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Bilingualism, Language Development and Psychological well-being: an example of Deafness

Hayley Ford, Trainee Clinical Psychologist

A thesis submitted in partial fulfillment of the requirement for the degree of Doctorate of Clinical Psychology

University of Warwick, Department of Psychology
Coventry University, Faculty of Health and Life Sciences

May 2011

Contents   **Page Numbers**

_____

_____

Chapter One: Literature paper

The effects of bilingualism with two spoken language on a child's psychosocial development:

A critical review

_____

Chapter Two: Empirical paper

The experiences of bilingualism within the deaf and the hearing world:

The views of d/Deaf young people

_____

1.0   Abstract

2.0   Introduction

2.1   Prevalence and nature of deafness in the United Kingdom

2.2   Language development and deafness

2.3   British Sign Language

2.4   Cultural factors in deafness

2.5   Education for deaf children

2.6   Introduction to bilingual development for deaf children

2.7   Deaf bilingualism and psychological well-being

2.8   Rationale for current study

2.9   Aims and research questions

3.0   Method

3.1   Design

3.2   _Participants_

3.2.1   Inclusion criteria

3.2.2   Exclusion criteria

3.3   Data gathering

3.4   Procedure

4.0   Results

4.1   Outline of Interpretative Phenomenological Analysis and steps taken

4.2   _Superordinate theme 1: Understanding deafness and significance of being deaf_

4.2.1   Subordinate theme 1: Disability

4.2.2   Subordinate theme 2: The impact of other people

4.3   _Superordinate theme 2: Belonging within their own world_

4.3.1   Subordinate theme 3: Deaf and Hearing: Feeling part of these worlds

_____

Chapter Three: Reflective Paper

Communication within the d/Deaf world: Reflections on the research and clinical process

_____

1.0   Choosing a reflective topic

2.0   The d/Deaf community and communication

3.0   Communication with deaf signers

3.1   The first interaction between hearing people and deaf people

3.2   Talking and listening

3.3   Confidence to communicate with deaf signers

4.0   Barriers for deaf people with access to spoken language

4.1   Access to spoken language for the deaf

4.2   Confidence to communicate with deaf people using the voice

5.0   The integration of sign and spoken language: Voice 'on' or voice 'off'

6.0   Being aware of the environment

6.1   Group and one to one communication

6.2   Use of interpreters

7.0   Summary of personal and professional learning

8.0   References

List of tables and figures   **Page**

_____

List of appendices   **Page**

_____

List of abbreviations and glossary

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ASL   American Sign Language

BSL   British Sign Language

CAMHS   Child and Adolescent Mental Health Service

CI   Cochlear Implant

CSW   Communication Support Workers

<u>D</u>eafness   Generally, people who describe them as 'Deaf' with a big "D" identify

                         themselves as culturally Deaf, and have a strong deaf

                         identity*.

<u>d</u>eafness   Generally, people who describe them as 'deaf' with a small "d" do not

                         associate with other members of the deaf community, strive to

                         identify themselves with hearing people, and regard their

                         hearing loss solely in medical terms*.

                         *When writing about deafness, many writers will use a capital D when

                         referring to aspects of deaf culture, and a lower case d when

                         speaking solely about the hearing loss, and some just simply

                         use d/Deaf.

EAL   English as an Additional Language

IPA   Interpretative Phenomenological Analysis

LREC   Local Research Ethics Committee

LSW   Learning Support Workers

NDCS   National Deaf Children's Society

11

NHS	National Health Service
PHU	Partially Hearing Unit
Pre-lingual deafness	Hearing impairment that is sustained prior to the acquisition of language, which can occur as a result of a congenital condition or through hearing loss in early infancy.
Post-lingual deafness	Hearing impairment that is sustained after the acquisition of language, which can occur as a result of disease, trauma, or as a side-effect of a medicine. This is also referred to as *d/Deafened*.
PUMS	Public Use of Microdata Sample
R&D	Research and Development
RNID	Royal National Institute for Deaf people
SALT	Speech and Language Therapist
Sign Bilingualism	Deaf children who utilise two languages in different modalities (usually BSL and English) as opposed to the use of two spoken languages.
SSE	Sign Supported English
TA	Teaching Assistant

Interview transcript key

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…   =   Short pause

[…]   =   Long pause

/   =   Sentence interrupted

__   =   Emphasis on word.

Disclaimers

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Definitions

1. In the empirical paper, there is awareness of the difference between Deafness with capital *D* and deafness with lower case *d* depending on how individuals value the meaning of their hearing impairment. However, for the purposes of this paper, to avoid making assumptions, the term will be referred to as *d*eaf, unless starting a new sentence, and will be referred to as *D*eaf.

2. In the empirical paper, the definition of being 'bilingual' is unique for each individual, therefore when referring to bilingualism or sign bilingualism, it is referring to bilingualism with English language and sign language, regardless or fluency or preference. Furthermore, participants are asked to take part if they define themselves as bilingual, rather than adhering to any rules.

3. When discussing individuals who are bilingual in two languages, whether that is two spoken languages, as in the literature paper, or one spoken and one signed language, as in the empirical paper, for ease of writing the term *bilinguals* may be used. Furthermore, when discussing individuals who are monolingual in one language, the term *monolinguals* may be used.

References

4. Throughout this paper, there are times where secondary references may be used, however, wherever possible, the primary references will be referred to.

Acknowledgements

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Declaration

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The material in this thesis has not been submitted for any other degree or to any other institution.

The thesis was carried out under the academic and clinical supervision of Dr Eve Knight, Programme Director of Doctorate of Clinical Psychology, Coventry University, and Dr Sarah Kent, Clinical Psychologist, and Dr Sylvia Glenn, Principal Clinical Psychologist based at National Deaf CAMHS – Central England. Apart from these collaborations, all material presented in the thesis is my own work.

A summary of the research will be produced and disseminated to all participants and services involved. A copy of the full research paper can be obtained upon request.

Chapter One has been written for submission to **International Journal of Bilingual Education and Bilingualism** [Appendix F for instructions to authors - Journal word Count is 7,000].
Chapter One word count: 7,231 [Tables, figures, and references not included in word count].

Chapter Two has been written for submission to **Deafness and Education International** [Appendix F for instructions to authors - Journal word Count is 7,000]. For submission of this thesis to meet the requirements of the University of Warwick, this paper deviates from journal requirements in that the references are presented in APA style. The stated journal requests that references be presented in the Harvard style these will be amended prior to submission. This is also relevant to the word count requirement for this publication, and will be amended.
Chapter Two word count: 8,114 [Tables, figures, quotes, and references not included in word count].

Chapter Three is a reflective account, not prepared for publication.
Chapter Three word count: 3,724 [Figures and references, not included in word count]

Total thesis word count: 19, 069 [Tables, figures, quotes and references, not included in word count].

Summary of thesis

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Chapter One: *The effects of bilingualism with two spoken languages on a child's*
psychosocial development: A critical review.

This paper critically reviews the literature to explore the effects of bilingualism with two spoken languages on a child's psychosocial development. Researchers have primarily been concerned with the effects of bilingualism on intelligence (e.g., Darcy, 1963, as cited in Ricciardelli, 1992, p.301) and educational achievement (e.g., Tucker & d'Anglejan, 1971). More recently research has focused on the psychological impact of bilingualism on a child, and how their social, cultural, and familial relationships may be affected (e.g., Han & Huang, 2010). A search of papers identified **12** papers for review. The findings portrayed that societal, cultural, and familial factors are not only important with regard to language development, but are important for psychological well-being including relationships and behaviours (e.g., Han, 2010).

Chapter Two: **The experiences of bilingualism within the deaf and the hearing**
world: The views of d/Deaf young people

Research into bilingualism and the learning potential offered by a second language are widely reported, with much of this evidence relating to both languages being spoken. However, further reviews have identified that learning a language in two different modalities, offers a much richer learning environment for children. Therefore, it is imperative to understand the language development of deaf children who access both a signed language and a spoken language. For this empirical paper, **7** deaf bilingual young people were interviewed to explore their views and experiences of bilingualism and deafness. The results were analysed using Interpretative Phenomenological Analysis. It highlighted the experiences for deaf young people of having a strong identity within the deaf and the hearing communities (e.g., Calderon, 2000).

Chapter Three: **Communication within the d/Deaf world: Reflections on the research**
and clinical process

This paper reflects on my personal and professional learning throughout this research as a hearing person communicating with deaf people. Hearing people, with access, generally use spoken language to communicate. However, deaf people can communicate through spoken language, sign language, and lip-reading. Being aware of the many needs of deaf people has helped me to reflect on my experience of communication in the context of everyday life.

Chapter One: Literature paper

The effects of bilingualism with two spoken languages on a child's psychosocial development

A critical review

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1.0   Abstract

This paper outlines the typical development of language and the acquisition of a second language in bilingualism. Bilingualism is a complex concept, which may have an effect on many aspects of a child's development. There are important implications for understanding the impact of bilingualism on a child's integration into their society and consequential psychological well-being. Relevant literature was reviewed, highlighting the consequences of bilingualism on a child's psychosocial development. It discusses the pressures faced by ethnic minorities to abandon their mother-tongue in favour of the majority language to fit into their new cultural society (e.g., Agirdag, 2010). On the other hand, it also discusses the desire for ethnic-minority groups to maintain their minority language to receive the benefits of their bilingual identity, such as feeling part of their society, whilst maintaining their uniqueness (e.g., Kanno, 2000). The consequences of bilingualism on social, cultural, and familial relationships have implications for a child's psychological well-being, and successful integration into their society (e.g., Chen, Benet-Martinez, & Bond, 2008). Methodological factors, clinical implications, and ideas for future research are reported.

2.0   Introduction

This paper begins with a brief overview of the important role that language plays in the development of children. The concept of bilingualism is then introduced; setting the scene for a critical review of the existing literature into the consequences of bilingualism on psychosocial development.

2.1   Typical language development in childhood

There has been an ongoing debate regarding whether language skills are acquired through an inherent capacity to learn language, or whether they are acquired through nurturing (e.g., Brennan, 1999). However, regardless of the exact process, complex linguistic and communication skills are acquired within the context of a child's social interaction within their family. These skills become evident from around the age of one year and continue to develop in complexity through the pre-school period (e.g., Tabors, 1997). Most of the basic skills of language are acquired by the time a child is five years old, which sets the child up for transition into school, forming peer relationships, and with regard to their emotional adjustment (Moffitt, 1993).

2.2   Bilingualism and child development

Many families speak more than one language and many children are increasingly developing skills in a second spoken language. The acquisition of two spoken languages is known as bilingualism (e.g., Kohnert & Bates, 2000). Tabors (1997) outlined two methods by which bilingualism may be achieved. The first is known as simultaneous acquisition, whereby children are exposed to both languages from an early age, often from each parent speaking a different language. The second is referred to as sequential acquisition, which sees a child learn one language from birth, usually that of their parents, and a second language later in childhood, often the language used in education. The latter is increasingly prevalent, and it is recognized by the Office for Standards in Education [OFSTED] (2001) that during childhood it takes around 5-7 years to become fully competent in the second language, and thus to achieve bilingualism.

The study of bilingualism in childhood has served to help further understand development in several areas, and the focus of study has shifted over recent decades. Before the 1960s, researchers were primarily concerned with the effects of bilingualism on intelligence (e.g., Darcy, 1963, as cited in Ricciardelli, 1992, p.301). The evidence at that time suggested that

bilingualism might hinder a child's cognitive development (e.g., Saer, 1923, as cited in Ricciardelli, 1992, p.301). More recently however, accumulated evidence has suggested that bilingualism can have a positive effect on intelligence (e.g., Bialystok, 1999; Ricciardelli, 1992). Within the educational literature there have been similar views. Until the late 1970s, there was a general belief that bilingual children were at an educational disadvantage (e.g., Tucker & d'Anglejan, 1971), yet more recent evidence has suggested that bilingualism can help to stimulate a child's development and benefit their education (e.g., Verhoeven, 2007).

Whilst there has been substantial research exploring the cognitive and educational impacts of bilingualism, much less focus has been paid to the psychological impact of bilingualism on a child, and how their social, cultural, and familial relationships may be effected. Language plays a key role in the development of cultural identity, and if a child is speaking different languages in different environments they may find themselves caught between different cultures (e.g., Tannenbaum & Howie, 2002). It has been argued that it is not the experience of the two language systems in bilingualism that can affect development, but what plays a greater part is the experience within two different cultural systems and their integration (Kharkhurin, 2010). These factors will impact on language development, which are not only vitally important for education but are important for the development of psychological well-being including; relationships with others and, behaviour and emotional regulation (Han, 2010; Linton, 2004).

Some of the early work on the impact of bilingualism on psychological well-being considered bilingualism to be damaging to a child's emotional adjustment by being stressful, provoking anxiety, and causing depression (e.g., Park, 1928; Stonequist, 1935, as cited in Chen, Benet-Martinez & Bond, 2008, p.805). However, whilst little is currently known about the impact bilingualism may have on a child's wider adjustment and psychological well-being, the notion of it being damaging has been challenged (e.g., Han & Huang, 2010; Ricciardelli, 1992).

2.3 Aims of the literature review

The majority of research to date exploring the effects of bilingualism on child development has focused on cognitive development and educational achievement. More recently, research has explored the implications of bilingualism on psychosocial development, but with no thorough review of the evidence available. This paper aims to conduct a thorough review of the existing evidence in relation to the psychosocial impact of bilingualism among children.

3.0   Method

A search of relevant journal articles highlighted literature on bilingualism and the

consequences for a child's psychosocial development, for critical review. Psychosocial

development refers to exploring the impact of bilingualism on a child's social, cultural, and

familial relationships, and on a child's psychological well-being. This involved a search of

databases through a number of search terms. Filters were used to include and exclude criteria.

3.1   Search Strategy

Eight search strategies [**Appendix B, p.111**] were used to find relevant articles [**Table 2, p.23**] in

the following databases: PsycINFO, Medline, and CINAHL with full text. These databases were

used to capture literature specific to a child's development and language, which included:

behavioural science and mental health, medical advances, and allied health journals. These

searches were carried out between May and October 2010. The search term *bilingualism* was

used for title searches. The search terms: *cognitive development, language development,*

education, psychological well-being, cultural identity, social identity, self-esteem, and mental

health, were used for keyword searches. The search terms were based on the initial findings in

the introduction, on bilingualism and a child's development, which were used as a guide for the

search terms for this critical review. The inclusion and exclusion criteria were adopted.

3.2   Inclusion criteria

Filters were used to include those journal articles that were: written in English, with references

available, dated from the last two decades, and peer reviewed. The last two decades were

chosen because much of the earlier work in the field of bilingualism has focused on the

consequences for cognitive development and educational achievement. However, recent

research has highlighted the importance of understanding the impact of bilingualism on a

child's social, cultural, and familial relationships, and consequential psychological well-being.

All articles that focused on the consequences of bilingualism for a child's psychosocial

development were included. Journal articles were checked for secondary references. Martin

and Stuart-Smith (1998) were found in Agirdag (2010), but the primary reference was used.

