded from the discussions and Q sort. Further to this staff may have ranked such strategies more highly if they were thinking of a child with communication difficulties because of AS needs rather than purely SLCN. However, as the study is explorative it aims to get an authentic perspective of the participants' reality, therefore if their experience is mainly based on children with AS then this methodology is effectively capturing their reality.

If greater control of these variables was required or desired then vignettes presenting example cases could have been provided to participants for them to rank statements according to the need presented. However, this has a number of flaws. This is not in line with the epistemology as it reduces down the complexity of real life experience, it over simplifies SLCN, if a participant did not have experience with the needs presented then the Q sort may not be a true reflection of their views or practice, and finally it would not be drawing upon the real-life experiences of the participants sampled.

5.4.4 Summary of the strengths and limitations within the study

It has been demonstrated that a number of steps have been taken throughout the research to improve the quality of the data gathered according to both qualitative and quantitative criteria, where appropriate. Key limitations lie in the generalisability and reliability of the results, as is common amongst qualitative research. However, as has been demonstrated, though the results may not be generalisable they may be transferable with caution. The validity of the results has held paramount importance throughout the research and by encouraging participants to check their Q sorts and through taking the results and interpretations back to the participants the validity of the results presented has been increased.

In conclusion, although the limitations identified make the area more challenging to research the exploratory nature of the methodology allows for such complexity. If this complexity is manipulated or managed, although it becomes easier to measure, it loses the very purpose of why the research is being carried out.

5.5 Implications for professional practice

The results of this research have implications for professionals working in early years settings, in particular, all professionals in the focus LA who work to support children with SLCN within an early years environment, including EYPs, SLTs and EPs. Overall the findings of this research show that practitioners do not always perceive strategies to be equally effective in supporting children with SLCN. This is significant as the beliefs held by staff could affect their practice (Porter, 2007). Therefore these findings may have implications in terms of appreciating that the various viewpoints held might influence practice.

The findings of this study also demonstrates the complexity of SLCN, the wide range of strategies and also the perceptions of staff regarding this area of need and support. It is argued that the understanding regarding different viewpoints on this complex topic can form a foundation to build effective strategies (ten Klooster, Visser, & de Jong, 2008). As EYPs view the effectiveness of strategies differently, it could impact their engagement

with and implementation of strategies they don't highly value. To produce effective and sustainable strategies to support children with SLCN, it seems important that all potential 'viewpoints' are taken into account. In order to do so an understanding of the different viewpoints that may exist is required.

Viewpoint One highly values direct intervention and focusses on a child's interests to make these interventions engaging and meaningful as well as utilising visual aids and timetables. They highly value professionals support and are therefore most likely to engage with their support. However, they do not highly value modelling and commenting strategies. The implication of this viewpoint on practice may result in children receiving good quality intervention but the child may not apply the learnt skills more widely as they are not integrated in to the environment. Further to this it has been acknowledged that effective intervention should be interwoven within education (Law & Durkin, 2000). Finally modelling and commenting can be useful strategies for supporting social skills and engaging with peers, which could have implications for children with SEBD. The high value placed on individualised interventions may be informed by the high value placed on engaging with professionals, which are likely to advise strategies to support an individual child. Professionals working with practitioners may therefore choose to hold this viewpoint in mind in order to ensure an emphasis on environmental and modelling strategies is also valued.

Practitioners holding Viewpoint Two in contrast value modelling and commenting strategies to support expressive language and also place the highest value on strategies to support receptive language and understanding of instructions. The viewpoint does not value visual aids, which may result in them not being implemented. However, the practitioners who formed this viewpoint might be less willing, and possibly less likely to engage with professionals and training and employ strategies that draw on this advice. This suggests that a worthwhile implication for professionals within the focus LA would be to raise awareness of their role and the ways in which they can support practitioners in supporting children with SLCN.

Finally practitioners holding Viewpoint Three value more environmental strategies than targeted intervention, which is good for impacting on more children and making support

meaningful and contextual for the child but this may limit the support for children with receptive language needs as information is not being tailored to their level of understanding and ability to process verbal instructions. This viewpoint also places less importance on direct intervention and as such they may not engage as well with tailored, specific intervention for children with SLCN. This viewpoint is in line with the recommendations of Wolery (2000) to deliver interventions in the least obtrusive environment and the findings of Turan, Ostrosky, Halle, and DeStefano (2004) that staff value naturalistic intervention as well as accessing specialist advice to implement such intervention. This may also be the most appropriate approach for settings in low SES areas due to the high prevalence of SLCN in this population (Locke, Ginsborg, & Peers, 2002).

Further to this Viewpoints One and Three highly value assessment and understanding background, which may have an impact on the type of referrals made as a better understanding of the child's needs should have been created prior to professionals' engagement. Therefore some practitioners or settings may need support in effective assessment to increase early identification whereas others may need advice to widen their knowledge base as to which strategies are most effective for specific cases, such as how to support children with receptive language needs.

The findings of this research also have significant implications for the work of EPs as it is considered that the majority of the educational psychology profession aims to promote inclusion throughout education (Farrell et al., 2006) and the results of this research are certainly informative for EPs in the focus LA; offering findings that will help further understanding of how they can support settings to meet the needs of children with SLCN. The implications for EPs could include the following roles:

- Raising awareness of different strategies and ensuring that practitioners know when different strategies are most effective, for example receptive rather than expressive language needs.
- Raising awareness of the implications of SLCN on other areas of development and achievement, including literacy and SEBD.

- Providing support to settings regarding good practice and environmental strategies to support low level needs so that the most complex cases can be referred for specialist advice.
- Offering training on how to implement strategies whilst minimising additional work and time.
- Providing settings, and practitioners, with evidence of when strategies have been effective to encourage them to value them.
- Confidence in meeting the needs of children with SLCN was relatively low amongst this participant group and supporting the development of practitioner's confidence and skill set may be essential in insuring strategies are implemented.

Ultimately, the findings of this research – that practitioners hold different viewpoints about strategies to support children with SLCN within the early years – suggests that management and professionals should always consult with staff prior to, and during, the implementation of new strategies and interventions, with the purpose of assessing staff's perceptions of the effectiveness of the strategies. Many staff valued training and accessing support from professionals and this must be tailored to the needs of the practitioners and draw on strong evidence bases to ensure that practitioners value the strategies discussed. The skills that EPs regularly utilise within their practice, including consultation, problem solving and qualitative and quantitative research methods, could be applied to this process to problem solve to find the most effective ways of practicing as well as gathering and analysing data.

Based on this understanding the Researcher suggests that consulting with staff is essential when recommending strategies to ensure that the staff are engaged and understand why strategies are being recommended. It is essential that the effectiveness of strategies is demonstrated to staff and that practitioner's confidence to deliver such strategies is developed.

5.6 Future Research

Divergent viewpoints held by practitioners within early years settings in the focus LA have been identified through a Q methodological approach. The follow up interviews as well as the exploration of the findings in relation to the existing literature have indicated a number of areas for further exploration through future research.

Through exploring the three viewpoints held and the demographic of the sample which informed each viewpoint it became evident that there were key differences with regards to age, experience, qualification and self-reported confidence. The self-reported confidence levels of staff was highlighted as an area of concern within the existing literature and varied amongst the demographic of this study as a whole and also between the Viewpoints held. This would warrant further exploration, in particular how this impacts on the implementation of strategies and intervention and ultimately how this impacts on the outcomes of children with SLCN.

This could be explored in a number of ways. Further Q sort activities could be held with more purposive sampling to identify if qualification level, age or confidence impact on the strategies ranked as most effective. Analysis within this Q sort could be more deductive and explore these patterns during factor extraction. Alternatively the three viewpoints identified within this research could be taken back to a larger sample of EYPs, practitioners would then be asked which viewpoint they most agreed with and this would allow patterns within the demographic to be explored in further detail.

Further exploration of what practitioners believe help or hinders engaging with professionals would also provide useful data as to how professionals can effectively engage with staff, especially for those who do not value professionals as highly. It is possible, as indicated by the demographic of the group holding Viewpoint One that the staff group may be unaware of the professionals, due to limited experience or training, or diversely because the staff group have a high level of experience and therefore access professionals as a last resort as they have the skill set themselves.

As acknowledged within the limitations of this research the varied needs of children with SLCN and the strategies to support them, namely receptive versus expressive language,

may have made the Q sort challenging because the strategies would be dependent on the need being supported. Although staff rarely reported drawing on a specific area this may have implications for how the strategies were ranked. In order for this to be explored further questionnaires or further Q sorts could be carried out with an emphasis on strategies to support children with receptive/expressive needs specifically. However, in order for this data to be meaningful it would require a highly knowledgeable participant set and therefore would not have been appropriate at this exploratory stage of the research.

Finally the importance placed on Early Intervention by practitioners has not been explored explicitly by this research. Although it has been inferred that staff engaged in early intervention, exploration of their view of its importance as well as their role in delivering early intervention has not been explored. Careful consideration would be required as to the methodology of such a study as socially desirable responses would be highly likely due to the emphasis placed on early intervention within government policy and legislation.

Ultimately the study has provided data from an exploratory phase which can now be utilised as the foundation for further study, perhaps the most logical next step would be to increase the generalisability and reliability of the results by sampling a larger participant base and identifying how many practitioners subscribe to each of the three viewpoints, or otherwise. In addition to this correlations regarding key demographics should be explored, such as whether the amount of experience, level of training or self-reported confidence are correlated with certain viewpoints. Questionnaires could be utilised to access a wide range and large number of EYPs.

Further research regarding what informs the generation of these viewpoints would then deepen the understanding of these viewpoints, careful exploration of what beliefs, constructs, theories and knowledge base inform each of the viewpoints could be explored through case studies. This deeper understanding would help support future practice as the constructs and theories identified could be built upon or challenged, as appropriate, to ensure that staff were accepting of different approaches to practice and supporting children with SLCN. Action research methods, utilising vignettes, could also

be carried out to explore the viewpoints in greater depth and create change within the system directly, as appropriate.

5.7 Conclusions

This research attempted to explore and identify viewpoints of early years practitioners regarding strategies to support children with SLCN. Three distinct viewpoints were identified from 42 practitioners who completed a 58-item Q set. The results indicate that not all strategies are viewed as being equally effective, which is informed by the viewpoint held by the practitioner. This provides a significant contribution to the existing literature on practitioners' views regarding supporting children with SLCN.

A systematic investigation of the viewpoints held regarding the complex topic of SLCN has been achieved through the use of Q methodology, which has identified some implications for ensuring future strategies are valued and implemented by all staff. These findings provide a basis to inform the development of training and supporting practitioners in meeting the needs of children with SLCN, within the focus LA and potentially more widely.

An argument has been made that Q methodology has provided a more in-depth and richer understanding of the viewpoints held by practitioners than would have been gained by purely quantitative approaches. In addition a larger number of practitioners' views have been represented than a purely qualitative method, such as discourse analysis or grounded theory could have offered. The detailed accounts presented of the practitioners' viewpoints, about what are the most effective strategies to support children with SLCN, should support the implementation of strategies, and could therefore impact on outcomes for children with SLCN.

The research question has been answered and some potentially important findings have been identified. Although a number of limitations have been acknowledged, Q methodology was identified to be the most appropriate approach to achieve the aims of this research. The rigorous and transparent reporting of the methodological procedures provides validity to the results and increases the replicability of the study.

There are a number of implications for professionals who support children with SLCN, in particular for the focus LA, due to the demographic of the LA and the association of low SES and SLCN. A number of important implications have been identified through both the factor analysis and follow up interviews. There are a number of key findings which are in line with the identified literature within this area. Further to current research highlighting the diverse workforce this research demonstrated that the level of qualifications and experience may impact on the viewpoints held by practitioners. In addition to this the confidence levels self-reported by practitioners indicates that increased experience and qualifications do not necessarily increase the confidence of practitioners in meeting the needs of children with SLCN, in fact the opposite may be the case. The importance of assessment, training and professionals' advice varied amongst the viewpoints which may prove to be a valuable insight to inform the delivery of training and how professionals engage with early years practitioners. Follow up interviews highlighted that some practitioners highly valued strategies which they had personally seen impact on children's needs, which has implications for the delivery of training and the advice of professionals.

As identified within the literature review, there is limited research within the UK regarding the viewpoints of EYPs regarding SLCN and strategies to support SLCN. The studies that do look into EYPs' views of strategies are very limited in the depth of exploration, have predominantly relied upon rating statements generated solely by the researchers and were carried out with limited numbers of participants. This study has provided a more in-depth exploration of the strategies that EYPs utilise within a naturalistic environment, identifying strategies within the literature, from key professionals and EYPs. Further to this a more representative sample was utilised to ensure that the viewpoints explored represented the reported demographic of the workforce.