3.3   Exclusion criteria

A cross-search of identified journal articles was carried out to remove duplicated journal

articles as identified through the same search terms. Journal articles were then removed if they

did not meet the inclusion criteria. Therefore, those journal articles that focused on areas of bilingualism other than the psychosocial effects of two spoken languages were excluded. This included reading and writing, parental or counsellor bilingualism, language assessment tools, linguistics, policies of bilingualism, gender differences, other literature reviews, and those related to deafness [**Appendix B: Table 1**]. Of the remaining journal articles, those that only focused on cognitive development or educational achievement without considering psychosocial development were subject to further exclusion.

3.4   Summary of the structure of the review

To identify a research topic relevant for critical review, an initial search highlighted literature on bilingualism and a child's development. It identified earlier work focusing on bilingualism and, cognitive development and educational achievement, and more recent research highlighting the importance of exploring the consequences of bilingualism on a child's psychological well-being (e.g., Han, 2010; Han & Huang, 2010). Psychosocial development became the focus of this critical review and adopted the relevant search terms, and inclusion and exclusion criteria. Psychosocial development was divided into two areas of first, social, cultural, and familial relationships, and second, psychological well-being. Whilst the author recognises these two are not mutually exclusive concepts, this decision was adopted for ease of reading. Those articles that focused on other areas of a child's development, without considering psychosocial development were subject to further exclusion [**Table 1, p.114**]. Whilst some of the remaining articles included consideration of more than one area of development, they were selected for critical review if psychosocial development were their primary focus. Each of the **12** articles were analysed for themes, which formed the content for the critical review. Whilst some of the articles contained information pertinent to more than one thematic heading, and thus were not mutually exclusive, they were fitted under the thematic heading of their primary focus.

Table 2: Thematic headings for psychosocial development [N=12]: Page 1

Social, cultural, and familial relationships [N=8] ▮ (green)   **Psychological well-being [N=4]** ▮ (magenta)

Author	Year	Title of article	Methodology			Nature of study	Main findings
			Study	Measures	Sample size		
Agirdag, O.	2010	Exploring bilingualism in a monolingual school system: Insights from Turkish and native students from Belgian schools.	Qualitative	Semi-structured in-depth interviews.	19 Turkish-Dutch bilingual and native-Dutch monolingual students [14-17 years] 5 Flemish schools.	Investigated how students evaluate their languages, and how students respond to Dutch monolingualism being imposed.	The mother tongues of bilinguals are mainly perceived as a barrier to success. Benefits of bilingualism are unknown.
Choi, J.K.	2003	Language Attitudes and the Future of Bilingualism: The Case of Paraguay.	Quantitative	Questionnaire to assess opinions on Spanish and Guaraní. Students were in 7th, 8th and 9th grades. Self-reported methods.	620 students bilingual in Spanish and Guarani. 279 students from 2 private schools. 341 students from 2 public schools. 304 parents from all social classes.	Examines the language attitudes of parents and students towards both languages of Paraguay.	Many studies have shown that positive attitudes towards a language increase its usage. Our data from Paraguay does not show this.
Conteh, J.	2007	Opening doors to success in multilingual classrooms: Bilingualism, Codeswitching and the professional identities of ethnic minority primary teachers.	Qualitative	Interview.	17 bilingual primary teachers conducted a small action research project in 2 classrooms. Most of the interviewees were Urdu/Punjabi and English speakers.	Illustrated views on bilingualism, language choices and multilingual classrooms. It analysed and discussed code-switching between English and Punjabi.	It shows how code-switching, as part of bilingualism may have the potential to raise pupils' achievements. The roles played by all teachers in their pupils' success are recognised.

Thematic headings for psychosocial development [N=12]: Page 2

Desirability to maintain minority languages in bilingualism

Author	Year	Title of article	Methodology			Nature of study	Main findings
			Study	Measures	Sample size		
Kabadayi, A.	2008	Analysis of the socio-demographic structure and thoughts of the Turkish bilingual children on 'bilingualism' in Germany.	Quantitative	Questionnaire to assess the socio-demographic structure of the Turkish bilingual children and their parent's opinions about bilingualism society and schools.	120 Turkish-German bilingual children attending pre-school and elementary schools.	This study aims to analyse the socio-demographic structure and second language acquisition (L2).	Parents and teachers should take precautions to make Turkish bilingual children integrate to the German society and be successful.
Kanno, Y.	2000	Bilingualism and identity: The stories of Japanese returnees.	Qualitative Longitudinal study	Each student interviewed 2-3 times before leaving Canada. After return to Japan interviewed every 6 months for 2 years.	4 Japanese-English bilingual participants who are former students of author.	Relationship between bilingualism and identity in Japanese children.	English the majority language, was participation. Japanese the minority language was uniqueness.
Linton, A. Same data as Shin & Alba.	2004	A Critical Mass Model of Bilingualism among U.S.-Born Hispanics.	Quantitative	Measured the proportion of native-Hispanics who are fluent in English and Spanish in relation to area incentives for bilingualism.	1% Public Use of Microdata Sample 1990. 1.5 generation Hispanics [came to US – ages not known] and US born [aged 18-75 years].	Assess contextual and individual-level factors which influence the desirability of bilingualism.	When contextual incentives are included in individual models it influences the odds of bilingualism. A critical mass effect.
Shin, H. & Alba, R. Same data as Linton.	2009	The economic value of bilingualism for Asians and Hispanics.	Quantitative	Measured bilingualism: English monolingual, Bilingual with fluent English, and Bilingualism with limited English fluency.	5% Public Use Microdata Sample 2000 with 3 Hispanic and 3 Asian groups. 1.5 generation [came to US 0-12 years] and US born [aged 25-64 years]	Examines how bilingualism affects the wages of Asian and Hispanic workers.	No evidence that Asian and Hispanic bilingual workers generally have higher wages than their English.

Thematic headings for psychosocial development [N=12]: Page 3

Integration of the influence of environmental factors on bilingualism

Author	Year	Title of article	Methodology			Nature of study	Main findings
			Study	Measures	Sample size		
Pearson, B.Z.	2007	Social factors in childhood bilingualism in the United States.	Quantitative Longitudinal study.	[1] Language samples. [2] Standardised testing. [3] MacArthur Communicative Developmental Inventories. [4] Surveys. [5] 250 observations.	25 babies in English-Spanish bilingual families before they were born and followed monthly until age 3 years.	Explores factors influencing likelihood of bilingualism; input, language status, access to literacy, family language, and community.	Schooling is shown to benefit children's language proficiency in the minority language without diminishing their progress in the community language.

Thematic headings for psychosocial development [N=12]: Page 4

Subjective well-being and integration into two cultural orientations

Author	Year	Title of article	Methodology		Sample size	Nature of study	Main findings
			Study	Measures			
Chen, S. X. & Benet-Martínez, V. & Bond, M. H.	2008	Bicultural identity, bilingualism, and psychological adjustment in multicultural societies: Immigration-based and globalization-based acculturation.	Quantitative *Three studies*	*Questionnaires* [1] Language proficiency and use. [2] Cultural identification [3] Bicultural Identity Integration Scale [4] Riverside Acculturation Stress Inventory [5] Symptom Checklist-90 Revised [6] UCLA Loneliness Scale [7] Satisfaction with Life Scale [8] Subjective Happiness Scale [9] Rosenberg's self-esteem scale [10] General self-efficiency scale [11] Neuroticism of the big five Inventory	*Study 1* 67 Mainland Chinese immigrants in Hong Kong. *Study 2* 153 Filipino domestic workers in Hong Kong. *Study 3* 452 Hong Kong and Mainland Chinese college students.	Examined the impact of bicultural identity, bilingualism, and social context on the psychological adjustment of multicultural individuals, across three different studies.	Bicultural Identity Integration positively predicted psychological adjustment for all the samples except sojourners. Managing two cultural identities are important for psychological outcomes.
Martin, D. & Stuart-Smith, J. [Cited in Agirdag, O. 2010]	1998	Exploring Bilingual Children's Perceptions of Being Bilingual and Biliterate: implications for educational provision.	Qualitative	*Interviews* [1] Interviewed in Punjabi by the first language Panjabi speaker on the research team. [2] Interviewed in English by two monolingual middle-class English women. Interviews shaped by Personal Construct Psychology [PCP]	50 children from a large Punjabi-speaking community, who are bilingual in Punjabi and English. Sikh religion and from 5 schools.	Explores the feelings of bilingual children towards developing two languages, two literacies and belonging to two communities.	Bilingual children express their constructs of bilingualism, literacy and identity differently in both languages.

Thematic headings for psychosocial development [N=12]: Page 5

Personality and behavioural factors

Author	Year	Title of article	Methodology			Nature of study	Main findings
			Study	Measures	Sample size		
Han, W-J. *Same data set as Han & Huang (2010).*	Jan 2010	Bilingualism and socioemotional well-being.	Quantitative	[1] Teacher reported data from the social rating scale. [2] Language status at home. Oral Language development Test to test English proficiency. [3] Immigrant generation status and race/ethnicity. [4] 14 variables to evaluate school environment. [5] Child and family characteristics.	Subsample [N=20, 534] of an early childhood longitudinal study of a cohort of children who originated from Asian countries, US born non-Hispanic white children were the comparison group. All entered kindergarten 1998-1999.	Using the Early Childhood Longitudinal Study – Kindergarten Cohort, it examines Latino children's socioemotional pathway from kindergarten to 5th grade.	Fluent bilingual and non-English-dominant bilingual children had the lowest levels of internalizing and externalizing behaviors, and the highest levels of self-control and interpersonal skills, compared to non-English monolinguals.
Han, W.J. & Huang, C. C. *Same data set as Han (2010).*	May 2010	The forgotten treasure: Bilingualism and Asian children's emotional and behavioral health.	Quantitative	[1] Teacher reported data and included behaviours. [2] Immigrant generation status and race/ethnicity. [3] Language status at home. Oral Language development Test to test English proficiency. [4] *Reading competence using Item Response Theory.* [5] 14 variables to evaluate school environment. [6] Child and family characteristics.	Subsample [N=12,586] of an early childhood longitudinal study of a cohort of bilingual Latino children who spoke English and a non-English language were used. All entered kindergarten 1998-1999.	Using the Early Childhood Longitudinal Study – Kindergarten Cohort, it investigates the relation between the language status and behavioral and emotional well-being.	Fluent bilingual and non-English-dominant bilingual children had the lowest levels of internalizing and externalizing behaviors, compared to non-English monolinguals. Personality traits were not assessed.

4.0   The consequences of bilingualism on psychosocial development: A critical review.

This critical review will summarise and evaluate the relevant articles on the consequences of bilingualism for a child's psychosocial development, which is divided into the two areas of, first, social, cultural, and familial relationships, and second, psychological well-being.

4.1   Social, cultural, and familial relationships

From the **12** studies, **8** articles contained aspects of social, cultural, and familial relationships within bilingualism. This is illustrated with reference to relevant themes in **Table 2** [**p.23**].

4.4.1   Pressure to abandon the mother-tongue in bilingualism: Family and school

In the United Kingdom there are a growing number of ethnic minority children who adopt a second language to fit into the norms of a growing multi-ethnic society, and that bilingualism becomes a natural part of their identities (Conteh, 2007). Languages are a reflection of the psychosocial attitudes of parents, siblings, and friends, and these attitudes have a decisive influence on the linguistic process, and puts pressure on the maintenance or loss of languages in a community (Choi, 2003). With each family generation, bilingual children are becoming increasingly reluctant to speak their family's language, choosing instead to speak the dominant language of the society (Choi, 2003). There is socio-political pressure on linguistic minority bilingual students to abandon their mother tongue, and for immigrant parents to avoid passing their native language onto their children (Agirdag, 2010). This means minority languages are at risk of decline with an increase in the rise of children adopting the majority language.

Choi (2003) explored the opinions of bilingualism in 620 Spanish and Guarani students using a questionnaire. Results showed that there were positive attitudes towards using Guarani the minority language, which reflected identification and pride to their culture. However, their linguistic attitudes reflected different linguistic behaviours, as Choi found that even though parents reported the importance of preserving the home language, they indicated that 57.6% of parents spoke Spanish the majority language with their children, with the remainder using both Spanish and Guarani. None of the parents reported using only Guarani with their children. Whilst this study has many identifiable strengths; such as the finding that social class does not influence the linguistic attitudes of pupils, as evident by recruiting from public schools, which reflected low-income families, and from private schools, which reflected high-income families, the results need to be considered with caution due to the limitations of the design. Whilst an

28

interview design was adopted to collate data from parents, only quantitative data was explored, thus losing some of the richness of the findings.

Many schools in western countries also put increasing pressure on linguistic minorities to abandon their mother-tongue, which is related to feelings of it being the most socially valued tongue, and fears that bilingualism will invite discrimination (Agirdag, 2010). In contrast to the pressures to abandon the mother-tongue, some researchers supported the mother-tongue, as without it children risked lower academic achievements (Agirdag, 2010; Conteh, 2007).

Agirdag (2010) interviewed a total of 19 Turkish-Dutch bilingual and native-Dutch monolingual students, aged 14-17 years to explore how they evaluated their languages, and responded to the dominance of Dutch monolingualism. Agirdag found that all bilingual and monolingual students believed monolingualism in Dutch the majority language to be advantageous, as Turkish the mother-tongue was perceived as a barrier to educational success. However, Agirdag argued that immigrant children using their mother-tongue actually had stronger educational achievements than their native peers. Agirdag's study had the strength of exploring the bilingual experiences of Turkish-Dutch immigrants, because Turkish minority students were considered under-achievers in both Flanders and England, which had previously received little attention from researchers. However, the sample was limited as only male participants were recruited, and most of these were from a working-class background.

Conteh (2007) interviewed 17 bilingual primary teachers in two schools in England. Most teachers were Urdu/Punjabi speakers, with spoken English as their second language. Conteh analysed the switching process between English and Punjabi to show the potential for academic achievements. Results indicated that all teachers valued the importance of bilingualism to enhance their pupils learning and felt that problems could arise for teachers who did not share the mother-tongue of the children. They found that children's use of their bilingualism was dependent on the attitudes of the teachers, as they were more likely to maintain both languages if it was seen as socially acceptable. The methodology for this study adopted a group of four Urdu/Punjabi and English bilingual primary teachers who worked as co-researchers. This had the strength of supporting the emphasis on a bilingual approach, as it shaped the ethnic and linguistic equality in this research. However, as the interviews were conducted in English, this re-emphasised the dominance of English as the majority language.

To reach a balanced view of the consequences of abandoning the mother-tongue, there was a clear consensus among later generations, that the native language should be maintained for specific purposes such as speaking with parents, but that it should be used interchangeably with a second language to support integration into their society (Choi, 2003; Conteh, 2007). Educational achievements depended on the opinions of the community, and were reflected in the attitudes of its people (Agirdag, 2010; Choi, 2003; Conteh, 2007). Therefore, the positive change in the linguistic behaviour of parents was quite significant as it reflected not only a positive linguistic attitude towards their native language, but also shaped a bilingual society (Choi, 2003). The positive change in education for equal language status for immigrant children encouraged schools to allow children to use their mother-tongue (Agirdag, 2010). However, despite this motivation, languages continued to be viewed as hierarchical, therefore more cohesion was needed (Conteh, 2007) as depriving linguistic minorities of this supportive right could be considered a failure on schools to provide an appropriate service (Conteh, 2007). To achieve this, equal status could be provided within the curriculum (Agirdag, 2010; Choi, 2003; Conteh, 2007) with more ethnic minority teachers (Conteh, 2007). A concerted effort is needed to increase the use of both languages, and to reduce the effect of stigma on the minority language, by valuing their social, cultural, and familial importance, as these factors have an impact on maintaining bilingualism (Agirdag, 2010; Choi, 2003).

In these studies (Agirdag, 2010; Choi, 2003; Conteh, 2007) there were equality differences, which impacted on the pressures to abandon the mother-tongue. Agirdag argued that the mother-tongue was socially stigmatised as bilingual children were forced to speak Dutch exclusively and were penalised for speaking their mother tongue. Conteh promoted bilingualism by having bilingual teachers and equal status in both languages. Similarly, Choi gave students the choice of both languages in school, as neither was stigmatised. Agirdag and Choi collected data in the minority language chosen of the participant, which provided equal status. However, this meant that during translation to some utterances were lost. Due to the mixed methodology, it was not known whether the pressure to abandon the mother-tongue reflected the attitudes of pupils (Agirdag), teachers (Conteh), or parents and pupils (Choi). However, it was not merely linguistic attitudes which reflected linguistic usage of both languages, as other factors were also likely to help or hinder the desirability to maintain bilingualism.

4.1.2   Desirability to maintain minority languages in bilingualism

It is often assumed that bilinguals can, and do everything in two languages. However, this is a misconception, as most bilinguals live some aspects of their lives in one language and other aspects in the other language. Therefore, it was not unusual for bilinguals to have two different identities (Kanno, 2000; Linton, 2004). Kanno was aware that when individuals had the desire to be included within a new culture as well as the desire to assert ones own uniqueness, by maintaining their own culture, this could result in conflict. Kanno argued that this conflict occurred when children were adjusting to their new culture as they could lose the protective features of their home culture. Social comparison could also impact on the desirability of bilingualism for children who were beginning to see their own cultural identities as different from their peers, and were strongly influenced by their new cultural environment (Kanno, 2000; Linton, 2004). In every culture, children learned the majority language through the home, school, and community (Pearson, 2007), but Pearson argued that it was also crucial to have contact with monolingual speakers of the minority language to provide sufficient exposure to both languages. The social desirability of two cultural identities was evident in two studies (Kabadayi, 2008; Kanno, 2000), but both these studies were limited with a bias towards the majority language in their methodology.

Kanno (2000) interviewed four Japanese-English bilingual students 2-3 times before leaving the host country Canada. After their return home to Japan they were interviewed every 6 months for 2 years. Kanno found that in Japan, in order to be accepted as a member of a community, they must have proficiency in their home language. Kanno argued that bilingualism gave students the ability to switch between each context and promote their participation into society with Japanese their majority language, whilst simultaneously holding the key to uniqueness with English their minority language. To capture the experiences of the students in Japan their home country, this meant Kanno could not meet the students very often. However, the data were strengthened by the use of letters, journal exchange, telephone calls and email contact. However, this study was limited as only a small sample of four participants were recruited, who were all from the same educational environment, as well as being former students of the authors, which meant there could have been some bias in the results to please the researcher. Also, as all of the communication took place in Japanese, with minor borrowing of English expressions, there was a bias towards the majority language.

Kabadayi (2008) explored adjustment to bilingualism using a questionnaire with 120 Turkish-German bilingual children living in Germany. Kabadayi found that immigrant children in Germany had to face the challenges of two cultural identities, and the impact on their desirability for bilingualism. They had to master Turkish their mother-tongue to communicate effectively with their family, but also German to integrate into society. Results indicated that 31% of Turkish immigrant children, and 47% of German native children, valued their bilingualism, as it gave them access to making friends with both German and Turkish speaking children. Seventy-seven percent of all children stated feeling comfortable in German society, which showed that bilingual children had come a long way in their adjustment. However, there was an uneven bias in their sample towards the majority language, as 91 out of 120 had German nationality, and 29 had Turkish nationality. Thus, perhaps the reason most children felt comfortable in German society was because most of them were born in Germany.

The same data set were used in two studies (Linton, 2004; Shin & Alba, 2009), which were taken from the Public Use of Microdata Sample [PUMS]. However, there were some differences. Linton used 1% of data from PUMS (1990), which included native born or 1.5% immigrant generation Hispanics who migrated to the United States [US]; all were aged 18-75 years and were fluent in Spanish and English. Shin and Alba used 5% of data from PUMS (2000), which included native born or 1.5% immigrant generation Hispanic and Asian ethnic groups who came to the US between the ages of 0-12 years, all were aged 25-64 years and had English as a second language. The Hispanic and Asian groups were selected to capture a different pattern of ethnicity in geography and labour market. The social and economic desirability of bilingualism was evident in two studies (Linton, 2004; Shin & Alba, 2009). Both studies were limited in their definitions of bilingualism and failed to provide a measure of competency in the second language. The range of participant ages was also flawed. Older people were likely to have lived or worked in a dominated Hispanic sector, which influenced their native language.

Linton (2004) aimed to assess contextual and individual-level factors, which influenced the decision to maintain Spanish, and influenced the degree to which bilingualism was desirable. This was done by asking respondents which language they spoke at home and how well they spoke English. Linton stated that if bilinguals attracted other people to bilingualism by increasing the personal incentives to make the same choice, then the nature of bilingualism increased, known as the critical mass effect. For example, Linton found that children of

Spanish-English bilingual immigrants who lived in ethnic neighbourhoods were more likely to become bilingual, whereas those who did not would usually be English monolingual, as they felt socially stigmatised. Thus, it is only when bilinguals were appreciated for their existence that they could retain both languages. Linton's study had the strength of specifying the contextual, economic, social, and individual circumstances in which their bilingualism was likely to be a stable feature of their identity. However, Linton's definition of Spanish-English bilinguals was weak, as it was defined as speaking Spanish at home and speaking English 'very well'. Furthermore, it did not provide a measure of competency in Spanish, but Linton argued that speaking Spanish at home was the best indicator available.

Shin and Alba (2009) aimed to examine how bilingualism affected the wages of Asian and Hispanic workers, and examined the impact on education and employment. In contrast to Linton focusing on feeling socially accepted which enhanced the desirability to stay bilingual, Shin and Alba speculated that bilingualism would be desirable only to the extent that it represented an economic advantage and translated into good jobs and high incomes. However, Spanish-English bilinguals in the US actually earned less than English monolinguals (Linton, 2004; Shin, & Alba, 2009). The criteria for Shin and Alba's sample were Hispanic and Asian salary workers, who were native born or belonged to 1.5% of the immigrant generation, aged 25 to 64 years, worked at least 160 hours, and reported non-zero salary income in the preceding year. However, the limitations of Shin and Alba's study were their definition of bilingualism, as it was categorised as English monolingualism, bilingualism with fluent English proficiency, and limited English proficiency. They also failed to include a measure of competence in the second language.

4.1.3   Integration of the influence of environmental factors on bilingualism

Pearson (2007) illustrated the societal and individual factors needed for children to maintain their bilingualism, which also reflected the findings from the above studies. Pearson recruited 25 babies before they were born who were brought up bilingually with English and Spanish, and followed them monthly until age 3 years. By this time, several of them had stopped using Spanish. Language samples, parent questionnaires, and observations were conducted. Several factors contributed to the desire to maintain the minority language. First, children needed access to language from parents to develop proficiency in bilingualism. Pearson recognised that exposure was not directly related to proficiency, but there appeared to be a threshold, or

a critical mass effect (Linton, 2004). Second, the attraction of the majority language was influenced by the languages of education (Agirdag, 2010; Conteh, 2007). Third, the enhancement of literacy in both languages provided children with more input. Fourth, the most potent predictor was child and family characteristics, such as parent's beliefs, which impacted on decrease in bilingualism over generations from fluent bilingualism to monolingualism (Choi, 2003). Fifth, children were more likely to maintain their minority language if speaking it was free from social stigma (Kabadayi, 2008; Kanno, 2000).

One of Pearson's limitations was that the children were not comfortable in their second language [Spanish] to respond to remarks by their parents or the research team, much less initiate an interaction in that language themselves. However, Pearson provided a summary of the environmental factors that impacted on the consequences of bilingualism on a child's psychosocial development, which enhanced support for the existing literature.

4.1.4   Summary of bilingualism and, social, cultural, and familial relationships
Bilingual children are increasingly reluctant to speak their mother-tongue, choosing instead to speak the dominant language of the society (Choi, 2003). This means minority languages are at risk of decline, which has implications for bilingualism. The linguistic attitudes of minority linguists reflected a desire to preserve the mother-tongue, but the linguistic behaviours reflected a desire to adopt the majority language to fit into society (Choi, 2003). In contrast to the pressure to abandon the mother-tongue, maintaining its usage had raised the educational achievements of bilingual children (Agirdag, 2010). It was evident that the desirability of bilingual children to fit into the new cultural environment, whilst maintaining a unique identity, impacted on the desirability to maintain the minority language (Kanno, 2000; Kabadayi, 2008). Bilinguals were also more likely to maintain their minority language if it was socially acceptable (Linton, 2004), or if bilingualism represented as an economic advantage (Shin & Alba, 2009).

4.2   *Psychological well-being*

From the **12** studies, **4** articles contained aspects of psychological well-being within bilingualism. This is illustrated with reference to relevant themes in **Table 2** [**p.26**].

4.2.1   Subjective well-being and the integration of two cultural orientations

The integration of minority linguists into a new society has led nations to be become both multilingual and multicultural. The impact of this integration has been explored in societal, cultural, and familial relationships. However, as these factors have brought many psychological changes to these individuals, the research on bilingualism has received increasing attention in the psychological literature (Chen, Benet-Martinez, & Bond, 2008). The impact of bilingualism through integration into two cultural orientations on subjective well-being was evident in two studies (Chen et al., 2008; Martin & Stuart-Smith, 1998). However, both studies were limited with a bias towards the majority language. In both studies individuals were asked to report on their first and second language, and on the extent to which they identified with their home culture and the receiving culture. Martin and Stuart-Smith (1998) found that positive factors such as self-confidence and self-esteem through cultural integration helped the development of bilingualism, whilst negative factors such as anxiety, alienation and low self-esteem hindered its development. Chen et al., (2008) also found that immigrants with elevated levels of stress may be at risk of anxiety and depression.

Chen et al., (2008) examined the impact of bicultural identity*,* bilingualism*,* and social context on the psychological adjustment of multicultural individuals, across three different studies. Three distinct groups completed a number of questionnaires to measure psychological adjustment and included: 67 mainland Chinese immigrants who permanently relocated themselves from one cultural context to another, 153 Filipino domestic workers who worked in a foreign culture for a limited period of time, and 452 Hong Kong and Chinese students who were majority individuals all residing in Hong Kong, and who came into contact with a second language in their home culture. Chen et al., (2008) indicated that when an individual successfully internalised two cultures, particularly the new receiving culture through long-term migration, this was linked to better psychological adjustment to the new society. However, if one's cultural identity was not compatible with the new cultural norms, this may translate into feelings of ambivalence regarding integration into society, and was linked to psychological distress (Chen et al., 2008).

Chen et al., (2008) indicated that pressures associated with integration into a new society could exert a negative effect on psychological adjustment, not just for minority individuals, but also for the majority group as well. This was because the majority group were less likely to feel the pressure to learn multi-languages, which meant deficiency in a second-language could make them feel that their own environment was not representative to the new cultural richness (Chen et al., 2008). The strength of this study was that a number of the measures were replicated across all three studies [**Table 2, p.26**]. However, this study was limited as the sample of students was not comparable in number across the studies, as there was a bias towards the majority of the sample residing in the home country and adopting the majority language. This meant the author's could have been biased in their perceptions towards the native country and language. Furthermore, the samples needed to reflect the sociocultural, economic, political and historical uniqueness, rather than being defined by cultural difference and length of time in the new society.

Martin and Stuart-Smith (1998) explored the feelings of 50 children from a Punjabi-speaking community, who were bilingual in Punjabi and English. All children were interviewed twice on different days in Punjabi and in English to determine their perceptions of bilingualism and constructs of identity. Martin and Stuart-Smith emphasised the difference between a feeling and an attitude, which was achieved through the framework of personal construct psychology to understand the impact of bilingualism on subjective well-being. The children showed positive constructs about being bilingual. However, there was a significant difference between the constructs expressed in the two languages of the interviews. In the English interview, the children showed positive feelings about speaking English and negative feelings about speaking Punjabi. There was no significant difference in the Punjabi interview. The proportions of children identifying themselves with Punjabi (72%) and English (28%) were expressed consistently across both interviews. However, 28% of children were actually dissatisfied with their group and wanted to change, but could not articulate how this change could happen. The main strength of Martin and Stuart-Smith's study was the emphasis on the bilingual approach. However, during translation from Punjabi into English, several comments risked being lost. In contrast to the bilingual strength, this study biased the majority language, as while all the children were developing English literacy only a few were learning Punjabi literacy, which restricted the benefits of the second language.

4.2.2 Personality and behavioural factors

The same data set were used in two studies (Han, 2010; Han & Huang, 2010), which were taken from the Early Childhood Longitudinal Study Kindergarten Cohort between 1998 and 1999, and were used for assessing the relationship between language status and proficiency, and behavioural problems. The former study from January 2010 investigated the relationship between personality traits and behavioural problems. However, in the latter study from May 2010 the growth rate of personality traits was not assessed. Han used a sample of Latino bilingual children and their monolingual counterparts, whereas Han and Huang used a sample of children who originated from Asian countries, and US born non-Hispanic white children who served as the comparison. Both studies used large samples [**Table 2, p.27**]. However, they were limited by the subjectivity of their results, as both used teacher reported data to measure internalising and externalising behavioural problems. These studies accounted for language and immigration status at home, language proficiency, school environment and, child and family characteristics. In addition, Han and Huang measured reading comprehension. Results in both studies (Han, 2010; Han & Huang, 2010) were consistent, indicating that fluent bilingual and non–English-dominant bilingual children had the lowest levels of internalizing and externalizing behaviours, compared to non-English monolinguals.

Han found a positive correlation between high levels of personality traits, and low levels of behavioural problems. They found that fluent bilingual [5.59%], non–English-dominant bilingual children [3.93%], English dominant bilingual children [6.91%], and English monolingual children [80.55%] had the highest levels of self-control, and interpersonal skills that positively related to lower levels of behavioural problems. However, they also found that non-English monolingual children [3.02%] had the lowest level of self-control and interpersonal skills, and the highest level of internalizing problems. Although, these findings indicated a bilingual advantage, this study was limited as the majority of the sample [83.57%] was monolingual and therefore 16.43% of bilinguals were inefficient to make a comparison. This study highlighted some limitations with concluding a direct link between bilingualism and behavioural problems. First, it did not include detailed information about the classroom. Second, even with the same type of instruction two children may respond differently. Third, there needs to be awareness of how the different types of migration shape experiences. Fourth, only information from

kindergarten and fifth grade was used. Fifth, the definition of language proficiency could be measured more accurately.