Three distinct viewpoints have been identified, as well as a number of consensus statements, which can inform professionals' work within this area. The identified viewpoints can be used to inform the development of policy, ensuring that the various viewpoints are reflected within the policy, understanding that different practitioners value various strategies to a greater or lesser extent. Further to this the viewpoints

should also inform the delivery of training in the area. Through gaining the views of staff at the beginning of training sessions this research can inform how professionals approach the promotion of various strategies, such that more emphasis may need to be placed on assessment, environmental strategies, or direct intervention accordingly. A number of participants also emphasised that they engage with strategies that they have seen to be effective, therefore, policy and training should highlight the evidence base and underpinning theory for the strategies advised.

Future research which is potentially beneficial to our understanding of this area has also been considered. Possible future research includes: exploring the relationship between experience and training and viewpoints held, which could be explored by using Q methodology with purposively sampled practitioners, or the three viewpoints identified could be presented to a larger sample of practitioners to identify if there are patterns with which practitioners hold each viewpoint. Further exploration of receptive opposed to expressive language strategies has also been suggested, potentially through further Q studies with careful sampling of practitioners. Finally the views on, and implementation of 'early intervention' warrants further exploration, though socially desirable responses may be a key barrier to generating valid finding.

This research offers an insight into the different ways early years practitioners view strategies to support children with SLCN, highlighting that early years practitioners do not place the same value in the various strategies put forward to address this complex topic. It is hoped that this research informs the development and delivery of future initiatives to ensure they are fully supported and ultimately implemented by practitioners.

6 References

- Baker, C. N., Kupersmidt, J. B., Voegler-Lee, M. E., Arnold, D. H., & Willoughby, M. T. (2010). Predicting teacher participation in a classroom-based, integrated preventive intervention for preschoolers. *Early Childhood Research Quarterly, 25*(3), 270-283.
- Baker, R. M. (2006). Economic rationality and health and lifestyle choices for people with diabetes. *Social Science & Medicine, 63*(9), 2341-2353.
- Bandura, A. (1977). *Social learning theory*. New York City: General Learning Press.
- Barrett, E., & Hammond, L. (2008). Early Childhood Education of Children with Specific Language Impairments. *Australian Journal of Learning Difficulties, 13*(2), 145-160.
- Belsky, J., Vandell, D. L., Burchinal, M., Clarke-Stewart, K. A., McCartney, K., & Owen, M. T. (2007). Are There Long-Term Effects of Early Child Care? *Child development, 78*(2), 681-701.
- Bercow, J. (2008). The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs.
- Bickford-Smith, A., Wijayatilake, L., & Woods, G. (2005). Evaluating the Effectiveness of an Early Years Language Intervention. *Educational Psychology in Practice, 21*(3), 161-173.
- Block, J. (2008). *The Q-sort in character appraisal: Encoding subjective impressions of persons quantitatively*. Washington, DC: American Psychological Association.
- Bottling, N., & Resling, C. (2007). Language impairments: Their impact on educational progress. *Educational and Child Psychology, 24*(4), 6-8.
- Boyle, J., McCartney, E., O'Hare, A., & Forbes, J. (2009). Direct versus indirect and individual versus group modes of language therapy for children with primary language impairment: principal outcomes from a randomized controlled trial and economic evaluation. *International Journal of Language & Communication Disorders, 44*(6), 826-846.
- Bracken, S. S., & Fischel, J. E. (2006). Assessment of preschool classroom practices: Application of Q-sort methodology. *Early Childhood Research Quarterly, 21*(4), 417-430.
- Bradley, J., & Miller, A. (2010). Widening participation in higher education: constructions of "going to university". *Educational Psychology in Practice, 26*(4), 401-413.

- Brind, R., McGinigal, S., Lewis, J., Ghezelayagh, S., Ransom, H., Robson, J., Street, C., & Renton, Z. (2014). *Childcare and Early Years Providers Survey 2013*.
- British Psychological Society. (2002). *Professional Practice Guidelines: Division of Educational and Child Psychology*. Leicester: BPS.
- British Psychological Society. (2014). *Code of Human Research Ethics. British Psychological Society (Vol. 1)*. Leicester: BPS.
- Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*: Yale University Press.
- Brown, S. R. (1993). A primer on Q methodology. *Operant subjectivity*, 16(3/4), 91-138.
- Brown, S. R. (1996). Q methodology and qualitative research. *Qualitative health research*, 6(4), 561-567.
- Brownlie, E., Beitchman, J. H., Escobar, M., Young, A., Atkinson, L., Johnson, C., Wilson, B., & Douglas, L. (2004). Early language impairment and young adult delinquent and aggressive behavior. *Journal of abnormal child psychology*, 32(4), 453-467.
- Carlson, J. S., Tired, H. B., Bender, S. L., & Benson, L. (2011). The influence of group training in the Incredible Years Teacher Classroom Management Program on preschool teachers' classroom management strategies. *Journal of Applied School Psychology*, 27(2), 134-154.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate behavioral research*, 1(2), 245-276.
- Cochran-Smith, M., & Lytle, S. L. (1993). *Inside/outside: Teacher research and knowledge*: Teachers College Press.
- Crain, W. (2015). *Theories of development: Concepts and applications* (Sixth ed.). London: Routledge.
- Cross, R. M. (2005). Exploring attitudes: the case for Q methodology. *Health education research*, 20(2), 206-213.
- Curt, B. C. (1994). *Textuality and tectonics: Troubling social and psychological science*. Buckingham: Open University Press.

- Dancey, C. P., & Reidy, J. (2014). *Statistics without maths for psychology* (Sixth ed.). Essex: Pearson Education Limited.
- de Ruyter, K. (1996). Focus versus nominal group interviews: a comparative analysis. *Marketing Intelligence & Planning*, 14(6), 44-50.
- Department for Children, Schools, & Families. (2008). *Better Communication: An action plan to improve services for children and young people with speech, language and communication needs*. Nottingham: Department for Children, Schools and Families Publications.
- Department for Education. (1994). *Code of practice on the identification and assessment of special educational needs*. London: HMSO.
- Department for Education. (2014). *Statutory framework for the early years foundation stage. Setting the standards for learning, development and care for children from birth to five*. Department for Education.
- Department for Education and Employment. (2000). *Educational psychology services (England): Current role, good practice and future directions—report of the Working Group*. Nottingham: DfEE Publications.
- Division of Educational & Child Psychology. (1999). A framework for psychological assessment and intervention. *DECP Newsletter*, 89, 6-9.
- Dockrell, J., Sylva, K., Huxford, L., & Roberts, F. (2008). I CAN Early Talk package: An evaluation in two local authorities.
- Dunsmuir, S., Clifford, V., & Took, S. (2006). Collaboration Between Educational Psychologists and Speech and Language Therapists: Barriers and opportunities. *Educational Psychology in Practice*, 22(2), 125-140.
- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American journal of community psychology*, 41(3-4), 327-350.
- Ellingsen, I. T., Størksen, I., & Stephens, P. (2010). Q methodology in social work research. *International journal of social research methodology*, 13(5), 395-409.

- Farrell, P., Woods, K., Lewis, S., Rooney, S., Squires, G., & O'Connor, M. (2006). *A Review of the Functions and Contribution of Educational Psychologists in England and Wales in Light of "Every Child Matters: Change for Children"*: Department for Education and Skills London.
- Field, F. (2010). *The Foundation Years: preventing poor children becoming poor adults: The report of the Independent Review on Poverty and Life Chances*: The Stationery Office.
- Freeman, K., & Hartshorne, M. (2009). *I CAN Talk Speech, Language and Communication Needs and the Early Years Issue 7*. London: I CAN.
- Gallagher, A., Frith, U., & Snowling, M. J. (2000). Precursors of literacy delay among children at genetic risk of dyslexia. *Journal of Child Psychology and Psychiatry*, 41(2), 203-213.
- Gallagher, A. L., & Chiat, S. (2009). Evaluation of speech and language therapy interventions for pre-school children with specific language impairment: a comparison of outcomes following specialist intensive, nursery-based and no intervention. *International Journal of Language & Communication Disorders*, 44(5), 616-638.
- Georgeson, J., Campbell-Barr, V., Mathers, S., Boag-Munroe, G., Parker-Rees, R., & Caruso, F. (2014). Two-year-olds in England: an exploratory study. Available at <http://tactyc.org.uk/research/>.
- Han, S. S., Catron, T., Weiss, B., & Marciel, K. K. (2005). A teacher-consultation approach to social skills training for pre-kindergarten children: Treatment model and short-term outcome effects. *Journal of abnormal child psychology*, 33(6), 681-693.
- Hatcher, P. J., & Hulme, C. (1999). Phonemes, rhymes, and intelligence as predictors of children's responsiveness to remedial reading instruction: Evidence from a longitudinal intervention study. *Journal of experimental child psychology*, 72(2), 130-153.
- Herbel-Eisenmann, B., Drake, C., & Cirillo, M. (2009). "Muddying the clear waters": Teachers' take-up of the linguistic idea of revoicing. *Teaching and Teacher Education*, 25(2), 268-277.
- Hutchinson, J., & Clegg, J. (2011). Education practitioner-led intervention to facilitate language learning in young children: An effectiveness study. *Child Language Teaching and Therapy*, 27(2), 151-164.

- Kington, A., Gates, P., & Sammons, P. (2013). Development of social relationships, interactions and behaviours in early education settings. *Journal of Early Childhood Research*, 11(3), 292-311.
- Kitzinger, C. (1999). Researching subjectivity and diversity. *Psychology of Women Quarterly*, 23(2), 267-276.
- Kline, P. (2014). *An easy guide to factor analysis*. London: Routledge.
- Knight, C., Studdert-Kennedy, M., & Hurford, J. (2000). *The evolutionary emergence of language: social function and the origins of linguistic form*: Cambridge University Press.
- Kratochwill, T. R., & Shernoff, E. S. (2004). Evidence-based practice: Promoting evidence-based interventions in school psychology. *School Psychology Review*, 33(1), 34-48.
- Krueger, R. A., & Casey, M. A. (2009). *Focus groups: A practical guide for applied research*. Thousand Oaks, CA: Sage publications.
- Law, J. (2000). Treating children with speech and language impairments. *British Medical Journal*, 321, 908-909.
- Law, J., Beecham, J., & Lindsay, G. (2012). *Effectiveness, costing and cost effectiveness of interventions for children and young people with speech, language and communication needs (SLCN)*. London: Department for Education.
- Law, J., & Durkin, C. (2000). The Literacy Skills of Language-Impaired Children: Time for 'joined up' thinking? *Educational Psychology in Practice*, 16(1), 75-87.
- Law, J., Lindsay, G., Peacey, N., Gascoigne, M., Soloff, N., Radford, J., & Band, S. (2001). Facilitating communication between education and health services: the provision for children with speech and language needs. *British Journal of Special Education*, 28(3), 133-137.
- LeCouteur, A., & Delfabbro, P. H. (2001). Repertoires of teaching and learning: A comparison of university teachers and students using Q methodology. *Higher Education*, 42(2), 205-235.
- Lenneberg, E. H., Chomsky, N., & Marx, O. (1967). *Biological foundations of language* (Vol. 68): Wiley New York.

- Letts, C., & Hall, E. (2003). Exploring early years professionals' knowledge about speech and language and development and impairment. *Child Language Teaching and Therapy*, 19(2), 211-229.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In K. N. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research*. London: Sage.
- Lindsay, G., Desforges, M., Dockrell, J., Law, J., Peacey, N., & Beecham, J. (2008). *Effective and efficient use of resources in services for children and young people with speech, language and communication needs*. Warwick: DCSF.
- Lindsay, G., & Dockrell, J. (2012). *The relationship between speech, language and communication needs (SLCN) and behavioural, emotional and social difficulties (BESD)*. DFE.
- Lindsay, G., & Dockrell, J. E. (2004). Whose Job Is It?: Parents' Concerns About the Needs of Their Children with Language Problems. *The Journal of Special Education*, 37(4), 225-235.
- Lindsay, G., Dockrell, J. E., Mackie, C., & Letchford, B. (2005). The Roles of Specialist Provision for Children with Specific Speech and Language Difficulties in England and Wales: A Model for Inclusion? *Journal of Research in Special Educational Needs*, 5(3), 88-96.
- Lindsay, G., Dockrell, J. E., & Strand, S. (2007). Longitudinal patterns of behaviour problems in children with specific speech and language difficulties: Child and contextual factors. *British Journal of Educational Psychology*, 77(4), 811-828.
- Locke, A., Ginsborg, J., & Peers, I. (2002). Development and disadvantage: implications for the early years and beyond. *International Journal of Language & Communication Disorders*, 37(1), 3-15.
- Marshall, J., & Lewis, E. (2014). 'It's the way you talk to them.' The child's environment: Early Years Practitioners' perceptions of its influence on speech and language development, its assessment and environment targeted interventions. *Child Language Teaching and Therapy*, 30(3), 337-352.
- McCartney, E., Ellis, S., & Boyle, J. (2009). The Mainstream Primary Classroom as a Language-Learning Environment for Children with Severe and Persistent Language Impairment--

- Implications of Recent Language Intervention Research. *Journal of Research in Special Educational Needs*, 9(2), 80-90.
- McCartney, E., Ellis, S., Boyle, J., Turnbull, M., & Kerr, J. (2010). Developing a Language Support Model for Mainstream Primary School Teachers. *Child Language Teaching and Therapy*, 26(3), 359-374.
- McConnellogue, S. (2011). Professional roles and responsibilities in meeting the needs of children with speech, language and communication needs: joint working between educational psychologists and speech and language therapists. *Educational Psychology in Practice*, 27(1), 53-64.
- McKeown, B., & Thomas, D. (1988). *Q Methodology*. Newbury Park, CA: Sage.
- Mecrow, C., Beckwith, J., & Klee, T. (2010). An Exploratory Trial of the Effectiveness of an Enhanced Consultative Approach to Delivering Speech and Language Intervention in Schools. *International Journal of Language & Communication Disorders*, 45(3), 354-367.
- Mertens, D. M. (2015). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (Fourth ed.). London: Sage Publications.
- Morgan, L. (2008). *I CAN Talk Speech, Language and Communication and the Children's Workforce Issue 5*. London: I CAN.
- Mroz, M. (2006). Teaching in the Foundation Stage—how current systems support teachers' knowledge and understanding of children's speech and language. *International Journal of Early Years Education*, 14(1), 45-61.
- Mroz, M., & Hall, E. (2003). Not Yet Identified: The knowledge, skills, and training needs of early years professionals in relation to children's speech and language development. *Early Years*, 23(2), 117-130.
- Mroz, M., Hall, E., Santer, J., & Letts, C. (2002). *Children's Speech and Language Development: Investigation of the Knowledge, Skills and Understanding of Early Years Professionals*: School of Education, Communication and Language Sciences, University of Newcastle upon Tyne.

- Mroz, M., & Letts, C. (2008). Interview stories: Early years practitioners' experiences with children with speech, language and communication needs. *Child Language Teaching and Therapy*, 24(1), 73-93.
- O'Keeffe, M. J., & McDowell, M. (2004). Bridging the gap between health and education: Words are not enough. *Journal of paediatrics and child health*, 40(5-6), 252-257.
- Ofsted. (2007). *The Foundation Stage: a survey of 144 settings*: Ofsted.
- Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. . New York: Continuum.
- Øverland, K., Thorsen, A. A., & Størksen, I. (2012). The beliefs of teachers and daycare staff regarding children of divorce: A Q methodological study. *Teaching and Teacher Education*, 28(3), 312-323.
- Palikara, O., Lindsay, G., Cullen, M. A., & Dockrell, J. (2007). Working together?: the practice of educational psychologists and speech and language therapists with children with specific speech and language difficulties. *Educational and Child Psychology*, 24, 77-88.
- Pence, K. L., Justice, L. M., & Wiggins, A. K. (2008). Preschool teachers' fidelity in implementing a comprehensive language-rich curriculum. *Language, Speech, and Hearing Services in Schools*, 39(3), 329-341.
- Petersen, I. T., Bates, J. E., D'Onofrio, B. M., Coyne, C. A., Lansford, J. E., Dodge, K. A., Pettit, G. S., & Van Hulle, C. A. (2013). Language ability predicts the development of behavior problems in children. *Journal of abnormal psychology*, 122(2), 542.
- Petticrew, M., & Roberts, H. (2008). *Systematic reviews in the social sciences: A practical guide*: John Wiley & Sons.
- Porter, L. (2007). *Behaviour in Schools. Theory and Practice for Teachers* (Second ed.). Milton Keynes: Open University Press.
- Potter, C. A. (2007). Developments in UK early years policy and practice: can they improve outcomes for disadvantaged children? *International Journal of Early Years Education*, 15(2), 171-180.
- Robson, C. (2011). *Real World Research*. Chichester: John Wiley & Sons Ltd.

- Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical child and family psychology review*, 3(4), 223-241.
- Rose, J. (2006). *Independent review of the teaching of early reading*. Nottingham: DfES.
- Roulstone, S., Wren, Y., Bakopoulou, I., Goodlad, S., & Lindsay, G. (2012). *Exploring interventions for children and young people with speech, language and communication needs: A study of practice*. London: Department for Education.
- Roulstone, S., Wren, Y., Bakopoulou, I., & Lindsay, G. (2012). Interventions for children with speech, language and communication needs: an exploration of current practice. *Child Language Teaching and Therapy*, 28(3), 325-341.
- Sadler, J. (2005). Knowledge, attitudes and beliefs of the mainstream teachers of children with a preschool diagnosis of speech/language impairment. *Child Language Teaching and Therapy*, 21(2), 147-163.
- Schmolck, P. (2014). PQMethod (Version 2.35) [Computer Software]. Neubiberg: University of the Bundeswehr Munich. Retrieved from <http://schmolck.userweb.mwn.de/qmethod/downpqwin.htm>
- Sexton, D., Snyder, P., Wadsworth, D., Jardine, A., & Ernest, J. (1998). Applying Q methodology to investigations of subjective judgments of early intervention effectiveness. *Topics in Early Childhood Special Education*, 18(2), 95-107.
- Shannon, D., & Posada, S. (2007). The Educational Psychologist in the Early Years: Current practice and future directions. *Educational Psychology in Practice*, 23(3), 257-272.
- Shaughnessy, A., & Sanger, D. (2005). Kindergarten Teachers' Perceptions of Language and Literacy Development, Speech—Language Pathologists, and Language Interventions. *Communication Disorders Quarterly*, 26(2), 67-84.
- Simes, J. (2014). Children with special educational needs 2014: an analysis.
- Siraj-Blatchford, I., & Clarke, P. (2003). *Supporting identity, diversity and language in the early years*. Buckingham: Open University Press.
- Springate, I., Atkinson, M., Straw, S., Lamont, E., & Grayson, H. (2008). *Narrowing the Gap in Outcomes: Early Years (0-5 years)*. Slough: NFER.

- Stainton Rogers, R., & Stainton Rogers, W. (1990). What the Brits got out of the Q: And why their work may not line up with the American way of getting into it. *Electronic Journal of Communication*, 1(1), 1-11. 22 June 2015
- Stephenson, W. (1953). *The study of behavior; Q-technique and its methodology*. Chicago: University of Chicago Press.
- Stewart, D. W., Shamdasani, P. N., & Rook, D. W. (2007). *Focus groups: Theory and practice* (Second ed.). London: Sage.
- Stringer, H., & Lozano, S. (2007). Under identification of speech and language impairment in children attending a special school for children with emotional and behavioural disorders. *Educational and Child Psychology*, 24(4), 9.
- Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2010). *Early childhood matters: Evidence from the effective pre-school and primary education project*: Routledge.
- ten Klooster, P., M, Visser, M., & de Jong, M. D. (2008). Comparing two image research instruments: The Q-sort method versus the Likert attitude questionnaire. *Food quality and preference*, 19(5), 511-518.
- Tickell, C. (2011). The early years foundation stage (EYFS) review: report on the evidence. *London: Department of Education*.
- Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative inquiry*, 16(10), 837-851.
- Turan, Y., Ostrosky, M. M., Halle, J. W., & DeStefano, L. (2004). Acceptability Of Language Interventions: A Comparison Of Preschool And Elementary Teachers' Responses. *Journal of Early Intervention*, 26(3), 221-233.
- University of Nottingham. (2013). *University of Nottingham Code of Research Conduct and Research Ethics*. Nottingham: University of Nottingham.
- Van Exel, N., & De Graaf, G. (2005). Q-methodology: A sneak preview. www.jobvanexel.nl. 29 June 2015
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, 23(3), 34-41.

- Ward, S. (1999). An investigation into the effectiveness of an early intervention method for delayed language development in young children. *International Journal of Language & Communication Disorders*, 34(3), 243-264.
- Watts, S., & Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative Research in Psychology*, 2(1), 67-91.
- Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method & interpretation*. London: Sage.
- Weare, K. (2007). Delivering Every Child Matters: the central role of social and emotional learning in schools. *Education 3–13*, 35(3), 239-248.
- Webler, T., Danielson, S., & Tuler, S. (2009). Using Q method to reveal social perspectives in environmental research. *Greenfield MA: Social and Environmental Research Institute*, 54, 1-54.
- Webster, A., & McConnell, C. (1987). *Children with speech and language difficulties*: Paul H Brookes Pub Co.
- Whitaker, A. (2014). Special educational needs in England: January 2014.
- Wiebe Berry, R. A. (2006). Beyond Strategies Teacher Beliefs and Writing Instruction in Two Primary Inclusion Classrooms. *Journal of Learning Disabilities*, 39(1), 11-24.
- Wolery, M. (2000). Recommended practices in child-focused interventions. *DEC recommended practices in early intervention/early childhood special education*, 29-37.
- Young, A. R., Beitchman, J. H., Johnson, C., Douglas, L., Atkinson, L., Escobar, M., & Wilson, B. (2002). Young adult academic outcomes in a longitudinal sample of early identified language impaired and control children. *Journal of Child Psychology and Psychiatry*, 43(5), 635-645.
- Zambelli, F., & Bonni, R. (2004). Beliefs of teachers in Italian schools concerning the inclusion of disabled students: a Q-sort analysis. *European Journal of Special Needs Education*, 19(3), 351-366.

Secondary References

- Bruner, J. S., (1983) *In Search of Mind*. New York: Harpur and Row. In Freeman, K., & Hartshorne, M. (2009). *I CAN Talk Speech, Language and Communication Needs and the Early Years Issue 7*. London: I CAN.
- Chomsky, N., (1959) Review of Verbal Behaviour by B. F. Skinner. *Language*, 35, 26-58. In Ward, S. (1999). An investigation into the effectiveness of an early intervention method for delayed language development in young children. *International Journal of Language & Communication Disorders*, 34(3), 243-264.
- Dewey, J. (1931/1985) Social science and social control, in J.A. Boydston (ed.) *John Dewey: The Later Works, 1882-1898 (Vol. 2)*. Carbondale, IL: South Illinois University Press. pp. 64-8. In Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method & interpretation*. London: Sage.
- Hall, D., (1989) *Health for all Children: The Report of the Joint Working Party on Child Health Surveillance*. Oxford: Oxford University Press. In Ward, S. (1999). An investigation into the effectiveness of an early intervention method for delayed language development in young children. *International Journal of Language & Communication Disorders*, 34(3), 243-264.
- Holzman, M. (1997) *The Language of Children* (Second ed.). Oxford: Blackwell. In Herbert, M. (2003). *Typical and Atypical Development: From Conception to Adolescence* Oxford: BPS Blackwell.
- Goleman, D. (1996) *Emotional Intelligence*. London: Bloomsbury. In Weare, K. (2007). Delivering Every Child Matters: the central role of social and emotional learning in schools. *Education 3-13*, 35(3), 239-248.
- Schwandt, T. (2007) *Dictionary of Qualitative Inquiry*. 3rd edn. Thousand Oaks, CA: Sage.
- Stephenson, W. (1953). *The Study of Behaviour: Q Technique and its Methodology*. Chicago: University of Chicago Press. In Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method & interpretation*. London: Sage.

Webster-Stratton, C., & Reid, M. J. (2003). The incredible years parents, teachers, and children training series: A multifaceted approach for young children with conduct problems. In A. E. Kazdin & Weisz, J. R. (Eds.), *Evidence-based psychotherapies for children and adolescents* (pp. 224–240). New York: The Guilford Press.

In Carlson, J. S., Tiet, H. B., Bender, S. L., & Benson, L. (2011). The influence of group training in the Incredible Years Teacher Classroom Management Program on preschool teachers' classroom management strategies. *Journal of Applied School Psychology, 27*(2), 134-154.

7 Appendices

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Appendix 1: Alternative Methodologies Considered

Discourse Analysis

Q methodology can be seen as fitting within the wider methodological area of discourse analysis techniques (Webler, Danielson, & Tuler, 2009). Discourse analysis is a large category of methods based on detailed explorations of language, whether they be verbal or in print. It is based on the belief that language plays such a central role in our construction of meaning and social norms that studying the discourse of a target topic is the key to understanding our social functions (Robson, 2011). The approach usually involves very detailed analysis of small amounts of discourse and typically focuses on small units of language, including intonation and the choice of words used, creating a micro analysis (Thomas, 2013). Q methodology explores the macroscopic level through identifying related viewpoints by exploring the structure of the viewpoints presented by the participants (Watts & Stenner, 2005). In line with other methodologies exploring subjectivity, the participants' responses are based on internal interpretations of the language and statements presented. However, an advantage of Q methodology is that the responses from participants can be consistently compared as they are responding to the same set of statements.

Discourse analysis could have been used to explore EYPs' viewpoints within this research, however, the purpose of the study was to identify the viewpoints held by practitioners and therefore exploring the similarities and differences between viewpoints at a macroscopic level rather than the microscopic level, as produced by discourse analysis, was more appropriate.