Han and Huang contributed the positive relationship between bilingualism and lower levels of externalizing and internalizing behaviours, to the influence of English language used in school, and from receiving extra benefits from the cultural resources within their families and ethnic communities. Their comparisons between white children and Asian children showed that Asian children were more likely to live with married parents with high educational expectations, which could impact on behaviours. Han also commented that the positive outcomes for bilingual children could be as a result of living in a two parent family, and having fewer family members under the age of 18 years. Furthermore, Han's study could be influenced by access to English rather than a bilingual advantage, as non-English monolinguals were the only group who did not demonstrate this positive outcome. Despite the advantage for English monolingual children, the self-control and interpersonal skills of the bilingual group in both studies increased at a faster rate from Kindergarten to year five, compared to the monolingual group.

4.2.3 Summary of bilingualism, and psychological well-being

When an individual could successfully internalize two cultures without any conflict, particularly through long-term migration, this was linked to better psychological adjustment to the new society (Chen et al., 2008). Bilingual children were more likely to show feelings of happiness towards their bilingualism with feelings of acceptance towards both languages (Martin & Stuart-Smith, 1998). It was found that bilingual children were likely to show lower levels of behavioural problems compared to monolingual peers, but that this finding could be due to the dominance on English language in school, as higher levels of behavioural problems were more evident in non-English speaking monolingual children (Han & Huang, 2010). Finally, a link was found between high levels of self-control and interpersonal skills, and low levels of behavioural problems in bilingual children, but it was argued that factors related to social, cultural, and familial, relationships had a bigger part to play (Han, 2010).

5.0   Methodological factors and areas for future research

This section will compare the methodologies of the studies in this critical review, identify their limitations, and give ideas for future research. The clinical implications will also be given.

5.1   Methodological approaches

From the **12** journal articles selected for this critical review of the consequences of bilingualism on psychosocial development, **8** reviewed social, cultural, and familial relationships, and **4** reviewed psychological well-being. Methodological comparisons will be made across all the articles. There were **8** quantitative studies and **4** qualitative studies. The same data set were used for Linton (2004) and Shin and Alba (2009), and Han (2010) and Han and Huang (2010) studies. The data for the former studies was taken from PUMS in 1990 and 2000, respectively. These studies have been reviewed to capture the consequences of bilingualism on the desirability to maintain minority languages. The data for the latter studies was taken from the early childhood longitudinal study of a cohort of children. These studies have been reviewed to capture the consequences of bilingualism on behavioural problems [**Table 2, p.23**].

The methods for these studies consisted of interviews for the qualitative studies, and a range of methods for the quantitative studies including: questionnaires, language proficiency tests, surveys and observations. The questionnaires captured participant's views on bilingualism and their environment. There was a range of participants from different minority ethnic groups, with **7** studies, which collected data directly from bilingual students within education, **1** study collected data from bilingual teachers, and the remaining **4** studies collected data from the PUMS and subsample of the early childhood study of a cohort of children. The samples consisted of different bilingual groups; Turkish-Dutch, Spanish-Guarani, Urdu-English, Turkish-German, Japanese-English, Hispanic, Asian and Latino, English-Spanish, Chinese-English, and Punjabi-English, which captured a range of minority ethnic groups.

5.2   Methodological limitations

One of the limitations was that for the studies where the methodology was administered in the majority language (e.g., Conteh, 2007; Kabadayi, 2008; Kanno, 2000), this created power inequalities between the researcher and participant and could have resulted in participants feeling the pressure to respond favourably towards the majority language and abandon their minority language. For those studies (e.g., Agirdag, 2010; Chen et al., 2008; Choi, 2003; Martin

& Stuart-Smith, 2008) whereby participants were provided with the opportunity to communicate in their minority language, they were translated for use in the report, which meant some of the data could have been lost. Two studies (Martin & Stuart-Smith, 1998; Pearson, 2007) captured a bilingual approach in their methodology by collecting data in both languages. This ensured both languages were regarded as having equal status, and removed any bias towards one language being seen as superior. However, Martin and Stuart-Smith did not mirror this bilingual approach in the education for these children, as although they were being taught English literacy, the same support was not provided for Punjabi literacy. This power inequality was also evident in an uneven sample of participants from each language group (e.g., Kabadayi, 2008). The language used for methodology was imperative, as Pearson (2007) noted how some participants were uncomfortable using their second language.

Another limitation was that there were several factors that needed to be considered to truly understand the experiences of bilingual children, such as social class, immigrant status and, family and school characteristics. This was recognised by most researchers (e.g., Agirdag, 2010; Chen et al., 2008; Han, 2010). However, it was difficult to have consistency across all these factors in the same sample. Some studies included factors such as social class and socio-economic status in their study (e.g., Choi, 2003; Linton, 2004; Pearson, 2007). It was identified that although proficiency in the majority language was measured, the same consideration was not given to the second minority language (e.g., Linton, 2004; Shin & Alba, 2009), which limited a true understanding of the impact of minority languages.

These studies were selected to explore the consequences of bilingualism on a child's psychosocial development therefore the age of participants was imperative. In the majority of the studies participants were in education. However, Linton (2004) and Shin and Alba (2009) recognised that their sample recruited teenagers up to older adults, thus different views were expected.

Finally, the following studies (Conteh, 2007; Han, 2010; Han & Huang, 2010) used data from teacher's perspectives, which was limited by their own subjective opinions of the children.

5.3   Future research

Future research needs to consider the influence of adopting the methodology in the majority

language, as this created a bias, which could hinder the perceptions of ethnic minority groups

towards their bilingualism, particularly towards their minority language. To remove this bias,

future studies should adopt a bilingual approach (e.g., Martin & Stuart-Smith, 1998; Pearson,

2007) by collecting data in both languages. Future research also needs to take into account

family and school characteristics as it was evident that the linguistic attitudes of bilingual

children did not reflect linguistic behaviours, as they were influenced by their environment

(Choi, 2003). The age of participants in future research is imperative, as the linguistic use of

bilingualism decreases over generations (Choi, 2003). Finally, the majority of research on

bilingualism and psychological well-being has focused on assessing bicultural identities of

immigrants and ethnic minorities, mostly in Western cultural contexts, therefore future

research should explore the identity issues of native groups, especially majority groups who

come into contact with other cultures through migration (Chen et al., 2008).

6.0   Clinical implications

The importance of considering the psychosocial development of bilingual children has been

highlighted to understand the future for minority linguists, and consequently, the future for

bilingualism. Minority linguists, and their emotional well-being are at risk of being overlooked

by family and school, as attention has focused on abandoning the mother-tongue and adopting

the majority language to fit into the new cultural environment. For example, children are torn

between two identities, if expected to use their mother-tongue within their family, but this is

forbidden in education. It could also hinder a child's unique cultural identity, and socially

stigmatise their minority language. To promote positive attitudes towards bilingualism, there

needs to be equal status in both languages. The importance of bilingualism on psychological

well-being showed that bilingual children were more likely to show lower levels of behavioural

problems, which correlated with high levels of personality traits, as children had the

opportunity to develop their bilingual identity without any conflict. The feelings of being

rejected by the new society could predict anxiety and depression, and the integration of two

cultural identities without any conflict could predict better emotional well-being.

7.0   Conclusions

This paper has considered the literature pertaining to the psychosocial development of bilingual children as they integrate into society, and manage the pressures to abandon the mother-tongue, and adopt the majority language. The literature has yielded results which are conflicting, which reflects the complexities of this area of research, and the individual differences in minority ethnic groups. Linguistic attitudes of bilingual children are influenced by social, cultural, and familial relationships, so the environment needs to be accepting of individual circumstances to promote linguistic behaviours. There needs to be a move away from the dominance on majority languages, by valuing bilingualism, to help to increase its usage in a multi-ethnic society. The overall findings showed a positive change towards bilingualism, which could reflect positive outcomes for a child's emotional well-being, and positive feelings of their bilingual existence. However, as the settings for these studies were diverse including; different minority ethnic groups, both bilingual and monolingual educational curriculums, and the views of pupils, parents and teachers, then the outcomes could reflect individual, rather than collective influences. Further research could continue to explore the linguistic attitudes of a diverse number of minority ethnic groups, and move away from Western cultural contexts, to explore the impact of individual ethnic differences.

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Chapter Two: Empirical Paper

The experiences of bilingualism within the deaf and the hearing world:

The views of d/Deaf young people

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1.0   Abstract

Research into bilingualism and the learning potential offered by a second language are widely reported, with much of this evidence relating to both languages being spoken. However, further reviews have identified that learning a language in two different modalities, such as one spoken and one signed language, offers a much richer learning environment for children. This study focuses on signed languages learned by deaf young people and explores the development of sign bilingualism. It adopts a qualitative approach through the use of semi-structured interviews with deaf bilingual young people. Interpretative Phenomenological Analysis was used to analyse the data. The findings showed that deaf young people valued their bilingualism for having the best of the hearing world and the deaf world. Sign language was imperative for gaining access to deaf peers, and being part of the deaf culture, which provided a sense of belonging and identity. Spoken English was imperative for integration into the hearing society, which provided access, rather than belonging, as there were feelings of isolation in the hearing world. The limitations, ideas for future research, and clinical implications are highlighted.

2.0   Introduction

This section discusses language development and education in deaf children, and introduces the development of bilingualism with one signed and one spoken language. The consequences of bilingualism on a deaf child's psychological well-being are discussed, to provide a rationale for this study.

2.1   Prevalence and nature of deafness in the United Kingdom

In the United Kingdom [UK] the estimated figures of babies born each year with deafness is 1 in 1,000 (RNID, 2010). Hearing loss and deafness is usually measured by decibels [dB] and anyone with a level of hearing between 0 and 20 dB is considered to have 'normal' hearing, and the greater the threshold level is, the worse the hearing loss (RNID, 2010). Children who are born deaf are sometimes called 'prelingually' deaf because they were deaf before they developed language, whereas those who were not prelingually deaf, but have become deaf later in life, are described as 'deafened' (RNID, 2010).

2.2   Language development and deafness

When a baby with hearing loss is born to hearing parents, the first year can be confusing as parents have to cope with a change in their expectations and understand how to best help their child acquire language (Brown, Bakar, Rickards, & Griffin, 2006; Meadow-Orlans, 1995). About 5-10% of deaf children are born to deaf parents (Daniels, 2003). Most of these children are known as native signers as they are brought up signing, and consider sign language their first and preferred language (Courtin & Melot, 2005). However, the vast majority of deaf children (90–95%) are born to hearing parents (Young, 1999). This means that most deaf children usually grow up in a hearing culture, and have limited contact with other deaf children and the deaf culture (Young, 1999). Therefore, deaf children born to hearing families with spoken English as their first language are often brought up orally, which means that in the UK, deaf children generally learn spoken English as their first language (Young, 1999).

2.3   British Sign Language

The most commonly used signed language in the UK for the deaf community is British Sign Language [BSL], a term first introduced in 1976 (Ladd, 2003). The struggle for recognition of BSL as an indigenous language of the UK ended in 2003, and its users now make up one of the largest linguistic minorities in the UK (Ladd, 2003). There are an estimated 50,000 deaf people

who use BSL as their first or preferred language (RNID, 2010). However, there continues to be an imbalance in the power between deaf and hearing people (Ladd, 2003). Recognising BSL as an official language has redressed this balance, and enabled deaf people to choose whether they prefer to use English or BSL (Komesaroff & McLean, 2006).

2.4   *Cultural factors in deafness*

According to Kyle (1989) a group of people who consider themselves from one culture share a set of learned behaviours. For people to be guided by these behaviours, they need to be able to share meaning amongst each other, which is enabled through language (Kyle, 1989). From a hearing perspective, deaf cultural norms are usually not recognized, which also extends to their sign language as well (Kyle, 1989). This creates a divide between deaf and hearing people, which can force deaf children into two opposing worlds, and create tensions between their deaf and hearing parts (Bishop & Hicks, 2005). Bishop and Hicks argued that deaf children need the opportunity to develop a positive identity, both as a deaf person and as part of the deaf community. Thus, the resilience on BSL for the deaf community is cherished as a central element of their identity (Brennan, 1999).

2.5   *Education for deaf children*

Woodward (1974, as cited in Fischer, 1995, p.13) found that deaf children who learned to sign before the age of 6 years were likely to do better academically than those who learned to sign after 6 years of age. However, the critical period (Fischer, 1995) regarding the age of language acquisition could be due to practice (Mayberry & Eichen, 1991). Until the 1960s very few deaf adults were involved in education because it was assumed that if deaf children were allowed to sign, they would not talk (Brennan, 1999). Over 80% of deaf children usually attended a mainstream school with spoken English as the language of the classroom (Brennan, 1999), but despite this, about 80% of deaf people learned to sign by age 16 years (Kyle, 1989). The growing acceptance of BSL has reflected a sophisticated understanding of the linguistic needs of deaf children, with positive attitudes towards a bilingual education (Swanwick & Tsverik, 2007).

2.6   *Introduction to bilingual development for deaf children*

In many parts of the UK, many hearing families are now choosing to bring up deaf children as bilingual to help them to be competent users of both sign language [e.g., BSL] and spoken

language [e.g., English], and to have a strong identity in both the deaf and the hearing communities (e.g., Calderon, 2000). Sign bilingualism enables deaf children to use sign language as a means of communication amongst deaf people, and to develop a strong deaf identity, after all, identity is vital to a strong sense of self and mental well-being (Emery, 2007). But they also need skills in English as a second language to communicate with those outside of their deaf community, such as hearing parents (Grosjean, 2010). It is assumed that just as with hearing children who acquire two spoken languages, deaf children with sign language as their first language can use this language as a 'bridge' for learning a second spoken language (Brennan, 1999; Fischer, 1995; Grosjean, 2010), which creates a bridge between the deaf and the hearing communities (Brennan, 1999).

It is argued that for deaf children to develop sign language effectively there needs to be access to deaf models to provide exposure to that language (Anagostou & Graham, 2007). However, for the majority of hearing families, access to sign language and the deaf culture is limited (Napier, Leigh, & Naan, 2007). The role of sign languages in deaf children has come from a UK pilot program, which was undertaken in 1997 known as 'Robinson's Sign in Education' (as cited in Daniels, 2003, p.54). It was conducted over 2-years, whereby a deaf teacher used BSL to teach the curriculum to deaf and hearing children. Results showed that all children had attained a bilingual ability while improving their academic levels. This study highlighted that a child's motivation for acquiring signing skills did not stem from their interaction with deaf people so much, but from the language itself, which provided an early entrée into deaf culture.

2.7   *Deaf bilingualism and psychological well-being*
A strong emerging consensus today suggests that with the provision of early access to both sign and spoken language, deaf children run no greater risk in linguistic deficit, than children in the general population, regardless of bilingualism (e.g., Mayer & Akamatsu, 2000). The deaf community stressed the impact of not advocating sign bilingualism, as a sign environment helped to advocate the linguistic and the cultural rights of the deaf child (Hindley, Hill, McGuigan, & Kitson, 1994). Grosjean (2010) argued that sign bilingualism was the only way deaf children could meet their many needs, such as communicating with parents, acquiring knowledge of the world, and fitting into their society. It was also argued that bilingualism helped improve social-emotional development (Calderon, 2000; Hindley et al, 1994).