Personal Construct Psychology (PCP)

Personal Construct Psychology (PCP) also utilises a social constructionist epistemology and aims to identify personal constructs which are defined as the dimensions people use to make sense of the world around them. Repertory grids are used to identify individuals' personal constructs including their bipolar. Correlation techniques are then utilised to statistically examine the individual participant's constructions of the world

(Robson, 2011). This technique can generate rich data and can be particularly useful for identifying the changes in constructs of individuals over time. However, the method has been criticised for researchers making inferences regarding the bipolarity of a construct, limiting the validity of the construct as a whole. Finally the method has been criticised for implying that the constructs are stable and applicable across the elements being rated, which is more in line with a positivist epistemological stance than the social constructionist approach in which it is located (Cohen, Manion, & Morrison, 2007).

Ultimately PCP and repertory grids explore individual views whereas Q methodology identifies patterns within complex or socially contested topics from the viewpoints of participants, identifying the main themes preferred by groups of participants and therefore allowing a wider exploration of viewpoints than is possible through repertory grids.

Activity Theory

Activity theory was developed in response to behaviourism and borne out of a need to dialectically link individual and social structure. It is in line with a constructivist epistemology as it is underpinned by the belief that human activity only exists, and can be understood, through the interaction with the social and cultural world (Engeström, Miettinen, & Punamäki, 1999). It is a tool for exploring how human functioning is shaped by cultural and social factors (Daniels, Leadbetter, Soares, & MacNab, 2007). Contradictions and tensions within and between elements of an activity system creates conflicts which drive change. Therefore by studying these tensions and conflicts the object of the system can be acted upon, through mediation to produce better outcomes for the service users engaging with the activity (Greenhouse, 2013). Activity theory can be used as a descriptive framework or analytic device and emphasises the actions of individuals or groups within their environmental context (Leadbetter, 2005).

Once again this methodology would have been suitable for the research carried out, however, activity theory is possibly best suited for working in multi-disciplinary working patterns and as such the research question would need to have been

reformulated to be more fitting for this type of exploration. Activity Theory could have been utilised to explore different groups of practitioners' views of how to support children with SLCN and identify conflicts between groups' views. However, as identified within the literature there is little understanding of EYPs' views and therefore this methodology may be more appropriate as further research once common viewpoints of practitioners have been identified.

Summary of other research designs considered

Though there are a number of alternative research designs which could have been utilised within this research an argument for each has been presented. Ultimately Q methodology was chosen above those identified as it is a rigorous methodology which emphasises the constructed meanings of individual experiences whilst objectifying participants' viewpoints. This allows the researcher to identify the commonality and patterns within the participant group, whilst retaining the richness of a person's viewpoint.

Finally a key consideration when contemplating methodologies was to gain as many perspectives as possible and as many of the alternative methods, such as discourse analysis, focus on a small number of participants they would not therefore fulfil the key purpose of the research.

REFERENCES

- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (Sixth ed.). Oxon: Routledge.
- Daniels, H., Leadbetter, J., Soares, A., & MacNab, N. (2007). Learning in and for cross- school working. *Oxford Review of Education*, 33(2), 125-142.
- Engeström, Y., Miettinen, R., & Punamäki, R.-L. (1999). *Perspectives on activity theory*. Cambridge: Cambridge University Press.
- Greenhouse, P. M. (2013). Activity theory: a framework for understanding multi-agency working and engaging service users in change. *Educational Psychology in Practice*, 29(4), 404-415.
- Leadbetter, J. (2005). Activity theory as a conceptual framework and analytical tool within the practice of educational psychology. *Educational and Child Psychology*, 22(1), 18-28.
- Robson, C. (2011). *Real World Research*. Chichester: John Wiley & Sons Ltd.
- Thomas, G. (2013). *How to do your research project: A guide for students in education and applied social sciences*. London: Sage.
- Watts, S., & Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative Research in Psychology*, 2(1), 67-91.
- Webler, T., Danielson, S., & Tuler, S. (2009). Using Q method to reveal social perspectives in environmental research. *Greenfield MA: Social and Environmental Research Institute*, 54, 1-54.

Appendix 2: Stakeholder Information Sheet

INFORMATION SHEET – EARLY YEARS SETTINGS Invitation to take part in research

Dear Setting Manager

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

School of Psychology, University of Nottingham
*****CONTACT DETAIL IN FOCUS LA*****

I am a Trainee Educational Psychologist, currently completing my Doctorate in Applied Educational Psychology at the University of Nottingham. I am presently training with **Focus Local Authority** and I have been supporting a number of schools within the Local Authority throughout this academic year. I am writing to provide details of the research that I hope to complete as part of my studies

This is an invitation for your setting to take part in a research study, which aims to explore the early years practitioners' viewpoints about strategies to support children with speech, language and communication needs (SLCN) within a mainstream environment.

The reason you have been approached to take part in this research is because there has been an increased awareness of the importance of early intervention for supporting children with SLCN, however, there is little knowledge of staff's viewpoints on how best to support children with these needs. As you are aware the importance of speech, language and communication needs has been a focus for the Local Authority as demonstrated by the introduction of the WellComm screening tool. The implications of exploring staff's views is that it may be able to inform the best way to support early years staff in meeting the needs of children with SLCN.

Before you decide if you wish to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

Wherever possible each phase of the study will be held within the setting's grounds and will be held at a time which is most convenient for staffing commitments. If you participate, the procedure and time lengths are detailed below.

Stage	Dates	Involvement	Duration	Location
1	May 2015	Focus group with early years practitioners to identify what strategies can be used to support children with SLCN.	45-60 minutes	A room free from distraction on the setting's grounds.
2	June 2015	PILOT: A systematic card sort (Q sort) of approximately 60 statements about strategies to support children with SLCN	30-60 minutes	A room free from distraction on the setting's grounds.
3	September 2015	A systematic card sort (Q sort) of approximately 60 statements about strategies to support children with SLCN	30-60 minutes	A room free from distraction on the setting's grounds.
4	October 2015	Interviews with early years practitioners to explore the identified viewpoints and the potential implications for practice	30-60 minutes	A room free from distraction on the setting's grounds.

If the setting chooses to engage in this research then you will be required to distribute information sheets, consent letters and questionnaires to all staff (which will be provided by the researcher). Once this information has been collected the researcher will make direct contact with any staff that have indicated an interest in participating in the study. A room would then need to be made available (at a time convenient for both the setting and staff) to carry out the various stages of the research, as detailed in the table above.

Participation in this study is entirely voluntary and you are under no obligation to take part. You are free to withdraw at any point before or during the study. All data collected will be kept confidential and used for research purposes only. It will be stored in compliance with the Data Protection Act.

You will be provided with feedback on the general outcomes of the study. We hope that this research will be important in understanding how children with SLCN are currently being supported and how to best support early years practitioners in meeting their needs.

If you wish to participate in this study please email me at jemmataylor@** or call ****. If you agree to participate in the study I will provide further information to your staff to seek their consent to engage.

If you have any questions or concerns, please don't hesitate to contact me

Warm regards

Jemma Taylor (trainee Educational Psychologist)

Telephone:

Email:

Research Supervisor:

Dr Sarah Atkinson
Academic & Professional Tutor
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School of Psychology
University of Nottingham
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NG2 7RD

Telephone: 0115 84 67923

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Chair of the University of Nottingham Research and Ethics Committee:

Professor Stephen Jackson

Telephone: 0115 846 7403 or 0115 951 4344

Appendix 3: List of references informing concourse development

- Clough, P., & Nutbrown, C. (2004). Special Educational Needs and Inclusion Multiple Perspectives of Preschool Educators in the UK. *Journal of Early Childhood Research*, 2(2), 191-211.
- DCSF. (2008). *Better Communication: An action plan to improve services for children and young people with speech, language and communication needs*. Nottingham: Department for Children, Schools and Families Publications.
- Gallagher, A. L., & Chiat, S. (2009). Evaluation of speech and language therapy interventions for pre-school children with specific language impairment: a comparison of outcomes following specialist intensive, nursery-based and no intervention. *International Journal of Language & Communication Disorders*, 44(5), 616-638.
- Hutchinson, J., & Clegg, J. (2011). Education practitioner-led intervention to facilitate language learning in young children: An effectiveness study. *Child Language Teaching and Therapy*, 27(2), 151-164.
- Law, J., Beecham, J., & Lindsay, G. (2012). *Effectiveness, costing and cost effectiveness of interventions for children and young people with speech, language and communication needs (SLCN)*. London: Department for Education.
- Marshall, J., & Lewis, E. (2014). 'It's the way you talk to them.' The child's environment: Early Years Practitioners' perceptions of its influence on speech and language development, its assessment and environment targeted interventions. *Child Language Teaching and Therapy*, 30(3), 337-352.
- Mroz, M., & Letts, C. (2008). Interview stories: Early years practitioners' experiences with children with speech, language and communication needs. *Child Language Teaching and Therapy*, 24(1), 73-93.
- Roulstone, S., Wren, Y., Bakopoulou, I., Goodlad, S., & Lindsay, G. (2012). *Exploring interventions for children and young people with speech, language and communication needs: A study of practice*. London: Department for Education.
- Shaughnessy, A., & Sanger, D. (2005). Kindergarten Teachers' Perceptions of Language and Literacy Development, Speech—Language Pathologists, and Language Interventions. *Communication Disorders Quarterly*, 26(2), 67-84.
- Ward, S. (1999). An investigation into the effectiveness of an early intervention method for delayed language development in young children. *International Journal of Language & Communication Disorders*, 34(3), 243-264.

Appendix 4. NHS consent form



With all of us in mind

South West Yorkshire Partnership **NHS**
NHS Foundation Trust

Project Queries

This form is for enquiries about whether a project is research, audit or service evaluation. The information requested will enable us to assign your project to the correct department. All projects that are taking place in SWYPFT must be registered correctly.

Please ensure you complete all the sections of the form as relevant and email to research@swyt.nhs.uk

2) INFORMATION ABOUT THE PERSON UNDERTAKING THE PROJECT:			
Name:		Jemma Taylor	
Address:			
Telephone:		Postcode:	
		Mobile:	
Email:		LA email address	
Are you employed by SWYPFT?		NO	Do you hold an Honorary Contract with SWYPFT?
			NO

1) FULL PROJECT TITLE:	What do Early Years Practitioners view as important to effectively supporting children with Speech, Language and Communication Needs in a mainstream environment?
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3) GENERAL PROJECT INFORMATION:			
Proposed Start Date:		April 2015	Proposed End Date:
			January 2016
Give a brief description of the background to your project	The Local Authority I am placed at for my Doctoral Training, is focussing on improving early identification and intervention of children with speech, language and communication needs (SLCN) within early years settings. Research has indicated the important role played by teacher attitudes, beliefs and expectations of pupils with special educational needs (Sadler, 2005) yet there is little research into Early Years Practitioners (EYP) views on SLCN which may be impacting on the provision received by these vulnerable children and families.		
What is the main aim of your study?	This research aims to identify what EYPs view as effective strategies to supporting children with SLCN. The understanding gained will inform how EYPs can be supported by Educational Psychologists to meet the needs of children with SLCN for effective early intervention.		
Why are you conducting this study?(As part of a	As part of my Doctorate in Applied Educational Psychology		

<i>course, personal development, professional interest etc)</i>	
Will anybody else be involved in co-ordinating or running the project? <i>If so, please give details.</i>	The research will be supervised by a designated tutor at the University of Nottingham, Dr Sarah Atkinson. Further to this supervision will be provided by Dr *****, representing the Education Psychology Service

Does your project include any of the following? (please answer all questions):	
Collection of samples (e.g. blood, saliva) or tissue	NO
Use of previously collected tissue/information from which individuals who use NHS services could be identified	NO
Participants who may not have (or may lose) capacity to consent to participation in the research	NO
External Funding <i>(if so, please give details)</i>	NO
Involvement of external researchers (i.e. non-SWYPT staff)	YES – as outlined above
Participants who are identified due to involvement in NHS services	NO
Participants who are identified due to being relatives of users of NHS services	NO
Involve exposure to ionising radiation	NO
Involve medical devices that are not CE-marked or CE-marked medical devices that have been modified or are being used for a new purpose	NO
Investigational medicinal products	NO
Protected information from the Human Fertilisation and Embryology Authority register	NO

Appendix 5: Concourse and origins of statements

1	Parents should be involved in their child's learning and development programs	Clough and Nutbrown (2004)
2	Produce models of target utterances	Gallagher and Chiat (2009)
3	Sentence recasting – modelling correct utterances initiated by the child	Gallagher and Chiat (2009)
4	Elicited imitation – model utterance related to visual stimulus, request child repeats it	Gallagher and Chiat (2009)
5	Visual stimulation	Gallagher and Chiat (2009)
6	Modify own language to enable more effective communication, such as visual cues, pausing and modelling language	Hutchinson and Clegg (2011)
7	Facilitate attention and listening	Hutchinson and Clegg (2011)
8	Increase communication skills such as turn taking	Hutchinson and Clegg (2011)
9	Teach language skills – vocab, syntax construction and narrative generation	Hutchinson and Clegg (2011)
10	Remodel child's utterances into a complete sentence	Hutchinson and Clegg (2011)
11	Modelling the correct pronunciation of a word the child has said incorrectly, then having the child say it backs correctly	Shaughnessy and Sanger (2005)
12	Restating the child's idea in correct grammatical form and ask the child to repeat it back	Shaughnessy and Sanger (2005)
13	Giving the child extra time to respond to questions	Shaughnessy and Sanger (2005)
14	Rephrasing complex statements in simpler form	Shaughnessy and Sanger (2005)
15	Coaching the child in conversations with peers	Shaughnessy and Sanger (2005)
16	Giving one direction a time	Shaughnessy and Sanger (2005)
17	Individualised interventions – work on what an individual child needs	Marshall and Lewis (2014)
18	Be aware of a child's home environment	Marshall and Lewis (2014)
19	Adapt interventions and the environment to children's interests	Marshall and Lewis (2014)
20	Provide strategies and advice for parents	Marshall and Lewis (2014)
21	Model strategies to both parents and children in order to support speech and language development	Marshall and Lewis (2014)
22	Gain eye contact	Marshall and Lewis (2014)
23	Turn taking	Marshall and Lewis (2014)
24	Gaining attention	Marshall and Lewis (2014)
25	Sitting face-to-face	Marshall and Lewis (2014)
26	Make specific time to interact with the child	Marshall and Lewis (2014)
27	Speak to them in very short sentences	Marshall and Lewis (2014)
28	Monitor your language – make phrases short, basic language	Marshall and Lewis (2014)
29	Chunk things down	Marshall and Lewis (2014)
30	Rephrase language	Marshall and Lewis (2014)
31	Use a lot of language	Marshall and Lewis (2014)
32	Encourage physical, symbolic and role-play – adult to help facilitate play	Marshall and Lewis (2014)
33	Physical environment changes to provide an auditory environment	Marshall and Lewis (2014)

34	Parents reading to their child at home	Marshall and Lewis (2014)
35	Television that is educational	Marshall and Lewis (2014)
36	Interventions informed by the professionals	Marshall and Lewis (2014)
37	Visual approaches to support language	Roulstone, Wren, Bakopoulou, Goodlad, and Lindsay (2012)
38	Symbols	Roulstone et al. (2012)
39	Chunking information	Roulstone et al. (2012)
40	Repetition	Roulstone et al. (2012)
41	Forced alternatives	Roulstone et al. (2012)
42	Reduce distractions	Roulstone et al. (2012)
43	Use keywords	Roulstone et al. (2012)
44	Provide feedback	Roulstone et al. (2012)
45	Language rich environment	Roulstone et al. (2012)
46	Modelling	Roulstone et al. (2012)
47	Extending	Roulstone et al. (2012)
48	Reducing questions	Roulstone et al. (2012)
49	Commenting	Roulstone et al. (2012)
50	Narrative therapy	Roulstone et al. (2012)
51	Barrier games	Roulstone et al. (2012)
52	Auditory memory activities	Roulstone et al. (2012)
53	Inform parents about the importance of using language around young children to facilitate their development	Department for Children, Schools, and Families (2008)
54	Modelling techniques targeting the child's emerging skills	Law, Beecham, and Lindsay (2012)
55	Eliminate background sound for part of the day	Ward (1999)
56	During quiet time encourage play with noisemakers	Ward (1999)
57	Engage in singing, rhymes and action rhymes	Ward (1999)
58	Encourage infant to link sound with its source	Ward (1999)
59	Running commentary	Ward (1999)
60	Always respond to the infant's communicative attempts	Ward (1999)
61	Don't use speech to reprimand the child whenever possible	Ward (1999)
62	Model sounds	Ward (1999)
63	Adult to be close to the child	Ward (1999)
64	Talking a lot	Ward (1999)
65	Labelling objects for the child	Ward (1999)
66	Remove from their environment anything that would tend to make them reluctant to listen to speech	Ward (1999)
67	Don't ask child to say words	Ward (1999)
68	Don't correct them	Ward (1999)
69	Use short phrases	Ward (1999)
70	Speak a little slower	Ward (1999)
71	Speak a little louder	Ward (1999)
72	Use lots of intonation	Ward (1999)
73	Use repetition	Ward (1999)
74	Use gesture	Ward (1999)
75	Repeat back to the child what the child has said	Ward (1999)
76	Follow their interests	Ward (1999)
77	Modelling	Mroz and Letts (2008)
78	Correcting	Mroz and Letts (2008)
79	Games to support child	Mroz and Letts (2008)
80	Reminding child of words to aid communication	Mroz and Letts (2008)

81	Give children time to express themselves or say what they want to see	Children's Centre Focus Group
82	PECS	Children's Centre Focus Group
83	Visual timetables	Children's Centre Focus Group
84	Communicate in print	Children's Centre Focus Group
85	Eye contact	Children's Centre Focus Group
86	Asking a child to repeat themselves and know it's okay to say something more than once	Children's Centre Focus Group
87	Make them feel relaxed	Children's Centre Focus Group
88	Changing environment if they are becoming distressed	Children's Centre Focus Group
89	Story cubes to create their own stories and get children talking and exploring language	Children's Centre Focus Group
90	Story bags and objects to create stories	Children's Centre Focus Group
91	Introduce phonics through flashcards	Children's Centre Focus Group
92	Sound walks	Children's Centre Focus Group
93	Use instruments and singing to communicate and develop language	Children's Centre Focus Group
94	Match and stretch	Children's Centre Focus Group
95	Mr Tongue	Children's Centre Focus Group
96	Modelling	Children's Centre Focus Group
97	Derbyshire language scheme	Children's Centre Focus Group
98	Makaton	Children's Centre Focus Group
99	Signs	Children's Centre Focus Group
100	Saying child's name first	Children's Centre Focus Group
101	Singing	Children's Centre Focus Group
102	oro motor activities	Children's Centre Focus Group
103	Picking up on a child's sounds copying and extending them	Children's Centre Focus Group
104	Forest School	Children's Centre Focus Group
105	Give time to respond	Children's Centre Focus Group
106	Singing phrases	Children's Centre Focus Group
107	Changing tone	Children's Centre Focus Group
108	Quiet and unbusy space	Children's Centre Focus Group
109	Repetitive phrases in stories	Children's Centre Focus Group
110	Intensive interactions	Children's Centre Focus Group
111	Language ladders	Children's Centre Focus Group
112	Rhythm and rhyme	Children's Centre Focus Group
113	Elklan	Children's Centre Focus Group
114	Repeat back the correctly modelled word or phrase	Children's Centre Focus Group
115	Sally spider	Children's Centre Focus Group
116	Modelling	Children's Centre Focus Group
117	Sharing interests in a one-to-one conversation, allowing plenty of time for child to respond	Children's Centre Focus Group
118	Change of environment	Children's Centre Focus Group
119	Practitioners working alongside SLT's	Children's Centre Focus Group
120	Copying back child sounds/babbling to model conversation structure	Children's Centre Focus Group
121	Cued articulation	Children's Centre Focus Group
122	Blank's level questioning	Children's Centre Focus Group
123	Colour coding for understanding sentence structure	Children's Centre Focus Group
124	Clear, precise instructions based on child's language level	Children's Centre Focus Group
125	proloquo 2 go	Children's Centre Focus Group
126	clicker	Children's Centre Focus Group
127	Memory magic	Children's Centre Focus Group

128	Allow processing time	Children's Centre Focus Group
129	Social stories	Children's Centre Focus Group
130	Model language	Children's Centre Focus Group
131	say child's name before talking, make sure that they are looking at you	Children's Centre Focus Group
132	Ask child to repeat instructions to ensure they have heard them	Children's Centre Focus Group
133	Salley - basic communication	Children's Centre Focus Group
134	Lots of sentence speaking	Children's Centre Focus Group
135	Allowing the child to choose pictures to make choices	Children's Centre Focus Group
136	Speaking in simple sentences, using the keywords you want the child to hear	Children's Centre Focus Group
137	Outside provision	Children's Centre Focus Group
138	Talk time intervention	Children's Centre Focus Group
139	Talk for writing	Children's Centre Focus Group
140	Practice sound production in front of mirrors	Children's Centre Focus Group
141	Engaging in their interests	Children's Centre Focus Group
142	Turn taking	Children's Centre Focus Group
143	Build confidence	Children's Centre Focus Group
144	Engage parents	Children's Centre Focus Group
145	Understand the developmental stages a child progresses through	Children's Centre Focus Group
146	Ensure that all activities are engaging	Children's Centre Focus Group
147	Repeating the child utterance correctly but not correcting them	Children's Centre Focus Group
148	Make them feel relaxed	Children's Centre Focus Group
149	Create opportunities for the child to communicate, such as putting things out of their reach so they need to engage with an adult	Children's Centre Focus Group
150	Sharing information with parents	Children's Centre Focus Group
151	Understanding the child's home life	Children's Centre Focus Group
152	Supporting parents in the removal of dummies	Children's Centre Focus Group
153	Accessing external, specialist advice	Children's Centre Focus Group
154	Sharing strategies with colleagues	Children's Centre Focus Group
155	Foundation skills for all staff	Children's Centre Focus Group
156	Information carrying words	Children's Centre Focus Group
157	Accessing training as well as the opportunity to practice it	Children's Centre Focus Group
158	Clear rules and boundaries with examples and explanations	Children's Centre Focus Group
159	Reduce distractions, both visual and physical	Children's Centre Focus Group
160	Conversations focused on interests	Children's Centre Focus Group
161	Engaging in their play	Children's Centre Focus Group
162	Creating a safe space to communicate which is not just for answering questions posed by staff	Children's Centre Focus Group
163	Play with sounds, repeating their utterances in different pitches	Children's Centre Focus Group
164	If a child does not often speak don't draw attention to them when they do	Children's Centre Focus Group
165	Break information into small chunks	Children's Centre Focus Group
166	Encourage children to repeat back keywords	Children's Centre Focus Group
167	Use of puppets during intervention time	Children's Centre Focus Group
168	Speaking and listening activities	Children's Centre Focus Group
169	Filming them telling stories that they can watch back to build their confidence	Children's Centre Focus Group

170	Forced communication	Children's Centre Focus Group
171	Repeat the child's utterance correctly	Children's Centre Focus Group
172	Errorless learning	Children's Centre Focus Group
173	Visual timetables	Children's Centre Focus Group
174	Now and next visuals	Children's Centre Focus Group
175	Use of symbols and resources	Children's Centre Focus Group
176	Use of photos on resources	Children's Centre Focus Group
177	Reducing sensory overload	Children's Centre Focus Group
178	Introducing symbols progressively	Children's Centre Focus Group
179	Simple, straightforward language	Children's Centre Focus Group
180	Repeating same sentence	Children's Centre Focus Group
181	Providing movement breaks during sessions	Children's Centre Focus Group
182	Supporting expressive needs	Children's Centre Focus Group
183	Supporting language through sign language	Children's Centre Focus Group
184	Flexible, imaginative, choice	Children's Centre Focus Group
185	Patience	Children's Centre Focus Group
186	Autonomy and choice	Children's Centre Focus Group
187	Rewards	Children's Centre Focus Group
188	See the child as an individual	Children's Centre Focus Group
189	Recapping vocabulary for activity	Children's Centre Focus Group
190	Positive rewards	Children's Centre Focus Group
191	Acknowledge all expressions, even when demands	Children's Centre Focus Group
192	Stories for talking	Private Setting Focus Group
193	Single word labelling	Private Setting Focus Group
194	Increasing understanding of instructional language	Private Setting Focus Group
195	Use stories to build up their understanding of concepts	Private Setting Focus Group
196	Physically interacting with stories	Private Setting Focus Group
197	Close assessment of need to increase understanding of pupils needs and identify next steps	Private Setting Focus Group
198	Focus on the child's interests	Private Setting Focus Group
199	Makaton	Private Setting Focus Group
200	Create strong routines	Private Setting Focus Group
201	Use Makaton in singing	Private Setting Focus Group
202	Use keywords	Private Setting Focus Group
203	Visual prompts	Private Setting Focus Group
204	Objects of reference	Private Setting Focus Group
205	Create groups based on age and ability, to differentiate input accordingly	Private Setting Focus Group
206	Use books to extend their vocabulary	Private Setting Focus Group
207	Communication friendly spaces	Private Setting Focus Group
208	Reduce noise in setting in designated areas	Private Setting Focus Group
209	Reduce visual distractions	Private Setting Focus Group
210	Feely bag including real objects, encourage them to use labelling words and doing words	Private Setting Focus Group
211	Hands-on activities	Private Setting Focus Group
212	Highly engaging	Private Setting Focus Group
213	Increase their confidence in speaking	Private Setting Focus Group
214	Understand the child from parents perspective	Private Setting Focus Group
215	Use running commentary of what they're doing in play	Private Setting Focus Group
216	Not asking the child too many questions	Private Setting Focus Group
217	Play alongside a child	Private Setting Focus Group
218	Visual timetables	Private Setting Focus Group
219	Use photos when symbols are ineffective	Private Setting Focus Group
220	Group intervention as appropriate	Private Setting Focus Group