2.8   *Rationale for current study*

Past reviews have predominantly focused on bilingualism with two spoken languages. Yet there is growing literature suggesting the benefits of signed languages for deaf bilinguals (e.g., Bishop & Hicks, 2005). Previous reviews on sign bilingualism have predominantly focused on bilingual hearing children with deaf parents. These children grow up as part of the deaf community and learn sign as their first language (Griffith, 1985). Griffith reported than when hearing children of deaf parents were presented simultaneously with sign and spoken languages, their language development was similar to that of bilingual learners of two spoken languages and held the same benefits. Further examples were evident in Daniels (1993), and Orlansky and Bonvillian (1985) with 14 and 13 sign bilingual hearing children, respectively. Results showed that these children accelerated in language attainment, compared with the norms for spoken language development in hearing children (Daniels, 1993; Orlansky & Bonvillian, 1985).

As deaf children are the main beneficiaries of sign bilingualism, then there is a need to move away in the literature from a focus on hearing bilinguals, to directly investigate the experiences of bilingualism for deaf children because there is limited literature in this area (Evans, 2004; Sutherland & Young, 2007; Wiefferink, Spaii, Uilenburg, Vermeij, & Raeve, 2008). The literature available has yielded mixed views about the effects of sign bilingualism on a child's development. Evans (2004) suggested the advantages of sign bilingualism, albeit with written English, because providing deaf children with the appropriate environment supported their language development. In contrast, Wiefferink et al., (2008) suggested the disadvantages of sign bilingualism on the development of spoken language, as children in a monolingual spoken environment showed better spoken language development than those in a bilingual environment. However, they also argued that a bilingual environment could enhance social and emotional development, as it enabled children to be part of the deaf community.

Sutherland and Young's (2007) study most closely explored the sign bilingual experiences of deaf children. They conducted a longitudinal qualitative study using grounded theory, with 8 deaf children (9-11 years) within a sign-bilingual education. The principle question asked 'what are the experiences, advantages, and disadvantages of a sign bilingual education'. Study one consisted of workshops with deaf children in BSL their first language to elicit data on family, school, languages, and future. Video-diaries, drawings, talks with the teacher, group discussions, photos, posters, and timelines were used to gather information. In study two,

interviews were conducted with deaf children based on the themes that emerged in study one. Results indicated that sign language was an integral part of the deaf children's lives, so too were interactions with deaf and hearing people. However, Sutherland and Young were concerned as to whether their aims were achieved in relation to a child's attitudes to English, but that with maturity in age, the children recognized English becoming more meaningful.

2.9   *Aims and research questions*

This current study addressed Sutherland and Young's concerns about the maturity of the deaf children in their sample, by exploring the experiences of deaf young people who are post compulsory education. Sutherland and Young adopted a qualitative study using grounded theory, which provided a newly developed theoretical model for understanding the experiences of sign bilingualism for deaf children. However, it was felt that using grounded theory could lose some of the richness of the participant's unique and novel experiences, as it aimed to fit participant data into a theoretical model. Therefore this current study aimed to maintain the uniqueness of a qualitative study with a sample of deaf people, but adopted IPA to provide a deeper understanding of individual and complex experiences.

The research questions were elicited from the themes identified within Sutherland and Young's (2007) study to explore family, education, language and future. They were also discussed in collaboration with deaf colleagues to ensure they were appropriate to the deaf culture.

The following 4 research questions were asked from the perspectives and experiences of deaf bilingual young people:

1. What was their experience of learning two languages?
2. What was their experience of the education and language support they received?
3. How did they perceive their choice of bilingual communication to be within the deaf world and the hearing world?
4. What did they perceive to be the benefits and challenges of being bilingual?

3.0   Method

3.1   Design

This study adopted a qualitative design using a semi-structured interview to collate data from deaf bilingual young people, and was analysed using IPA (Smith, Flowers, & Larkin, 2009). Ethical approval for this study is illustrated in **Table 3** [**Appendix A, p.109**] and ethical documents are also evident [**Appendix A**]. Questionnaires were also collated from the hearing parents of the participants being interviewed [**Appendix D, p.139**]. However, due to the constraints of the word count and the limited returned questionnaires, it was felt insufficient to conduct a thematic analysis on this data; therefore it has not been included in the analysis.

3.2   Participants

Participants were recruited from the National deaf Child and Adolescent Mental Health Service [CAMHS], schools for the deaf, and through professional and social networking in the deaf community. Only participants 16 years and over were recruited. Participants [N=7] ranging from 16-23 years participated, with the exception of one participant aged 32 years. This study aimed to recruit young people between the aged of 16-25 years. However, the author was misinformed about the latter participant's age at the time of recruitment, and therefore the interview still went ahead. Both males [N=2] and females [N=5] participated. The interviews took place at the participants home [N=4], school [N=2] and via Telelink [N=1]. A range of participants who accessed spoken, sign, and bilingual teaching at mainstream and deaf schools were included. The interviews were done individually [N=3], with parents present [N=1], with interpreter present [N= 2], and with both parents and interpreter present [N=1]. The interpreters were utilized for receptive communication. One participant used sign for expressive communication, but with spoken English. All other participants used spoken English. No participant used sign language only.

3.2.1   Inclusion criteria

The inclusion criteria were young people who were pre-lingually deaf and grew up with hearing parents. Young people were asked to define whether they considered themselves bilingual in one signed [BSL or Sign Supported English; SSE] and one spoken language [English]. All young people were at least 16 years old. Young people who attended a deaf or mainstream school, and taught using spoken, sign, or bilingualism, were included to capture diverse experiences.

3.2.2   *Exclusion criteria*

The exclusion criteria were young people post-lingually deaf, or who had deaf parents. Those without English as their first spoken language, or who had a co-morbid learning disability or mental health condition, which made it inappropriate to be interviewed, were excluded.

3.3   *Data gathering*

An interview schedule was used with deaf bilingual young people. The questions explored bilingualism with one signed language (BSL or SSE) and one spoken language (English). The themes for the questions explored language, education, social communication, and bilingualism, as developed from Sutherland and Young's (2007) study, and in collaboration with members of the deaf community to ensure it was appropriate to the deaf culture. The interview schedule was reviewed by a speech and language therapist in the deaf services. The feedback was based on the inaccurate assumption that deaf people would be completing the interview independently, but it raised awareness about the language terms. A pilot interview was done with a deaf person prior to data collection to ensure the questions were appropriate, but this was not included in the analysis. The schedule was reviewed after each interview and additional prompts were included in subsequent interviews [**See Appendix D for Schedules**].

3.4   *Procedure*

Participants were recruited from National deaf CAMHS, deaf schools, and through professional and social networking in the deaf community. Participant packs were distributed through these sources. These packs included a form for participants provide their contact details to the researcher and make the decision whether to take part. This is evident in the recruitment flowchart. The packs contained a covering letter, information sheet, a consent form to be contacted, and a stamped addressed envelope. With receipt of the consent to be contacted form, the young person was contacted via post, email or, text to discuss taking part. For any participant choosing to do the interview in sign, an interpreter was available. At the interview the young person was asked to sign a consent form to take part. A duplicate consent form was completed to provide a copy to the researcher and participant. The interpreter was also asked to sign a consent form. The interpreter's role was guided by the young person. A debriefing sheet was provided at the end [**See Appendix C for Recruitment and Participant Information**].

4.0   Results

The results from the interviews were analysed using IPA.

4.1   Outline of Interpretative Phenomenological Analysis and steps taken

The steps for analysing the data using IPA was adapted from Smith (2008) and, Smith, Flowers, and Larkin (2009), as evident in **Table 4**. The main method adopted was IPA, but aspects of grounded theory were used in the further development of the interview schedule to provide additional prompts for discussion points in the interview. It is important to note that the interview continued to be guided by the participant. Additional information on the process for analysis is evident in **Appendix E**, which includes reliability and validity of the data [**p.143**]. An example of the analysis and double-coding of the data is also evident in **Table 6** [**Appendix E, p.148**]. High levels of consistency of double-coding were evident. The results needed careful interpretation in light of sensitivity to context [**see Section 5.3.1 and Appendix E**].

Table 4:   Steps taken for Interpretative Phenomenological Analysis

	Step	Description of process
1	**Phenomenological and interpretative coding**	The first transcript is re-read and a close analysis of descriptive, linguistic and conceptual comments of the data are made in the *right* hand margin [**Table 6**] [**Appendix E**].
2	**Developing emergent themes**	Initial coding is reviewed and initial emergent themes are identified in the *left* hand margin [**Table 6**] [**Appendix E**].
3	**Clustering themes**	The emergent themes from step two are listed chronologically [**Table 5**] [**Appendix E**]. Relationships between themes are examined and connections are tentatively sought. Subordinate themes are clustered and Superordinate themes are initially identified across cases [**Table 7, p.55**].
4	**Peer/supervision review**	The resources of the researcher are utilized, alongside continuous checking to ensure the list of themes and clusters are consistent and justified by the raw data in the transcript [**Table 5**] [**Appendix E**].
5	**Moving on to the next case**	Steps one to four are repeated with subsequent interview transcripts. Themes from transcript one are used as a guide. Themes are modified in light of emergent themes from other transcripts.
6	**Integrative analysis**	A final table of Superordinate and subordinate themes are created [**Table 7, p.55**].

Four superordinate themes emerged from the analysis, as evident in **Table 7.** Themes are discussed and illustrated with extracts from the interview [*in italics*]. The source of the quotation is identified by the participant's number, followed by line numbers of the transcript. The emergent themes are introduced chronologically to reflect the process for the participants of experiencing the transition from: the view of society, to fitting into the hearing and deaf world, adjusting to the expectations of family and school, and then it is only through these experiences that the self can truly be understood [**see Section 5.2**].

Table 7:   **Superordinate and subordinate themes across cases**

Superordinate themes	Subordinate themes	Participant identification numbers
Understanding deafness and significance of being deaf	Disability	*All participants*
	The impact of other people	*All participants*
Belonging within their own world	Deaf and Hearing: Feeling part of these worlds	*All participants* [Deaf world] *Participants 3-6* [Hearing world]
	Deaf and Hearing: Feeling isolated in these worlds	*Participants 3,4, 6 and 7* [Deaf world] *All participants except #1* [Hearing world]
	Best of both worlds	*All participants*
Control over access to language	Influence of parents	*All participants*
	Fighting the education system	*All participants*
Self-identity	Personal language choice	*All participants except #2*
	Personality and self-development	*All participants*

4.2   *Superordinate theme 1: Understanding deafness and significance of being deaf*

This cluster of themes provides an understanding of the significance of deafness within society through the concept of disability, with reliance on aided hearing, and the impact of others.

4.2.1   Subordinate theme 1: Disability

Some participants compared a diagnosis of deafness to having a disability, but gave polarized views. On the one hand, deafness was defined as a disability when describing the need for society to have more *'disability people of that disability [**6, 380**],* or viewing it as similar to *'having a broken arm' [**5, 218**]*. Deafness was compared to dyslexia as a disability, as *'a lot of deaf people can't spell anyway'* [**4, 104**]. The word *'problem'* [**2, 24; 3, 18**] and emphasis on being born deaf [**2, 2; 3, 9**]; implied deafness being negative. Participants stressed that the reaction from parents finding out their child was deaf was one of *'panic'* [**1, 256**], *'scared'* [**1, 260**] or *'shocked' [**6, 88**]*. The term 'not hearing' as opposed to 'deaf' showed how participants were aware that a hearing child was expected within society, rather than a deaf child.

> *Don't panic because being deaf is not a bad thing it's not but…its okay if the Mum hasn't learnt how to sign completely it would help if she learned to sign or go to a signing class to learn to sign to help to communicate with her baby and…just go with it but if you want to learn to sign then learn how to sign its easier that way you can learn how to sign and just go with it and be normal…don't <u>act</u> scared because the baby is deaf the child is deaf the child might not like to be deaf they don't want you to be scared of you because you are deaf to…accept the child is not hearing but to speak with the child to accept the child into your world [**1, 256**].*

On the other hand, some participants did not view being deaf as a disability, but that instead, a disability was the side effects of having an illness at birth such as not being able to walk or talk. At the time of diagnosis, participants described being in a vulnerable period, as emphasized by the repetition of being poorly and the dramatic effect on their life. Consequently, participants felt fortunate with just being deaf as *'it could have been a lot worse'* [**4, 10**].

> *I was very poorly as a baby…I had Congenital Cytomegalovirus but the short name is CCMV and I was really really poorly and I had been given 9 hours to live then I had to have a blood transfusion the nurse said the side effects would be that I would basically be disabled can't talk can't walk can't feed myself nothing really but nothing happened really I was just deaf I had asthma and epilepsy umm [**1, 2**].*

*They are all hearing I am the only one deaf I was deaf due to mum had German measles when she was pregnant so that affected my hearing but I was very fortunate that was the only thing it could have been a lot worse [**4, 8**].*

Participants expressed their reliance on hearing aids. At first adjustments to their hearing aids were needed. However, some participants expressed an improvement in their level of hearing with their aids and rarely took them off as they could not live without them. Some participants were aware that although they wore their hearing aids, they were not completely reliant on them for communication as they used their lip-reading skills, so thought they could hear more than expected of their aids.

*…with my hearing aids I was doing okay but I was relying so much on lip-reading that I thought I could hear more, so I went for the test to see what the cochlear implant could give me. I can actually see the benefits of it but I didn't use it as much as I should initially but the quality of sound is brilliant so I am really glad I had it done [**6, 27**].*

Four participants described their aids as images of being detached robotic machines, which were made up of pieces of metal in their head and could be switched on and off to block out sound, rather than feeling part of the self. A description was given of a microphone that amplified sound, but which only gave the sound to make up the words. One participant described it as a machine teaching the brain to take in sound through different signals, but had trouble decoding what sound was entering the brain. Through describing these images, the word 'it' was emphasized, which implied distance between the aids and the self.

*And it's a new one and it's different because I expected to started to hear everything but basically my brain is teaching it to have things go in but it's a different signal going in it is a different language then it can't understand it as it can't de-code it all anything so all I can hear is basically beeps and words and stuff. But I am doing like listening skills which help it to work eventually [**1, 41**].*

4.2.2   Subordinate theme 2: The impact of other people

Society has stereotypical views of what is expected of deaf people. Participants described the assumptions from society that all deaf people used sign language, as it was assumed that deaf people could not speak. With this assumption participants were aware of the pressure on families to learn sign language to communicate with their children. The stereotype that sign

language was the language of the deaf, and that deaf people could not speak, was challenged by two participants who learnt French as a third language. When hearing people found out deaf people could speak, participants noticed that hearing people would change the way they talked to deaf people, whereas they were originally talking normally. The emphasis on 'talking normally' referred to spoken language being the norm within society.

> *People that I see and when they find out that I am deaf 'oh you speak so well'… I find they change a bit when they find out I am deaf they kind of like 'oh' and they kind of think I don't know how to talk to you anymore even though they are talking to me normally they might accelerate their lip patterns and things and that's why I don't bother telling people I am deaf [**5, 102**].*

Participants compared their sign language to other deaf people and distinguished between SSE and BSL. Consequently, there was not only a divide between sign language and spoken language, but also a divide between SSE and BSL as *'some are strong BSL users some are half and half like me and some do all SSE that's it* [**1, 9**]. With access to bilingualism there was also a divide between 'voice on' and 'voice off' when signing, which was decided by mirroring the language of others. Participants felt a sense of *'shame'* [**7, 130**] using their voice whilst signing with deaf people who signed without their voice. They recognized that deaf people who learned sign language growing up were more likely to be better signers than deaf people without early access. However, participants also compared their sign language with friends who learnt it later in life, and felt that with practice, both were comparatively good.

> *[…] I am probably bordering between SSE and BSL I mean umm I suppose I am comparing there is some people who I have met you can tell they are completely SSE but I have got some friends who sign loads better than me but I suppose maybe it's a confidence thing so I am better than I think but when I look at other people it's 'I can't do that' [**4, 208**].*

In contrast to the different communication functions in sign language, having access to spoken language was usually described as having full access or no access. Participants felt this could result in assumptions being made by hearing people that all deaf people fitted into one group. Participants valued the benefits of having both languages, in comparison to deaf people with only one language, as they could access both for support with pronouncing words, forgetting a sign, or supporting lip-reading skills.

*Well spoken language…I think I'm okay I think it got to the point where people could understand me more umm sign language I'm not […] I'm good at it but I'm not like I'm not fluent I can sign but like compared to…people who are like who sign at home who sign all the time the comparisons of those it's different [**7, 155**].*

4.3   Superordinate theme 2: Belonging within their own world

This cluster of themes encompasses a polarized perspective of feeling part of and isolated, with each area being broken down into the deaf and the hearing worlds.

4.3.1   Subordinate theme 3: Deaf and Hearing: Feeling part of these worlds

For most participants who adopted spoken language within the home, gaining access to sign language was usually introduced in education, either through teaching or interaction with deaf peers. This was usually their first interaction with deaf peers, something which was encouraged by hearing families who could not provide access to the deaf culture. Participants felt that an education with access to sign language provided access to a social network of deaf peers, but that access to English was important for gaining an education. Most participants preferred sign language and being with deaf peers, as they felt comfortable being with people they connected to. Participants did not feel the same level of acceptance by hearing people, thus they avoided going out of the comfort of their deaf world.

*Umm […] because I think the majority of deaf children…were more at my first school so…yeh like when I came here there was people who came who were from my first school and they are my close friends yeh I think socially I prefer the first school but I think the other school was better for me education wise [**7, 289**].*

*I think…in the deaf…I know it might sound really horrible but in the deaf in a group of deaf people they are very […] very welcoming to people that are like them umm if a hearing person walked in I'm sure they would like…not make any effort at all and because I have seen that happen…I feel probably that staying with hearing people whether they see that person they would probably go 'oh' I don't know [**7, 402**].*

Access to sign language provided participants with access to the deaf world, as it created a sense of acceptance and belonging within the deaf world and helped them to feel confident in themselves. Consequently, participants were eager to learn sign language to be included in this group. Participants expressed that without sign language they would not be in the deaf world as sign was their language, so they would have stayed in the hearing world, but would have

been '*sad*' [**5, 462**] without their deaf friends. Participants expressed making friends with deaf peers, who not only had access to the shared sign language, but also with deaf peers who preferred spoken language, as they had the shared deaf culture. This created an image of being in a deaf '*bubble*' [**7, 317**], which restricted the outside hearing world.

> *I umm…I was more accepted because everyone was like me because I wasn't like the odd one out and I learnt to sign bit more from them picking up the sign and things like that [**5, 261**].*

> *Well if I didn't have BSL I wouldn't be in the deaf world at all because I think because I would go to a spoken school and have language but the deaf world the door opened for me I have met so many deaf people now than when I was younger so if I didn't learn sign language or I didn't go to deaf school my life would be different I might be more oral I can't really explain it [**3, 490**].*

For participants to feel part of the hearing world they needed support to access information, usually through a Communication Support Worker who provided a transition from sign language to spoken language. Although participants accessed both languages, they needed further support to enter the hearing world. For those participants who felt comfortable with hearing people there was reference to being 'surrounded' by hearing people, which implied a sense of feeling isolated in this world. Furthermore, for those participants who grew up with spoken language, speaking became a habit rather than a preference.

> *Okay umm with hearing people I have a habit of talking to them because it makes more sense and I am quite comfortable in doing that I never have to write stuff down or get frustrated I am happy and I am confident with hearing people [**6, 307**].*

Participants expressed eagerness rather than a preference to learn English, because access to spoken, reading and written English provided a better place in the hearing world, which was imperative for later in life, such as in restaurants and banks. One participant described English as the keystone language that provided support in getting a job later in life, and that sign language would not fully provide for their future.

*Not really…but English is keystone so if I have English I can do everything else I could do that with sign language/sign language is only going to get me so far in the deaf world whereas English gives me the opportunity to do my job and access to everything else umm…its not about preferences I don't prefer English its more…it is a better skill to have than sign language sometimes [**6, 361**].*

4.3.2   Subordinate theme 4: Deaf and Hearing: Feeling isolated in these worlds

This section encompasses participant's experiences of feeling isolated in the deaf and the hearing world.

Participants expressed that accessing a deaf school or unit, without having sign language made them feel isolated in the deaf world. Whereas, most participants viewed the deaf world as a comfort zone, one participant viewed the deaf world as an isolated bubble, or a '*shell*' [**7, 396**]. These two images are very different, as a bubble provided visual access to the hearing world. However, a shell provided a protective barrier with no visual access to the hearing world. Although participants took comfort from the deaf world, it also isolated deaf people from interacting with hearing people. The image of being 'thrown' in with hearing people created feelings of limited choice in this decision, but that this was inevitable.

*I think [deaf school] is kind of like a bubble I don't think I don't…I have had worse experience but I don't really…socialise with hearing people…but I don't know it's like I am going to be thrown into it and then you know I don't know I think that is the only thing I would change and because it's in [place] and not in London it's kind of isolated so your own world and I am only communicating with people at school [**7, 317**].*

Participants expressed feeling isolated in the hearing world, with feelings of isolation in a mainstream education with hearing people. Participants experienced being taken advantage of because of their deafness, and that being the only deaf in the class was a daunting experience. Being in the hearing world meant participants accessed spoken language to fit in, however, participants expressed that even with this access their preference for sign language was based on it being a more relaxing language.

*I found it scary I was on my own wasn't I so I didn't know anyone else once I had been there I got used to it [**2, 192**].*

*People…I mean […] honestly in today's world oral is supposed to be the best language but that is no good really because it does help to have sign language its more on my level and I am more relaxed because with spoken language I mean I do it but if you are doing it <u>all</u> the time its tiring [laughs] [**4, 223**].*

Communication was more difficult with hearing peers as they were not deaf aware, and therefore although participants had access to shared spoken language, they felt hearing peers would talk really fast, which made lip-reading more difficult. For participants the most difficult aspect of being in the hearing world was being part of a group as it was more difficult to be included in the conversation. Thus, being with hearing people created feelings of being 'on the outside'. This was because the hearing world presented with barriers for deaf people, such as: films without subtitles, people with accents, and men with '*moustaches' [**4, 481**],* which restricted lip-reading, and made understanding humour more difficult.

*Just […] it's a lot of hard work to try and fit in and like the popular play hockey and like they never had any deaf awareness and to like get their attention it was excluding every time we went out on a night out I never things change I would be the one on the outside umm so I stopped putting myself in that situation just because I couldn't be bothered to make effort with people when they didn't make the effort with me I think if they really like you they will make an effort on a one to one basis but when it's a group this makes it difficult as if you miss something they have to say it again [**6, 279**].*

*I could be with hearing people but I didn't/actually at school it was different because we were all oral when I learnt/come to sign language. I wasn't completely signing and I still struggled with the hearing world, as you get older it gets harder because there are jokes so everybody is laughing and you are 'what you laughing to' so when you are a kid it's not so bad because it's a simple world just basic it's not a hard world when you're a kid, it's when you're older that's when it's harder [**4, 272**].*

4.3.3   Subordinate theme 5: Deaf and Hearing: Best of both worlds

Participants expressed polarized views of integrating into both the deaf and the hearing world. On the one hand participants stated that being bilingual contributed to feelings of having the best of two integrated worlds. On the other hand, participants viewed the two worlds as disparate.

Fitting into both worlds could be understood as fitting into the deaf world and the hearing world, but having access to sign language could also be understood as fitting into two signing worlds; SSE and BSL. This created two more worlds to adapt to in the deaf world.

> *Yes with my family I speak with them if I'm with a SSE person I do sign as spoken sign if I'm a BSL person its BSL I can change and adapt to that person [**4, 111**].*

Participants expressed that they used sign language with deaf friends, and spoken language with hearing people. This created the opportunity to have the best of both worlds. The term 'best of both' implied fitting into both worlds, but this ultimately meant having the best of two separate environments. Participants recognized being more comfortable fitting into both worlds when hearing people learned sign language, rather than deaf people being expected to adapt their language. The emphasis on the word 'them' implies it was ultimately a hearing world, and deaf people were the minority group.

> *Well I went to a mainstream school I would sign at school and speak I would do both at school then when I come home I would speak so I did both really [**7, 79**].*

> *…some people don't really understand deafness and it's hard for me to communicate with them but once I got into it with them I explained the difference between them and they wanted to learn sign language to make me feel more helpful to teach them sign so I can talk with them without any problems [**2, 298**].*

Feeling part of both worlds for these participants was understood as being in transition between the deaf world and the hearing world, and a way of bringing the two worlds together. It created a bridge to integrate hearing and deaf people. The first experience of this transition for some participants came from an integration of pupils in the classroom. Participants expressed that rather than fitting into both worlds, they fitted into the middle of these two worlds. One participant stated that being in this middle world resulted in taking on the role of interpreter for deaf friends who only had access to sign language or only to spoken language.

> *…the hearing kids so we had a bit of both so more close knit in the mornings to help us a bit further I think I suppose to help us to get into the real world to interact with the hearing people so they interacted…integrated us and umm [**4, 142**].*

*One to one is okay because you can like use your voice and sign at the same time but if there is like a group of people…I often the person who can't sign very well would often ask the person who can speak like what is going on and I would have to almost be interpreter I would have to forward what is going on and that can be hard because if they ask me what is going on I miss the conversation and I have to go back and it's all a bit [**7,377**].*

Participants presented the hearing world and deaf world as being two separate worlds, as represented by images of: a hearing and a deaf door, speaking and signing routes, and sets of hearing friends and deaf friends, rather than imagery of two worlds together. Furthermore, one participant described accessing the two worlds by spending separate time with hearing people, and with deaf people, but not together. Participants acknowledged that their career would likely be with fully hearing therefore, both languages provided deaf people with the choice of direction. Participants viewed deaf people as being captivated by the hearing world, which created imagery that deaf people could make the transition into the hearing world.

*Don't be nervous because it can be a difficult thing but just go with and how you feel and try to be with a hearing person for a day or half a day and being with a deaf person for second half of the day and go with it to see, it can be hard but you just need to go with it [**1, 236**].*

*Umm both for different reasons spoken because of the hearing world I live in the hearing world so I need to speak but I love signing as well because I got quite I got a deaf community around me and I like I like signing as well so both really they're both important about the same thing and not one is not best they are both equal so [**3, 358**].*

4.4   Superordinate theme 3: Control over access to language
This cluster of themes encompasses the influence of parents and education system on controlling access to language.

4.4.1   Subordinate theme 6: Influence of parents
Participants expressed that their home dominated around the use of spoken language because that was the language used within their family. Participants felt that it was easier to communicate orally so they could be with their family, so they did not bother signing. But what was most important for participants was that their family were deaf aware and made sure they could access lip-reading. There was an emphasis by participants on spoken language being the

norm in their family, because it was spoken by the majority, just as using sign language was influenced by the majority using it in school.

> *English is my mother-tongue it's what I was brought up with so English is my first language but I would say signing is my second and preferred language [**5, 425**].*

Some participants stated that their parents attempted to learn sign language but that as they were able to speak, and communication was possible, a preference for spoken language was adopted. Participants recalled their parents encouraging them to say words, rather than relying on gestural language to communicate. Even with the acknowledgment by participants that English was the dominant language as it was the language of the hearing, there was some hesitancy in understanding the reasons behind sign language being taught if it was not used within the home. Participants also felt that their parents were influenced by professionals as *'Doctors told them it's best oral'* [**4, 79**].

> *Mum…would go to like signing lessons but she couldn't…she couldn't really adapt to it she found it difficult and so…she…she decided to speak to me like I always understood her so there wasn't any point in learning to sign as communication was alright but my Grandma learnt how to sign [**7, 70**].*

> *My mum always encouraged me to speak and…yeh I was told that spoken language is better for me than sign [**7, 173**].*

Although participants expressed that their parents ultimately influenced their language decision, they felt fortunate to have grown up with both languages, as it provided them with the choice of language. Participants felt that both languages gave them the best of both worlds. There was an emphasis on *accessing* the deaf world as they integrated into the deaf society, whereas participants *adapted* into the hearing world to fit in with the norms of a hearing society. This had implications for parent's decisions in maintaining the child's right of choice, as it was reliant on parent's supporting early bilingual development.

> *…my mum signed <u>everything</u> to me like all the time, she made me sign and she made me say it [**6, 78**].*

4.4.2   Subordinate theme 7: Fighting the education system

Participants expressed gaining control over their language by fighting against education. Participants preferred sign language because it fitted with the majority of deaf peers, and they did not feel that using their voice was beneficial when they could communicate successfully using sign language, but that the voice should be used with people who could not sign. To fight against having to speak, participants would lip-read with friends, which held onto the deaf culture, but avoided breaking the rules. One participant fought for their language right, as emphasized by the word 'chop':

> *…in the classroom or anything that is all but they can't really stop you chop your hands off or anything [laughs] and one time umm the teachers tell me off and said 'your parents sent you to an oral school' so I rang up my mum and said 'mum am I allowed to learn to sign' she said 'yes' so I said to the teacher 'my mum said I can' [laughs] [**4, 88**].*

> *I ignored them and thought 'whatever'…because I thought there was no point me wasting my breath or voice on my friends who won't even know what I am saying I'm saving my voice until later [**5, 178**].*

With schools that adopted a preference for sign language, one participant recalled their parents '*campaigning' [**3, 132**]* to get them into a signing deaf school, but that this was difficult as school believed that they did not need to go to a deaf school as they had access to speech. Participants felt that schools needed to be aware of the importance for deaf people, of having access to sign language and to a deaf culture. Consequently, participants felt schools should support their bilingualism by allowing them to have access to both languages, either through teaching or social interaction.

> *I think it would like [school] my mum and dad did try to get me into [school] but they wouldn't let me in because I could hear quite a lot I think I don't know…my mum and dad told me that they would let me in now because it is more common at that time they were not very aware that a lot of people can hear and the deaf can speak but now it is more common but anyway it didn't really bother me I think my primary school could have been improved a lot more better because I don't think I had a good education there though when I got to [school] [**3, 281**].*

4.5 *Superordinate theme 4: Self-identity*

This cluster of themes encompasses personal language choice and, personality and self-development, which were prerequisites for deaf people developing their identity.