221	Speech and language therapy referral	Private Setting Focus Group
222	Hearing impairment identified or ruled out	Private Setting Focus Group
223	Understand impact of bilingual needs	Private Setting Focus Group
224	Category sorting tasks such as semantics	Private Setting Focus Group
225	Vocabulary book of words and pictures	Private Setting Focus Group
226	Provide functional phrases in vocab book	Private Setting Focus Group
227	Targeting specific skills and tasks	Private Setting Focus Group
228	Careful identification of need	Private Setting Focus Group
229	Understanding their background	Private Setting Focus Group
230	Home school diaries	Private Setting Focus Group
231	Reason for results i.e. Poor performance due to external factors	Private Setting Focus Group
232	Communication with home	Private Setting Focus Group
233	Provide the same level of attention for all children despite speed of processing and speech	Private Setting Focus Group
234	Reduce auditory distractions such as ear defenders if needed	Private Setting Focus Group
235	Provide a language rich environment	Private Setting Focus Group
236	Individual timetables	Private Setting Focus Group
237	Access to different levels of language	Private Setting Focus Group
238	Access to books and stories	Private Setting Focus Group
239	Access to a calm environment	Private Setting Focus Group
240	Active and engaging	Private Setting Focus Group
241	Repetition across curriculum	Private Setting Focus Group
242	Gain eye contact, make sure you have eye contact when talking to a child	Charity Setting Focus Group
243	Make it fun	Charity Setting Focus Group
244	Sound cards focussed on phonics, manipulation of mouth, do actions and introduce key pictures	Charity Setting Focus Group
245	Jolly phonics	Charity Setting Focus Group
246	Address them by name	Charity Setting Focus Group
247	Phrase things positively	Charity Setting Focus Group
248	Simple sentence structure	Charity Setting Focus Group
249	Say key words at beginning of sentence	Charity Setting Focus Group
250	Reading	Charity Setting Focus Group
251	Singing	Charity Setting Focus Group
252	Action rhymes	Charity Setting Focus Group
253	Photo books of key items	Charity Setting Focus Group
254	Careful assessment, such as through Wellcomm	Charity Setting Focus Group
255	Location, should be relaxed space for interventions	Charity Setting Focus Group
256	Encourage them to leave bottles and dummies	Charity Setting Focus Group
257	ECAT practice and inform parents of good practice	Charity Setting Focus Group
258	Descriptive commenting	Charity Setting Focus Group
259	Returning them to task when talking	Charity Setting Focus Group
260	Super simple songs on the whiteboard	Charity Setting Focus Group
261	Labels on objects around the provision	Charity Setting Focus Group
262	Simple instructions	Charity Setting Focus Group
263	Looking for sounds in the environment	Charity Setting Focus Group
264	Continually talking to children	Charity Setting Focus Group
265	Signing	Charity Setting Focus Group
266	Background radio on to increase exposure to language	Charity Setting Focus Group
267	Listening games	Charity Setting Focus Group
268	Attention and turn taking, listening and attention focussed games	Charity Setting Focus Group
269	Stop and go language	Charity Setting Focus Group

270	Removal of sippy cups	Charity Setting Focus Group
271	Lists of key words in additional language	Charity Setting Focus Group
272	Makaton	Charity Setting Focus Group
273	Photographs of objects and children to aid communication, encourage independence despite lack of communication	Charity Setting Focus Group
274	Encourage problem solving, self-help, independence and social skills	Charity Setting Focus Group
275	Praise, do not use negative language	Charity Setting Focus Group
276	Home visit and nursery book to identify need	Charity Setting Focus Group
277	Baseline assessment	Charity Setting Focus Group
278	2 year check – assessment	Charity Setting Focus Group
279	Provide positive feedback without criticising	Charity Setting Focus Group
280	Individual learning plan and reviews	Charity Setting Focus Group
281	Sharing with parents, including assessments and two year check	Charity Setting Focus Group
282	Alter verbal communication, shorter words and phrases	Charity Setting Focus Group
283	Information carrying words	Charity Setting Focus Group
284	Processing time – pausing	Charity Setting Focus Group
285	Lots of repetition	Charity Setting Focus Group
286	Over learning	Charity Setting Focus Group
287	Some weighing up at the end of each session, plenary	Charity Setting Focus Group
288	Altering non-verbal communication	Charity Setting Focus Group
289	Increasing non-verbal communication	Charity Setting Focus Group
290	Consistency of language	Charity Setting Focus Group
291	Intensive interaction	Charity Setting Focus Group
292	Get on the child's level	Charity Setting Focus Group
293	Engage in their play	Charity Setting Focus Group
294	Copy and encourage	Charity Setting Focus Group
295	Remove novel objects from the environment when working in small groups	Charity Setting Focus Group
296	Provide frameworks such as sentence structures	Charity Setting Focus Group
297	Encourage asking	Charity Setting Focus Group
298	Forced choice	Charity Setting Focus Group
299	Provide objects of reference	Charity Setting Focus Group

Appendix 6: Final Q set

1	Explore real objects, such as in a feely bag, to encourage children to use labelling and descriptive words
2	Focus on the child's interests and adapt activities to include their interests
3	Provide access to a quiet and calm space throughout the day including communication friendly spaces
4	Use symbols, pictures or photos to label resources in the environment
5	Use simple words
6	If a child doesn't often speak, don't draw attention to them when they do
7	Verbally label objects and actions to increase vocabulary
8	Ask the child to repeat instructions to check understanding
9	Provide a language rich environment and expose the child to lots of language
10	Directly teach vocabulary and useful phrases
11	Provide objects of reference to support verbal understanding, such as showing a child a nappy when they need changing
12	Increase gesture and non-verbal communication
13	Reduce auditory distractions including background noise
14	Encourage and support children in role-play, modelling appropriate language
15	Understand the child's background and home circumstances and the impact of this on SLC skills
16	Reduce visual distractions including novel objects, when engaging in speech and language activities
17	Gain eye contact before speaking to a child
18	Careful assessment of needs, including identifying hearing impairment or bilingual needs
19	Use visual aids to support understanding of verbal information and instructions
20	Copy child's utterances to model the structure of conversation
21	Teach underpinning skills of speaking and listening, including turn taking
22	Deliver interventions through fun and engaging games
23	Remodelling the child's speech into a correct sentence without correcting them or asking them to repeat it back

24	Create strong routines and clear boundaries
25	Use visual timetables, choosing boards and now and next boards
26	Provide the child with choices within activities to encourage them to engage
27	Use a high level of repetition of key language, including over learning and repetition in stories
28	Match language use to the child's ability level and provide stretch. Such as when remodelling a child's sentence add one additional word
29	Descriptive commenting, commenting on what a child is doing whilst playing
30	Provide opportunities for the child to communicate such as making choices or putting something out of reach which they have to request verbally
31	Provide the child with additional time to process verbal information and respond
32	Use singing to develop language
33	Watch television that is educational
34	Use stories to model language and encourage engagement with language. Supported by physical props or puppets
35	Reduce verbal reprimands
36	Film children telling stories for them to watch themselves back to increase confidence and review their own skills
37	Restate the child's sentence correctly and ask them to repeat it back
38	Gain the child's attention, such as saying their name, before talking to them
39	Provide one instruction at a time
40	Spending special time talking to a child, that is not academic related or asking lots of questions
41	For staff to access training in core skills and supporting children with SLCN
42	Go on sound walks where children have to identify sounds in the environment and identify the source
43	Playing with tone and pitch of your voice, repeating their speech in different ways.
44	Reduce language into manageable chunks
45	Encourage play with instruments to encourage the child to link sounds with their source, including barrier games
46	Use signing, such as Makaton, to support language
47	Adjust your speech so it is easier to hear, such as speaking louder and/or slower
48	Small group activities based on the child's age and ability, and differentiate accordingly

49	Acknowledge all attempts to communicate, even if they are demands (though not necessarily carrying out the demand)
50	Introduce phonic awareness, encourage children to copy actions and correspond sounds to letters
51	Provide movement breaks during sessions
52	Communicate with parents to involve them in their child's learning and development, including sharing and modelling strategies
53	Develop oro-motor skills, such as making noises in front of a mirror to raise awareness of sound production
54	Overview/plenary end of taught session
55	When talking to a child get down to their level, be face-to-face and close
56	Use short sentences and reduce instructions to key information carrying words
57	Sorting objects into categories to develop awareness of semantics
58	Seek advice from professionals, such as SLT

INFORMATION SHEET – STAFF

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

School of Psychology, University of Nottingham

Researcher:

Jemma Taylor,
Trainee Educational Psychologist

I am a Trainee Educational Psychologist, currently completing my Doctorate in Applied Educational Psychology at the University of Nottingham. I am presently training with the Local Authority and I have been supporting a number of schools within the Local Authority throughout this academic year. I am writing to provide details of the research that I hope to complete as part of my studies

This is an invitation to take part in a research study, which aims to explore the early years practitioners' viewpoints about strategies to support children with speech, language and communication needs (SLCN) within a mainstream environment.

The reason you have been approached to take part in this research is because there has been an increased awareness of the importance of early intervention for supporting children with SLCN, however, there is little knowledge of staff's viewpoints on how best to support children with these needs. The implications of exploring staff's views is that it may be able to inform the best way to support early years staff in meeting the needs of children with SLCN.

Before you decide if you wish to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

If you participate, the procedure and time lengths are detailed below, depending on which stages you engage in.

Stage	Dates	Involvement	Duration	Location
1	April 2015	Focus group with early years practitioners to identify what strategies can be used to support children with SLCN.	45-60 minutes	A room free from distraction on the setting's grounds.
2	June 2015	PILOT: A systematic card sort (Q sort) of approximately 60 statements about strategies to support children with SLCN	30-60 minutes	A room free from distraction on the setting's grounds.
3	September 2015	A systematic card sort (Q sort) of approximately 60 statements about strategies to support children with SLCN	30-60 minutes	A room free from distraction on the setting's grounds.
4	October 2015	Interviews with early years practitioners to explore the identified viewpoints and the potential implications for practice	30-60 minutes	A room free from distraction on the setting's grounds.

Participation in this study is entirely voluntary and you are under no obligation to take part. You are free to withdraw at any point before or during the study. All data collected will be kept confidential and used for research purposes only. It will be stored in compliance with the Data Protection Act.

You will be provided with feedback on the general outcomes of the study. We hope that this research will be important in understanding how children with SLCN are currently being supported and how to best support early years practitioners in meeting their needs.

If you wish to participate within this study please complete the attached documents; 'Expression of Interest' to indicate if you are interested in engaging with any or all stages of the research and 'Participant Questionnaire'.

If you have any questions or concerns, please don't hesitate to ask now or during the research. I can also be contacted after your participation at the address above.

Warm regards



Jemma Taylor

Trainee Educational Psychologist
Local Authority Details

Telephone:
Email:

Research Supervisor:

Dr Sarah Atkinson
Academic & Professional Tutor
School of Psychology
University of Nottingham
School of Psychology
University of Nottingham
University Park
Nottingham
NG2 7RD

Telephone: 0115 84 67923
E-mail: s.atkinson@nottingham.ac.uk

Chair of the University of Nottingham Research and Ethics Committee:

Professor Stephen Jackson
Telephone: 0115 846 7403 or 0115 951 4344

EXPRESSION OF INTEREST

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

After reading the Information Sheet please indicate if you are interested in participating in any of the stages of the study by ticking next to the stage/stages you are willing to participate in.

Please note that stages One, Two and Four require a smaller number of participants which may result in you not being selected for this stage. However, all interested participants will be able to engage in Stage Three.

Name:

Name of Setting:

Stage	Dates	Involvement	Duration	Location	Participant interest
1	April 2015	Focus group with early years practitioners	45-60 minutes	Within setting	
2	June 2015	PILOT: A systematic card sort (Q sort) of approximately 60 statements	30-60 minutes	Within setting	
3	July 2015	A systematic card sort (Q sort) of approximately 60 statements	30-60 minutes	Within setting	
4	September 2015	Interviews with early years practitioners to explore the identified viewpoints and the potential implications for practice	30-60 minutes	Within setting	

Please also complete the attached Participant Questionnaire and Consent Form.

Participation in this study is entirely voluntary and you are under no obligation to take part. You are free to withdraw at any point before or during the study. All data collected will be kept confidential and used for research purposes only. It will be stored in compliance with the Data Protection Act.

If you require any further information at any stage please do not hesitate to contact me on the details below.