4.5.1 Subordinate theme 8: Personal language choice

Participants reflected on their access and choice of language during their childhood, with implications for their preference for language as a young person. Participants were aware that their language would have ultimately been influenced by other people, however, they valued having access to both languages, should they decide to adopt one language as their method of communication. For example, participants were aware that even though they accessed spoken language, they had a preference for lip-reading, which provided a comfortable method of communication when accessing the spoken world. As young people, participants have made decisions to practice their listening skills to support their spoken language.

> *Nobody has ever actually said that to me. Nobody has ever said 'we would rather you use sign language or rather you have English' it has never been questioned as I have never had to have anyone say that [**6, 143**].*

> *To be able to understand a conversation without having to lip-read and not having to lip-read everything they are saying because I'm sure if I made myself listen more I'm sure if I didn't lip-read people more I could practice more because it's a habit of mine to lip-read and I don't practice those skills, it's up to me to do it and I should do it more but because I can lip-read so much and I'm at home with hearing people it's easier to lip-read but if I could practice I would get better [**6, 54**].*

Participants were aware that even with the influence of parents and education that they had formed their own preference for language. However, there continued to be splitting with this personal language choice, as participants continued to receive reassurance from family and school. Participant's first and second language was influenced by their interactions with the language and hearing status of family, peers, and professionals, however, some participants made a personal choice as to which language they viewed as their first language, even if this contradicted with the first language they acquired.

*Well people like mum and dad my teachers and everyone at college and school would see BSL as my first language but funnily enough I don't see it that way because I started speaking but I didn't understand till I got to college what it means I realized that when I write it in BSL that is my first language…English is my second language…now I can't always understand what is going on…now the reason BSL is my first language because I didn't speak properly until I was 5 so BSL is my first language and English is my second language I know I didn't sign until I was 11 but that's it [**3, 448**].*

4.5.2   Subordinate theme 9: Personality and self-development

Participants valued sign language for helping to develop personality and identity. This was because sign language helped participants to develop friendships with deaf peers and fit into the deaf culture. Sign language was perceived by participants as '*my language really it is who I am it is my deaf identity' [**5, 67**],* which helped participants be more comfortable as they commented using sign language when feeling nervous, as speaking required concentration. In contrast to the positive aspects of sign language, one participant found that when hearing people were aware of their deafness and sign language use, this captivated their identity, with little awareness of other aspects of their personality and identity.

*I found it really difficult umm…I was fine I could mix with both umm […] but I did feel torn because I did…I didn't know where to be, I couldn't…I didn't know my personality and umm it was only in my teens when I first, when I finally really developed sign language I suddenly felt 'this is it, this is my group' [**4, 269**].*

Moving between the two worlds created conflict for self-development, as their identity was established in one world, and then accessing a second language or second world created frustrations. Without access to sign language participants felt more frustrated with communication, resulting in negative behaviours. Participants described feelings of being a '*trouble-maker' [**3, 490**]*, or '*more posh'* [**5,366**]. If participants were frustrated they could not communicate, which hindered their self-confidence.

*University was a very negative experience really umm going from a deaf school to a hearing school umm hearing university…they had no/like my identity as a deaf person had been established and to go back into the hearing world it was quite hard I had my confidence knocked umm for me to go out there and make new friends and people were/my flat mates were really good but just that they were going out of their way to include me with company [**6, 267**].*

Participants expressed interests in creative talents such as media, arts, dance and drama; activities not reliant on spoken language. One participant described a preference for sign language as it involved *'facial expressions there is movement there is lots of more to it'* [**7, 102**], which fitted with creative activities. For some participants these activities provided the first integration with hearing people. Some participants did not have the confidence to integrate into the hearing world and chose to stay in the comfort of their deaf world. Participants described their bilingualism as part of their self-identity that they would not change, however, they did not view their identity as being bilingual, but that spoken and sign language was part of their identity and culture, and provided unique perspectives of the world.

> *Its different to being bilingual in that you speak French and German its more…I have English and sign language but because it's so relevant to my culture and so relevant to how I live like with my friends…its so important to have both, to develop both French and English would be an interesting concept but what I have is so relevant to me umm having it are the benefits of it are so much more than one language [**6, 404**].*

> *Umm I get more to life more to life with both languages like in terms of deaf world and hearing world I can go out with both of them…I can access and I can mingle with hearing world I can live in the hearing world I can work in the hearing world with my spoken language in BSL in BSL world I can sign when socialising with my deaf friends maybe like get into the deaf world and into the hearing world and bring it together so in a way I think it is a benefit for me because with English spoken I can access the hearing world I can understand what people are saying I can hear them talk to them I can lip-read them but also it will help me get my career wherever I want to…generally with BSL I can sign understand them mingle together and I can well wont get a career out of it but it has helped me be who I am with identity those are the benefits [**3, 471**].*

5.0   Discussion

This section will summarise the results as understood in light of theoretical underpinnings. Methodological factors, and clinical implications, with ideas for future research will be given. To the author's knowledge this study represents the first Phenomenological exploration into the experiences of deaf young people bilingual in one signed and one spoken language.

5.1   Summary of the results and theoretical interpretations of the research

This section will provide an overview of the results as classified under each of the superordinate themes, and integrate the clinical practice with theoretical interpretations.

5.1.1   Understanding deafness and significance of being deaf

This superordinate theme is evident in the participant data, and therefore has been captured to reflect the importance of valuing their deaf identity. However, this area pertains to deafness, rather than bilingualism per se. Polarized views of deafness as a disability and concepts of normality are given. According to Brennan (1999), deaf children have the same capacity for language as hearing children, as hearing loss itself does not negate that capacity. However, participants felt that society was not aware that deaf people could speak, therefore when hearing families understand this concept they introduced spoken language into their child's development. The ambivalence brought about by cultural pressures in society is influenced by the dominant group members of that society, the non-dominant group may feel rejected by the dominant society, which frequently gives rise to feelings of hostility, anxiety, withdrawal, depression and interpersonal relationship strains (DeBlassie, 1983). Participants stated feeling frustrated with spoken language, and that learning sign language supported the development of their spoken language, and provided access to the deaf culture. Access to spoken language required adjustment to hearing aids and impacted on language development and self.

5.1.2   Belonging within their own world

Participants reflected on their experiences of bilingualism and how this impacted on their belonging within the deaf world and hearing world. Participants valued their bilingualism as it provided them with the choice to adapt their language to their environment. Watson (1999) claimed that if a solid language base were acquired early, this provided deaf children with the opportunity to utilize that language to develop an understanding of their world. Participants

felt that being part of their deaf world meant accessing education within an environment that provided access to sign language, either through teaching or social interaction. Accessing sign language was imperative for developing friendships with deaf peers, as it provided access to the deaf culture where they felt accepted. English language provided access to the hearing world, and it was only with the experience of entering the hearing world and through spoken language, that raised feelings in deaf people of not being prepared for the outside world. The connotations 'access' and 'part' are used, but the overall experience was that participants valued sign language for feeling 'part' of the deaf world, but valued English to 'access' the hearing world. Wiefferink, et al., (2008) questioned whether deaf children with a CI should be educated bilingually as their spoken language appeared adequate in a hearing environment. But they also argued that a bilingual environment could enhance social and emotional development, as it enabled children to be part of the deaf community. This current study supports the latter argument as English gave deaf young people access to a hearing society, but that sign language was imperative for being part of the deaf world.

5.1.3   Control over access to language

Participants were aware that they had the responsibility of adapting their language to fit the language of the majority. This experience for participants generally involved adopting spoken language in the home, and sign language with deaf peers. According to Bishop and Hicks (2005) deaf children were often not perceived as being bilingual by the hearing society, but they often became the intermediaries for their parents and hearing people, which was a huge responsibility. However, participants valued their parents and peers making the effort to learn sign language as it contributed to their sense of belonging. By giving parents the means to communicate with their deaf child by using the child's primary language, it provided a greater opportunity for understanding their child's world (Young, 1999). Finally, Evans (2004) highlighted that sign language supported the development of written English. This study goes one further as participants highlighted that sign language supported their understanding of spoken language, and vice versa.

5.1.4   Self-identity

Bilingualism helped participants to feel responsible for their language rather than being controlled by one language. Participants felt that without sign language they would not have been part of the deaf culture and that without English they would have felt frustrated in a

hearing world. Language was the main prerequisite for forming their self-identity, as participants were influenced by language and society. However, through exposure to the deaf and the hearing world, participants created an identity that captured their unique personality, rather than just capturing their deafness and language. Developing a self-identity as a bilingual helped participants to integrate into both worlds, and enabled them to form friendships and feel part of society, which was imperative for psychological well-being (Bishop & Hicks, 2005; Brennan, 1999). Sutherland and Young (2007) highlighted the importance of deaf children using sign language to form relationships with deaf peers and being part of the deaf culture.

5.2   Model of superordinate themes

IPA has allowed for a close analysis of individual participant experiences, which through the process of identifying emergent themes of each case has captured the overall experience of bilingualism and deafness. There were four superordinate themes placed in chronological order, which was reflected by the author as representing a pictorial image of the participants discussing their role within society, the hearing and the deaf world, and in their family and school. Conclusively, participants discussed that it was only through the exposure of these environmental influences that they could identify their unique self [**Figure 1**].

Figure 1:   Model of superordinate themes
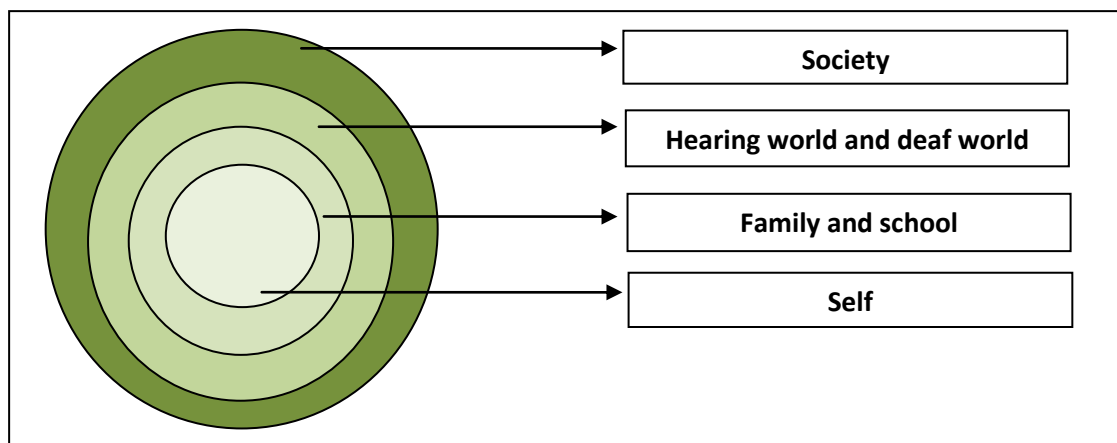
5.3   Methodological factors

The limitations of this research will be given with recommendations for future research. Whilst this study provides a unique and valuable insight into the experiences of deaf bilingual young

people, the findings need to be considered within the context of some methodological factors, and limitations.

5.3.1   Sensitivity to context

Throughout this research, the reflexivity of the results need to be interpreted in light of the presence of the researcher, the interpreter and parents, and the context of the interview [**Appendix E, p.146 for further details**] with emphasis on the researcher being hearing. The researcher was aware of her own beliefs and assumptions. Most of these views were based on the researchers own experiences of working clinically with deaf children. For example, assuming hearing people were not deaf aware, failing to be appreciative of BSL and SSE within sign language, and not being appreciative of the emotional impact of using the voice whilst signing. The researcher assumed that having BSL contributed to them feeling part of the deaf world, however, this was just gaining access and the researcher could never be in this group.

5.3.2   Limitations of the research

Sutherland and Young (2007) used a deaf researcher to collate data from deaf children to help to reduce the influence of the power of a hearing society. A hearing researcher was a limitation of this current study, however, for the researcher to have the opportunity to better understand bilingualism in deaf young people, and to immerse themselves in the data, this was inevitable. Interpreters were offered to participants if they chose to do the interview in sign language, but all participants chose to use spoken English language during the interview, which also allowed for a more valid linguistic analysis of the data. However, having a hearing researcher could have created a bias within the sample towards a preference for spoken English language, which could have influenced participant's views on bilingualism.

Some participants learnt both languages in their early years, however, some learnt spoken English in their early years, and sign language in their teenage years. As all participants had some bilingual fluency, regardless of age of acquisition, this showed the importance of clinical practice and of the use of IPA with this population in being able to explore the linguistic and conceptual comments of the sample used. To the author's knowledge, IPA has not previously been used in other studies with the deaf population before, which could be due to the language delay in comparison to hearing peers. Qualitative research has previously been used with deaf children, but with a focus on grounded theory. Using IPA in this study has allowed for

an exploration of novel experiences, with the language support of interpreters to enhance the validity of the study. Finally, parents being present at the interview could have influenced participant's disclosure of information, for not wishing to devalue their parents support.

5.3.3   Future research

If this research question were to be explored again, it would be done differently. First, young people could be advised to do the interview without their parents present. Second, participants could have been selected on the criteria that both languages were acquired before a certain age. However, having this flexibility provided an understanding of the diverse experiences of language development. Third, on reflection, the researcher was aware that participants could only truly reflect on their experiences of being bilingual when asked how they thought their life would be different if they only had access to sign language or only to spoken language. Therefore, future research could explore the experiences of deaf young people monolingual in sign or spoken language, to determine any significant differences.

5.4   Clinical implications

The findings have the potential to make a difference clinically, as understanding the experiences of language for deaf bilingual young people is important for supporting hearing parents. It cannot be assumed that the findings negate to helping deaf parents, as this presents with different communicative needs. Furthermore, the clinical implications were taken from a selective bilingual sample therefore they do not intend to imply that all deaf children should follow these implications. It is expected that all families are different therefore it will depend on individual circumstances. See **Table 8** for clinical implications.

Table 8:   **Clinical implications**

Area of interest	Service recommendations
Education	If education adopts oral teaching, ensure that deaf children have access to sign language, either through support from deaf peers or supportive teaching.
	Mainstream schools with deaf pupils could receive psycho-education support regarding deaf awareness, to ensure that the visual environment of the classroom is suitable for deaf children, for example, the position of the tables.
Families	For families to learn basic sign language, even if spoken language used within the home, as this will help their deaf child to feel their language is valued.
	For families to help deaf children to integrate with hearing children to make the transition into the hearing world post education a much easier process.
Deaf and hearing world	It is important for deaf children to have access to the deaf and the hearing world so that they have the opportunity to develop their unique self-identity.
Young people	For deaf young people to have the opportunity to reflect on their experiences of their language development as influenced by parents and education, so that they can make a well-informed decision should they choose to adopt a preference for one language, or choose to stay bilingual later in life.
Sign language	To be aware of the importance of accessing sign language for deaf children through exposure to deaf peers, to provide support in developing their deaf culture, self-identity, and feeling part of the deaf world.
Spoken language	To be aware of the importance of accessing spoken language to provide deaf children with the confidence and ability to access the hearing world.