Warm regards



Jemma Taylor

Trainee Educational Psychologist
Local Authority Details

Telephone:

Email:

Research Supervisor:

Dr Sarah Atkinson
Academic & Professional Tutor
School of Psychology
University of Nottingham
School of Psychology
University of Nottingham
University Park
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Telephone: 0115 84 67923

E-mail: s.atkinson@nottingham.ac.uk

Chair of the University of Nottingham Research and Ethics Committee:

Professor Stephen Jackson
Telephone: 0115 846 7403 or 0115 951 4344

Appendix 8: Common qualifications and their associated levels

Level	Common qualification
Level 1 (foundation level)	GCSE grade D-G, Foundation level GNVQ, Level 1 NVQ
Level 2 (intermediate level)	GCSE A*-C, Intermediate GNVQ, Level 2 NVQ
Level 3 (Advanced level)	A level, Vocational A level (Advanced GNVQ), Level 3 NVQ
Level 4 (High level qualifications)	BTEC Higher Nationals, Level 4 NVQ (e.g. Level 4 Certificate in Early Years Practice)
Level 5 (Higher level qualifications)	BTEC Higher Nationals, Level 5 NVQ (e.g. Diploma in Higher Education and Playwork, Early Years Foundation Degree)
Level 6	Honours degree (e.g. BA Early Childhood Studies, Bachelor of Education (BEd), Early Years Professional Status)
Level 7	Masters degree, PGCE, National Professional Qualification for Integrated Centre Leadership (NPQICL)

Appendix 9: General Instruction Sheet

GENERAL INSTRUCTIONS

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

School of Psychology, University of Nottingham

Researcher: Jemma Taylor

Research Supervisor: Dr Sarah Atkinson

Local Authority Supervisor: Dr Francine Wint

Thank you for agreeing to take part in this study. This pack should include:

1. This general instruction sheet
2. An information sheet
3. A consent form (please note you do not have to complete this if you have completed one during the focus group stage)
4. A short participant questionnaire (please note you do not have to complete this if you have completed one during the focus group stage)
5. An activity instruction sheet
6. 60 small cards with statements on
7. A long strip displaying the activity statement, '*This strategy would be most effective in supporting a child with speech, language and communication needs*', and 11 columns underneath with numbers on.
8. A blank grid
9. A post activity questionnaire

Firstly, please read sheet 2, the Information Sheet. If you are still happy to participate please **sign sheet 3, the Participant Consent Form**. Please ensure this is returned in the pack to be left with Jemma.

Then complete the activity, which should take no more than 45 minutes. Clear instructions how to do this are on sheet 5, Activity Instruction Sheet. The process should be relatively straightforward. If you have any problems or questions, please speak to Jemma.

Appendix 10: Consent Form

CONSENT FORM

School of Psychology

Consent Form

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

Ethics Approval Number or Taught Project Archive Number:

Researcher: Jemma Taylor lpj2@nottingham.ac.uk

Research Supervisor: Dr Sarah Atkinson s.atkinson@nottingham.ac.uk

Local Authority Supervisor:

The participant should answer these questions independently:

- Have you read and understood the Information Sheet? YES/NO
- Have you had the opportunity to ask questions about the study? YES/NO
- Have all your questions been answered satisfactorily? YES/NO
- Do you understand that you are free to withdraw from the study?
 - at any time YES/NO
 - without having to give a reason YES/NO
- I give permission for my data from this study to be shared with other researchers provided that my anonymity is completely protected. YES/NO
- Do you agree to take part in the study? YES/NO

“This study has been explained to me to my satisfaction, and I agree to take part. I understand that I am free to withdraw at any time.”

Signature of the Participant:

Date:

Name (in block capitals)

I have explained the study to the above participant and he/she has agreed to take part.

Signature of researcher:

Date:

Appendix 11: Participant demographic questionnaire

PARTICIPANT QUESTIONNAIRE

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

Please answer the following questions about yourself and your working experience. All information will be used only as indicative information of the participants that have taken part in the study. Once the form has been completed and the researcher has recorded your reference number names will be removed from the sheet. The research reference number has been provided to ensure that responses throughout the study will be linked together but not be identifiable by name.

Name:	
Research reference number:	
Age:	
Sex:	
Setting type: (please circle)	
Children's centre (LA maintained)	Children's centre (Non-maintained)
Private	Charity
Early Years Qualifications:	
Years of experience working with children aged 0-5 years:	
Do you have any additional personal experience, such as children of your own or close family? (please circle)	
YES	NO

If yes please provide brief details:

Have you had experience of working with children with speech, language and communication needs (either suspected or identified)? (please circle)

YES

NO

How would you rate your level of confidence with regards to supporting children with SLCN within a mainstream environment? (please circle)

Low

Medium

High

All data collected will be kept confidential and used for research purposes only. It will be stored in compliance with the Data Protection Act.

I have received and completed the Participant Consent Form

YES/NO

I consent for my information to be used for research purposes as outlined above

YES/NO

If you wish to withdraw this information at any stage during the research progress you may do so without providing a reason by making contact through the details below.

Researcher Details:

Jemma Taylor
Trainee Educational Psychologist

Telephone:

Email:

Research Supervisor:

Dr Sarah Atkinson
Academic & Professional Tutor
School of Psychology
University of Nottingham
School of Psychology
University of Nottingham
University Park
Nottingham
NG2 7RD

Telephone: 0115 84 67923
s.atkinson@nottingham.ac.uk

ACTIVITY INSTRUCTION SHEET

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

School of Psychology, University of Nottingham

Researcher: Jemma Taylor

Research Supervisor: Dr Sarah Atkinson

Local Authority Supervisor: Dr *****

1. The aim of this task is to individually rank the statements on the 58 small cards under the headings on item 7, the long strip, until they best represent your individual views in relation to the activity statement on the long strip, '*This strategy would be most effective in supporting a child with speech, language and communication needs*' and form the structure on sheet 8, the blank grid. This must be done individually and the following steps should help you do this.
2. Lay out the long strip, which displays the activity statement, '*This strategy would be most effective in supporting a child with speech, language and communication needs*' and has 11 columns underneath with numbers on. This will help you to remember how many statements should go in each column and which way to place the statements ('*Least Agree*' on the far left – '*Most Agree*' on the far right). You will return to this at step 5.
3. The 58 small cards have statements printed on them. These are strategies that some people have said might be effective in supporting children with speech, language and communication needs. (The numbers on the card do not mean anything; they are just there to help record which statement is placed where).
4. Read through each of the 58 statements in turn and consider them in relation to the activity statement, '*This strategy would be most effective in supporting a child with speech, language and communication needs*'. As you read the statements, sort them into 3 provisional ranking piles:
 - On the right – those that you agree might be the most effective in supporting children with speech, language and communication needs.
 - On the left – those that you agree with much less or disagree that they are the most effective strategies for supporting children with speech, language and communication needs.
 - In the middle – those that you feel indifferent, unsure, or otherwise leave you with mixed feelings.It doesn't matter how many are in each pile, just be faithful to your own feelings and views.
5. Return to the long strip. From the pile on the right, choose 2 statements, which are most like your view and physically put them under the far right column. It doesn't matter which is on the top and which is on the bottom.

6. From the pile on the left, choose 2 statements, which are least like your view and physically put them in the far left column.
7. Back to the pile on the right: choose 4 statements, which are more like your view than the others in the pile, but not as much your view as the ones you have already chosen. Put them in the second column from the right. Move statements around if you change your mind.
8. From the pile on the left, choose 4 statements to place in the second column from the left.
9. Keep doing this, working your way towards the middle with the statements you have left over. The sorted statements should take the format of the blank grid on sheet 8. Do not worry if your 'most agree' or 'least agree' statements cross past the middle point. The ranking system is relative, so the idea is that you rank the statements in relation to each other.
10. Check that you are happy with your arrangement and make any changes needed so that the final card sort represents your view.
11. Please transfer your sorted statements onto the blank A4 grid on sheet 8 by writing the number of each statement into the matching boxes. Please take care to make sure that sheet 8 is the same as your sorted card statements and that there is a number in each box.
12. On sheet 8, draw a line where the statements that you disagree with ends and the statements that you agree with starts. An example is shown below.

Least agree					Most agree						
1	2	3	4	5	6	7	8	9	10	11	
38	40	32	10	30	3	8	14	31	7	21	
20	51	2	37	41	23	36	45	52	22	35	
(2)	19	26	25	24	29	12	1	13	6	(2)	
	58	18	17	11	49	33	50	44	34		
	(4)	9	39	48	4	27	5	54	(4)		
		46	47	57	42	43	53	55			
		(6)	(6)	16	56	28	(6)	(6)			
				(7)	15	(7)					
				(8)							

13. Please complete sheet 9, the Post Activity Questionnaire, as honestly as possible.
14. Please collect a debrief sheet from the researcher before you leave.

Appendix 13: Post Q sort Questionnaire

POST ACTIVITY QUESTIONNAIRE

**The viewpoints of early years practitioners on effectively
supporting children with speech, language and communication
needs: a Q methodological study**

School of Psychology, University of Nottingham

Researcher: Jemma Taylor

Research Supervisor: Dr Sarah Atkinson

Local Authority Supervisor: Dr Francine Wint

Age:

Sex:

Research reference number (if known):

Setting type:

Children's centre
(LA maintained)

Children's centre
(Non-maintained)

Private

Charity

Which statement did you agree with most and why?

Which statement did you disagree with most and why?

Are there any comments that you would like to see added to the activity?

Are there any comments that you did not understand or did not make sense to you?

Whilst completing the Q sort did you focus on the strategies to support speech, language and communication needs equally or did you focus more on one area? (please circle)

Speech Language Communication All

Did you bring to mind a certain child you have worked with in the past whilst carrying out the Q Sort?

If so please could you provide brief details of their needs below (please do not refer to any child by name)

Any Other comments?

Thank you for your participation

Please collect a debrief sheet before you leave. If you require and further information or feel you need to discuss any issues raised by these process then please do not hesitate to contact myself on LA email or alternatively please make contact with the identified person within your setting.

Researcher Details:

Jemma Taylor
Trainee Educational Psychologist
Local Authority Details
Telephone:
Email

Research Supervisor:

Dr Sarah Atkinson
Academic & Professional Tutor
School of Psychology
University of Nottingham
School of Psychology
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Appendix 14: Blank Q sort grid

BLANK GRID

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

Participant reference number:_____

Least agree Most agree

1	2	3	4	5	6	7	8	9	10	11
(2)										(2)
	(4)								(4)	
		(6)	(6)				(6)	(6)		
				(7)		(7)				
					(8)					

Appendix 15: Ethical Approval



UNITED KINGDOM • CHINA • MALAYSIA

School of Psychology

The University of Nottingham

University Park

Nottingham

NG7 2RD

T: +44 (0)115 8467403 or (0)115 9514344

SJ/WB
Ref: 642R

Tuesday, 13 April 2015

Dear Jemma Taylor & Sarah Atkinson,

Ethics Committee Review

Thank you for submitting an account of your proposed research 'What do Early Years Practitioners view as important to effectively supporting children with Speech, Language and Communication Needs in a mainstream environment?'

That proposal has now been reviewed by the Ethics Committee and I am pleased to tell you that your submission has met with the committee's approval.

Final responsibility for ethical conduct of your research rests with you or your supervisor. The Codes of Practice setting out these responsibilities have been published by the British Psychological Society and the University Research Ethics Committee. If you have any concerns whatever during the conduct of your research then you should consult those Codes of Practice. The Committee should be informed immediately should any participant complaints or adverse events arise during the study.

Independently of the Ethics Committee procedures, supervisors also have responsibilities for the risk assessment of projects as detailed in the safety pages of the University web site. Ethics Committee approval does not alter, replace, or remove those responsibilities, nor does it certify that they have been met.

Yours sincerely

*Professor Stephen Jackson
Chair, Ethics Committee*

DEBRIEF SHEET

The viewpoints of early years practitioners on effectively supporting children with speech, language and communication needs: a Q methodological study

School of Psychology, University of Nottingham

Researcher: Jemma Taylor

Research Supervisor: Dr Sarah Atkinson

Local Authority Supervisor: Dr Francine Wint

Information about the research rationale

The LA have recently introduced the WellComm screening and intervention tool into many settings across the authority to improve the outcomes for children with speech, language and communication needs (SLCN). This is in line with the findings of the Bercow Review (2008) which identified high variability with regards to the provision children with SLCN received and identified a number of key areas for improvement, including early identification and intervention.

In 2014 The most common primary need for children with a statement or identified as 'School Action Plus' was SLCN at 20.6% (Whitaker, 2014). Just 16% of children with SLCN achieve a 'Good Level of Development' across the EYFS compared to 56% of children with no SEN in 2014 (Simes, 2014). It is therefore essential that effective support for children with these needs is identified. Research has indicated the important role played by teacher attitudes, beliefs and expectations of pupils with special educational needs (Sadler, 2005) but there is little research into EYP views on SLCN.

This study explored the viewpoints of early years practitioners about strategies to support children with SLCN. The implications of this offer a way forward in ensuring future initiatives are developed and delivered in a way that is likely to be supported by staff.

Information about the Research Method

Q methodology was the method used in this research and used the following procedure:

1. A review of relevant literature and focus groups with EYP and SLTs identified strategies to support children with SLCN.
2. Thematic analysis was carried out on the data generated in (1) to develop a concourse that was then refined to around 60 statements (the Q set).
3. Approximately 60 participants were asked to systematically rank the Q set according to the value they assigned to each statement.
4. The Q sort data will be analysed using a statistical by-person analysis with a computer package, PQ method. This is used to identify groups of participants who ranked the statements in a similar way.
5. Further interviews will be carried out with a sample of EYP who completed the Q sort to explore the implications of the findings for how best to support children with SLCN.

References

- Bercow, J. (2008). The Bercow Report: A review of services for children and young people (0-19) with speech, language and communication needs.
- Clough, P., & Nutbrown, C. (2004). Special Educational Needs and Inclusion Multiple Perspectives of Preschool Educators in the UK. *Journal of Early Childhood Research*, 2(2), 191-211.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (Sixth ed.). Oxon: Routledge.
- Daniels, H., Leadbetter, J., Soares, A., & MacNab, N. (2007). Learning in and for cross-school working. *Oxford Review of Education*, 33(2), 125-142.
- Department for Children, Schools, & Families. (2008). *Better Communication: An action plan to improve services for children and young people with speech, language and communication needs*. Nottingham: Department for Children, Schools and Families Publications.
- Engeström, Y., Miettinen, R., & Punamäki, R.-L. (1999). *Perspectives on activity theory*. Cambridge: Cambridge University Press.
- Gallagher, A. L., & Chiat, S. (2009). Evaluation of speech and language therapy interventions for pre-school children with specific language impairment: a comparison of outcomes following specialist intensive, nursery-based and no intervention. *International Journal of Language & Communication Disorders*, 44(5), 616-638.
- Greenhouse, P. M. (2013). Activity theory: a framework for understanding multi-agency working and engaging service users in change. *Educational Psychology in Practice*, 29(4), 404-415.
- Hutchinson, J., & Clegg, J. (2011). Education practitioner-led intervention to facilitate language learning in young children: An effectiveness study. *Child Language Teaching and Therapy*, 27(2), 151-164.
- Law, J., Beecham, J., & Lindsay, G. (2012). *Effectiveness, costing and cost effectiveness of interventions for children and young people with speech, language and communication needs (SLCN)*. London: Department for Education.

- Leadbetter, J. (2005). Activity theory as a conceptual framework and analytical tool within the practice of educational psychology. *Educational and Child Psychology*, 22(1), 18-28.
- Marshall, J., & Lewis, E. (2014). 'It's the way you talk to them.' The child's environment: Early Years Practitioners' perceptions of its influence on speech and language development, its assessment and environment targeted interventions. *Child Language Teaching and Therapy*, 30(3), 337-352.
- Mroz, M., & Letts, C. (2008). Interview stories: Early years practitioners' experiences with children with speech, language and communication needs. *Child Language Teaching and Therapy*, 24(1), 73-93.
- Robson, C. (2011). *Real World Research*. Chichester: John Wiley & Sons Ltd.
- Roulstone, S., Wren, Y., Bakopoulou, I., Goodlad, S., & Lindsay, G. (2012). *Exploring interventions for children and young people with speech, language and communication needs: A study of practice*. London: Department for Education.
- Sadler, J. (2005). Knowledge, attitudes and beliefs of the mainstream teachers of children with a preschool diagnosis of speech/language impairment. *Child Language Teaching and Therapy*, 21(2), 147-163.
- Shaughnessy, A., & Sanger, D. (2005). Kindergarten Teachers' Perceptions of Language and Literacy Development, Speech—Language Pathologists, and Language Interventions. *Communication Disorders Quarterly*, 26(2), 67-84.
- Simes, J. (2014). Children with special educational needs 2014: an analysis.
- Thomas, G. (2013). *How to do your research project: A guide for students in education and applied social sciences*. London: Sage.
- Ward, S. (1999). An investigation into the effectiveness of an early intervention method for delayed language development in young children. *International Journal of Language & Communication Disorders*, 34(3), 243-264.
- Watts, S., & Stenner, P. (2005). Doing Q methodology: theory, method and interpretation. *Qualitative Research in Psychology*, 2(1), 67-91.
- Webler, T., Danielson, S., & Tuler, S. (2009). Using Q method to reveal social perspectives in environmental research. *Greenfield MA: Social and Environmental Research Institute*, 54, 1-54.
- Whitaker, A. (2014). Special educational needs in England: January 2014.

Thank you for taking part in this study

Warm regards

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Appendix 17: Factor rotations and impact of significance values

	7 Factors	6 Factors	5 Factors	4 Factors	3 Factors	2 Factors
Unrotated						
Cumulative percentage	51	48	45	45	42	39
Post rotation						
Cumulative percentage	41	48	46	46	42	39
Number of Participants	20	19	22	22	23	27
Confounded	22	22	20	20	18	14
Non-sig		1			1	1
Increased sig level (0.40)						
Cumulative percentage (<i>without non-sig factors</i>)	51 (38)	48 (38)	46 (36)	45 (35)	42	39
Number of Participants	30	28	28	27	29	33
Hand Rotation						
Cumulative percentage	-	-	-	-	42	39
Number of Participants	-	-	-	-	31	37

Hand Rotations

Three Factors

Unrotated = 29 participants, 42% variance, highest correlation 0.5812

Degrees of rotation (factors 1 and 3)	7			6			5			4			3		
Viewpoint	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Participants	18	7	5	17	7	6	17	7	7	15	7	7	13	6	8
Total P	30			30			31			29			27		
Variance							1	2	3						
							20	10	12						
							42								
Eigenvalue							8.4	4.2	5.04						

Correlation		1	2	3
	1	-	0.5255	0.6931
	2	-	-	0.4849
	3	-	-	-

Best fit = 31 participants, 42% variance, highest correlation 0.6931

Two Factors

Unrotated = 33 participants, 39% variance, highest correlation 0.5211

Rotation	4		5		6		-2		-4	
Viewpoint	1	2	1	2	1	2	1	2	1	2
Participants	21	5	29	8	29	8	23	11	19	11
Total P	26		37		37		34		30	
Variance	1	2	1	2	1	2	1	2	1	2
	26	13	27	12	27	12				
	39		39		39					
Correlation	0.5797		0.5998		0.5999					
Eigenvalue					11.34	5.04				

Best fit = 37 participants, 39% variance, highest correlation 0.5998

Appendix 18: Crib Sheets

Factor One

+5

- 52 Communicate with parents to involve them in their child's learning and development, including sharing and modelling strategies
- 58 Seek advice from professionals, such as SLT

Ranked Higher by Factor One than any other Factor

- 2 Focus on the child's interests and adapt activities to include their interests
- 13 Reduce auditory distractions including background noise
- 19 Use visual aids to support understanding of verbal information and instructions
- 22 Deliver interventions through fun and engaging games
- 25 Use visual timetables, choosing boards and now and next boards
- 35 Reduce verbal reprimands
- 42 Go on sound walks where children have to identify sounds in the environment and identify the source

Ranked Lower by Factor One than any other Factor

- 6 If a child doesn't often speak, don't draw attention to them when they do
- 12 Increase gesture and non-verbal communication
- 14 Encourage and support children in role-play, modelling appropriate language
- 20 Copy child's utterances to model the structure of conversation
- 23 Remodelling the child's speech into a correct sentence without correcting them or asking them to repeat it back
- 29 Descriptive commenting, commenting on what a child is doing whilst playing
- 34 Use stories to model language and encourage engagement with language. Supported by physical props of puppets
- 40 Spending special time talking to a child, that is not academic related or asking lots of questions
- 57 Sorting objects into categories to develop awareness of semantics

-5

- 33 Watch television that is educational
- 37 Restate the child's sentence correctly and ask them to repeat it back

Factor Two

+5

- 17 Gain eye contact before speaking to a child
- 27 Use a high level of repetition of key language, including over learning and repetition in stories

Ranked Higher by Factor Two than any other Factor

- 3 Provide access to a quiet and calm space throughout the day including communication friendly spaces
- 6 If a child doesn't often speak, don't draw attention to them when they do
- 8 Ask the child to repeat instructions to check understanding
- 10 Directly teach vocabulary and useful phrases
- 12 Increase gesture and non-verbal communication
- 17 Gain eye contact before speaking to a child
- 20 Copy child's utterances to model the structure of conversation
- 23 Remodelling the child's speech into a correct sentence without correcting them or asking them to repeat it back
- 27 Use a high level of repetition of key language, including over learning and repetition in stories
- 37 Restate the child's sentence correctly and ask them to repeat it back
- 38 Gain the child's attention, such as saying their name, before talking to them
- 39 Provide one instruction at a time
- 43 Playing with tone and pitch of your voice, repeating their speech in different ways.
- 47 Adjust your speech so it is easier to hear, such as speaking louder and/or slower
- 49 Acknowledge all attempts to communicate, even if they are demands (though not necessarily carrying out the demand)
- 50 Introduce phonic awareness, encourage children's to copy actions and correspond sounds to letters
- 56 Use short sentences and reduce instructions to key information carrying words

Ranked Lower by Factor Two than any other Factor

- 1 Explore real objects, such as in a feely bag, to encourage children to use labelling and descriptive words
- 2 Focus on the child's interests and adapt activities to include their interests
- 4 Use symbols, pictures or photos to label resources in the environment
- 9 Provide a language rich environment and expose the child to lots of language
- 15 Understand the child's background and home circumstances and the impact of this on SLC skills

- 18 Careful assessment of needs, including identifying hearing impairment or bilingual needs
- 19 Use visual aids to support understanding of verbal information and instructions
- 21 Teach underpinning skills of speaking and listening, including turn taking
- 25 Use visual timetables, choosing boards and now and next boards
- 28 Match language use to the child's ability level and provide stretch. Such as when remodelling a child's sentence add one additional word
- 31 Provide the child with additional time to process verbal information and respond
- 36 Film children telling stories for them to watch themselves back to increase confidence and review their own skills
- 41 For staff to access training in core skills and supporting children with SLCN
- 46 Use signing, such as Makaton, to support language
- 48 Small group activities based on the child's age and ability, and differentiate accordingly
- 51 Provide movement breaks during sessions
- 52 Communicate with parents to involve them in their child's learning and development, including sharing and modelling strategies
- 53 Develop oro-motor skills, such as making noises in front of a mirror to raise awareness of sound production
- 54 Overview/plenary end of taught session
- 58 Seek advice from professionals, such as SLT

- 5
- 33 Watch television that it educational
- 54 Overview/plenary end of taught session

Factor Three

+5

- 15 Understand the child's background and home circumstances and the impact of this on SLC skills
- 52 Communicate with parents to involve them in their child's learning and development, including sharing and modelling strategies

Ranked Higher by Factor Three than any other Factor

- 9 Provide a language rich environment and expose the child to lots of language
- 14 Encourage and support children in role-play, modelling appropriate language
- 15 Understand the child's background and home circumstances and the impact of this on SLC skills
- 16 Reduce visual distractions including novel objects, when engaging in speech and language activities
- 21 Teach underpinning skills of speaking and listening, including turn taking
- 24 Create strong routines and clear boundaries
- 26 Provide the child with choices within activities to encourage them to engage
- 28 Match language use to the child's ability level and provide stretch. Such as when remodelling a child's sentence add one additional word
- 30 Provide opportunities for the child to communicate such as making choices or putting something out of reach which they have to request verbally
- 31 Provide the child with additional time to process verbal information and respond
- 32 Use singing to develop language
- 34 Use stories to model language and encourage engagement with language. Supported by physical props of puppets
- 40 Spending special time talking to a child, that is not academic related or asking lots of questions
- 41 For staff to access training in core skills and supporting children with SLCN
- 45 Encourage play with instruments to encourage the child to link sounds with their source, including barrier games
- 46 Use signing, such as Makaton, to support language

Ranked Lower by Factor Three than any other Factor

- 5 Use simple words
- 10 Directly teach vocabulary and useful phrases
- 11 Provide objects of reference to support verbal understanding, such as showing a child and happy when they need changing
- 13 Reduce auditory distractions including background noise
- 17 Gain eye contact before speaking to a child
- 22 Deliver interventions through fun and engaging games

- 27 Use a high level of repetition of key language, including over learning and repetition in stories
- 38 Gain the child's attention, such as saying their name, before talking to them
- 39 Provide one instruction at a time
- 44 Reduce language into manageable chunks
- 47 Adjust your speech so it is easier to hear, such as speaking louder and/or slower
- 50 Introduce phonic awareness, encourage children's to copy actions and correspond sounds to letters
- 55 When talking to a child get down to their level, be face-to-face and close
- 56 Use short sentences and reduce instructions to key information carrying words

-5

- 33 Watch television that it educational
- 37 Restate the child's sentence correctly and ask them to repeat it back