6.0   Conclusions

This present study enabled a psychological interpretation of the experiences of deaf young people bilingual in sign language and spoken language. Consistent with the literature the findings demonstrated the importance of sign language for deaf children to form relationships with deaf peers and to feel part of the deaf world, which also had implications for their psychological well-being. This study explored the experiences of deaf young people, which allowed for a mature understanding of language development in bilingualism. The importance of deaf peers, but also the importance of preparation for integration into the hearing society was evident, which were both influenced by language. An understanding of any conflict between a child's personal language choice and the influence of their parents and education helped deaf children to feel valued. Being aware of the needs of deaf bilingual young people will help them to fully develop their self-identity. These clinical implications must be considered when offering a new formulation for understanding bilingualism.

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Chapter Three: Reflective Paper

Communication within the d/Deaf world: Reflections on the research and clinical process
_____

1.0   Choosing a reflective topic

The empirical paper exploring the experiences of deaf young people bilingual in British Sign Language [BSL] and English language, has highlighted a number of reflections which occurred during the methodological process. These reflections revolved around communication from the position of being a hearing researcher and interviewing deaf young people. Although these reflections arose during the methodology, this paper will consider these experiences within the context of everyday life. Reflecting on my views on communication through the eyes of deaf people is based on my assumptions from exposure to deaf people. However, the focus of is on my experiences of being a hearing researcher and clinician, communicating with deaf people.

I developed an interest in deafness from an early experience of working in retail and seeing a deaf child becoming frustrated as they attempted to communicate to me through sign language. I had no idea of what they needed and felt helpless in this experience. I started thinking about the reliance on spoken language in a world that dominated around a hearing society. I started to question how deaf people fit into this hearing world. This led me to question whether deaf people are reliant on hearing people to provide this support, and if so what I can learn as a hearing person to support deaf people. I became intrigued by the deaf world and decided to learn BSL to gain some access into this world. I gained experience working as a Trainee Clinical Psychologist in the deaf services, where I had the opportunity to practice my skills in BSL and reflect on the process of communicating with deaf people. I held my own assumptions that sign language was the language of the deaf, and that if I had access to sign language then I could communicate with a deaf person. Although I have valued the use of sign language to communicate with deaf people, I have also learnt that there are numerous other aspects of communication that I needed to consider.

This paper will focus on the differences between my reflections on communicating with deaf people who predominantly use sign language and deaf people who predominantly use spoken language. Awareness of the bilingual approach and the impact of the environment for deaf people will also be discussed.

2.0   The d/Deaf community and communication

Deaf people who value their unique cultural identity tend to define themselves as Deaf with a capital *D*, whereas deaf people that value their access to spoken language in a hearing society tend to define themselves as deaf with a lower case *d*. However, *deaf* is also used to describe the physical condition of not being able to hear regardless of cultural identity. So as not to make assumptions about cultural identities, for the purposes of this paper I will refer to deaf with a lower case *d*.

On reflection of my experiences of how I see deaf people, it is very much in the middle. I value the importance of the deaf culture and respect the value of BSL to integrate with deaf people. However, I also value access to spoken language through bilingualism to help deaf people to integrate into a dominantly hearing society. My research experience into bilingualism and my clinical experience have given me the opportunity to be in the middle of these two view points. I attempted to understand the deaf culture through exposure to deaf people who were monolingual in sign language, but I also learnt the importance of accessing English through exposure to deaf people who were monolingual in spoken language. This was difficult to do, as I was aware of not devaluing the importance of the deaf community by trying to pretend I could truly understand what it was like to be deaf. I also wondered how deaf monolingual speakers, viewed their deafness, in comparison to deaf monolingual signers.

3.0   Communication with deaf signers

This section will consider the process of communication during my interaction with deaf people, and the role of body language to communicate with deaf signers.

3.1   The first interaction between hearing people and deaf people

My instinct when meeting another hearing person is to reach out my hand to shake the other persons hand as an act of greeting, which is usually accompanied by introducing my name. My hands are used to achieve the act of hand-shaking, whilst my voice is used to introduce myself. This form of interaction and communication occurs together, as it requires the use of verbal and non-verbal modes to create this interaction. When meeting a research participant or deaf client in clinical practice for the first time, I am mindful of utilizing a different approach, and to think carefully about how to introduce myself, to ensure the communication needs of the deaf

person are understood. I notice that deaf people without speech, who rely on sign language to communicate, use their hands for both the greeting and the introductions.

During a meeting with a research participant, my first interaction was guided by the deaf individual, to avoid making any assumptions about their communicative preference. Knowing that the deaf person would be bilingual to capture the criteria for my research, I was unaware whether they preferred to use sign language or spoken language. Some of this uncertainty was restored by the participant's choice of communication for the interview and whether they chose to have an interpreter present. On reflection, if they chose to use spoken language for the interview I would greet them through speech, whereas if they chose to have an interpreter, and therefore preferred sign language, I would greet them through sign language myself, albeit limited, and set the scene for introducing the interpreter. Sign bilingualism encompasses a social-linguistic view of deafness, which respects the distinct language and culture of deaf people and recognises the use of sign language as a central element (Swanwick & Tsverik, 2007). However, I still held some anxiety as to whether me accessing sign language would show appreciation of the deaf culture, or create confusion between the deaf community and the hearing community. Consequently, I would wait to be guided by the deaf person.

The skills I developed through the process of my research has influenced my clinical work, and vice versa. Interacting with deaf people with different communication needs, and being shown appreciation for my attempts at using sign language gave me more confidence to use this language to engage with deaf people, and hopefully help them feel more comfortable. The difference between my research and clinical work was that in clinical work, the deaf children I have worked with are not necessarily bilingual, or fully lingual in either language, and therefore to avoid making assumptions I would check this out with the deaf person, so as to provide good communication environments and opportunities.

It was a stressful experience meeting a research participant or client for the first time, and deciding whether to use sign language or spoken language, and even more so whether to use my voice when signing. I learnt that my anxiety was less about the language choice, and more about my fears to understand the needs of the deaf culture. According to DeBlassie (1983), in an attempt to function within the dominant culture by abiding to the cultural values and speaking in the dominant language, the non-dominant group are met with a number of barriers

including prejudice, cultural distance, discrimination, and most importantly language problems with less competence in the minority language. Consequently, my concerns with language are not present in my clinical work with hearing people, as I am less worried about causing offence, because we share the same hearing culture.

3.2   *Talking and listening*

The act of talking and listening requires different parts of the body used by hearing people and deaf people. When communicating with hearing people, I talk with my mouth, and listen with my ears. I can engage solely with the face of the other person and receive all the information I need to understand the exchange of information. However, I am less conscious of the role of the body language, which provides subconscious information. On the other hand, when communicating with deaf people I use my body to 'talk' and my eyes to 'listen'. Through the act of me using sign language with deaf people, I am more aware of the exchange of information through the hands and body, and facial expressions, which I adopt to accompany signs to relay emotions and meaning. Whereas, with hearing people I will merely use the words and tone of voice to inform the other person of my feelings. I may also use facial expressions, but be less aware of this act. During the course of learning BSL I gained awareness of the importance of expressing language and emotions through facial expressions. It became a daunting and somewhat embarrassing task to enhance the facial features during an act of communication with a deaf person, as it did not feel natural.

3.3   *Confidence to communicate with deaf signers*

For me the biggest achievement during my time working within a deaf environment was having the confidence to practice the skills I had developed in BSL in conversations with deaf people. Having my voice taken away, the tool I had been using to communicate with people my whole life was a daunting experience. I was aware that I felt more confident in expressive sign communication when I could prepare for giving this information by planning out exactly what I wanted to share. However, this meant restricting the information to that which I had confidence I could convey through my limited use of sign language.

I was less confident in receptive communication, as receiving information through sign language from a deaf person felt embarrassing for fear that I would not understand. However, what struck me most was reflecting on this through the eyes of deaf people, and how they

might feel integrating in a dominantly hearing society, and the feelings of isolation that could occur. With this in mind, I pushed myself to integrate into the deaf world through my use of BSL. By doing this I learnt that having perfect sign language was not that important for deaf people, but that it was my effort as a hearing person attempting to use sign language to integrate into the deaf world, which was valued. As even though sign language is involved, the acquisition process has less to do with my hearing status and more to do with the language used (Johnstone, 2004). Feeling accepted by deaf people through the shared language encouraged me to practice my sign language and increased my confidence.

4.0 Barriers for deaf people with access to spoken language

For most of this paper I have reflected on communication with deaf people who use sign language to communicate. However, I will move on to think about communication with deaf people where the role of the deaf person using their voice can be adopted, and communication can occur through spoken language. This section will highlight some of the barriers I became aware of when communicating with deaf people using my voice.

4.1 Access to spoken language for the deaf

I have learnt that for deaf people to have access to spoken language this meant more than having access to hearing. To support spoken language, deaf people can adopt lip-reading and gesture for receptive communication, which also provided relief from the concentration required with listening skills. I therefore needed to ensure my lip pattern was clear and that I gave extra visual clues such as pointing or written information. I learnt that deaf people faced barriers when communicating with hearing people using their voice, such as accents and pronunciations, which made lip-reading difficult, as lip-patterns could change. Also, deaf people's voices can sound different, which can take more concentration on the listeners part, as well as sadly being a potential for discrimination for deaf people who can get mislabeled as low-intelligence. Being aware of these barriers impacted on my confidence to communicate.

4.2 Confidence to communicate with deaf people using the voice

Knowing that some deaf people rely on lip patterns to receive information, I became consciously aware of my own lips when talking. I was aware of not talking too fast, but also not talking too slowly so as to appear patronising. I was informed by a number of deaf colleagues that I had good lip patterns, which gave me the courage and confidence to be myself. During

the interviews with research participants, I was aware of needing to continually face the deaf person so they could access my lip patterns. This meant that writing notes or looking down at my interview schedule, and talking at the same time was not possible. I became aware that I was much more confident communicating with deaf people with access to spoken language, as I regained the access to my voice, which was my comfort zone. However, I also noticed that my confidence and reduced anxiety impacted on the amount of attention I gave to my own communication, which could have made the communication process more difficult for the deaf person. Conversely, with sign language I am much more aware of adapting the process to suit the needs of the deaf person, but I am less confident with my limited access to sign language.

5.0   The integration of sign and spoken language: Voice 'on' or voice 'off'

The focus of this paper has looked at sign language and spoken language as separate entities used by deaf people, however, I started to think about whether sign language and spoken language came together simultaneously with deaf people who had access to both. From my research, I am aware that deaf people adapt their language to suit their environment, so they will tend to use their voice with hearing people, and sign with deaf people. However, I wondered how deaf people make the decision whether or not to use their voice at the same time as signing. I had heard the terms 'voice on' and 'voice off', but never clearly understood their meanings. I noticed that when learning BSL I would use my voice to practice sign language, and that because I had access to both languages, I assumed this was appropriate.

Through discussions with deaf people, I became aware that using the voice whilst signing could lead to feelings of shame for deaf people as it contradicted with being part of the deaf culture. Knowing this information I started to switch off my voice when signing, and this became a natural part of my signing communication. It no longer felt natural or comfortable to use my voice whilst signing, and gave me exposure to a world without spoken language. According to Grosjean (2010) just like hearing bilinguals, deaf bilinguals when communicating with monolinguals restrict themselves to the one language, and it is only when in the company of other bilinguals that they choose which language to use. Although I do not define myself as bilingual in anyway, I became aware that having access to spoken English and limited sign, I would restrict my language to suit the preferred language of the other person. This often meant using spoken language with hearing people, and sign language with deaf people.

However, I would use both languages together when communicating with a deaf and a hearing person.

6.0   Being aware of the environment

Having learnt about the diversity of communication needs for deaf people, such as sign language, spoken language, voice on or voice off, lip-reading, and the emphasis on the body to communicate, I move on to think about the importance of the environment in which all this interaction takes place. This section will reflect on the environment for deaf people and the impact on the dynamics within a group.

6.1   *Group and one to one communication*

There are social norms to consider when forming a group, however, when that group involves deaf people, I learnt that more consideration is needed. Within a group conversation the seating was particularly important. I adopted the process of waiting to sit down in a group until all the deaf people present had found the most suitable seat. For deaf people, having access to the whole group and to the interpreter was imperative for receiving visual information, such as access to sign language and seeing who was speaking. Whereas, I am able to receive audio information from the person who is sat behind me, without needing to visually see the person. I also became aware that during group conversations it was so easy for hearing people to dominate the conversation and for natural instincts such as talking too quickly to occur.

I notice that with deaf people present, before speaking I check whether any deaf person has begun a conversation through sign language, to avoid interrupting, and make an effort to ensure deaf people are not excluded from the conversation. I also slow my speech down to ensure the interpreters can follow, whilst trying to avoid this appearing patronising. I feel that one to one communication with a deaf person is much easier than group communication. This is because I can ask the deaf person to repeat information or to slow the process down to ensure that I can follow the conversation, particularly from my view point of having limited access to sign language. Exposure to one to one communication with deaf people has improved my confidence in my conversations using sign language, as on reflection, instead of filtering my conversations to fit my limited knowledge of sign language, if I become stuck or need clarification, I ask the deaf person for support through my knowledge of finger spelling in BSL, which has also increased my signing vocabulary.

6.2   Use of interpreters

The role of the interpreter has been mentioned as a support between the deaf person and the hearing person. I have learnt about the process of working with interpreters and the need to be aware of their role in the conversation and the impact on the dynamics in the group. I have gained experience clinically working with sign and foreign interpreters, and become aware of their different roles. Working with sign interpreters, they can interpret simultaneously whilst I am speaking, whereas working with foreign language interpreters I need to wait for this information to be translated before continuing to speak. This meant engagement was more difficult as the conversation was continually disrupted. Furthermore, as sign language involves spatial descriptions that do not map directly to the English words, interpreters have to give a subjective interpretation rather than a strict translation, which could also happen with concepts in foreign languages. Plus, as any interpreter will unconsciously add a subjective element to the process, it was evident in my work that information could be lost in interpretation. This could have dramatic effects on assessment and therapeutic processes, and therefore, I learnt how important it was to be continually mindful of this.

The biggest adjustment for me working with interpreters was the presence of a third person in the relationship, and how this impacted on engagement. I am aware that eye contact is a method that I rely upon to engage someone in a conversation. If I was talking to a hearing person and they looked in another direction whilst I was talking, I would view this as rude. Or as a Psychologist, I might see this as the client having touched on a difficult or painful topic. However, in the dynamic of speaking to a deaf person and having an interpreter, I learnt that this all changed. First of all, the seating had to be arranged so that the interpreter sat next to me and opposite the deaf person to create a triangle. This meant that I engaged with the deaf person by speaking and facing them, however, as I am speaking, my information is being interpreted, and therefore, the deaf person needs to be facing the interpreter to receive this information. This means that they cannot also make eye contact with me. The conversation becomes two-way between the interpreter and the deaf person, and one-way between me and the deaf person. There is also some eye gaze from me to the interpreter to follow the process [**Figure 2**]. On reflection, this process of communication was difficult to do at first as it went against the rules of natural conversation, but something that just like sign language, became more natural to do with practice.

Figure 2:   **Eye contact between interpreter, hearing person and deaf person**
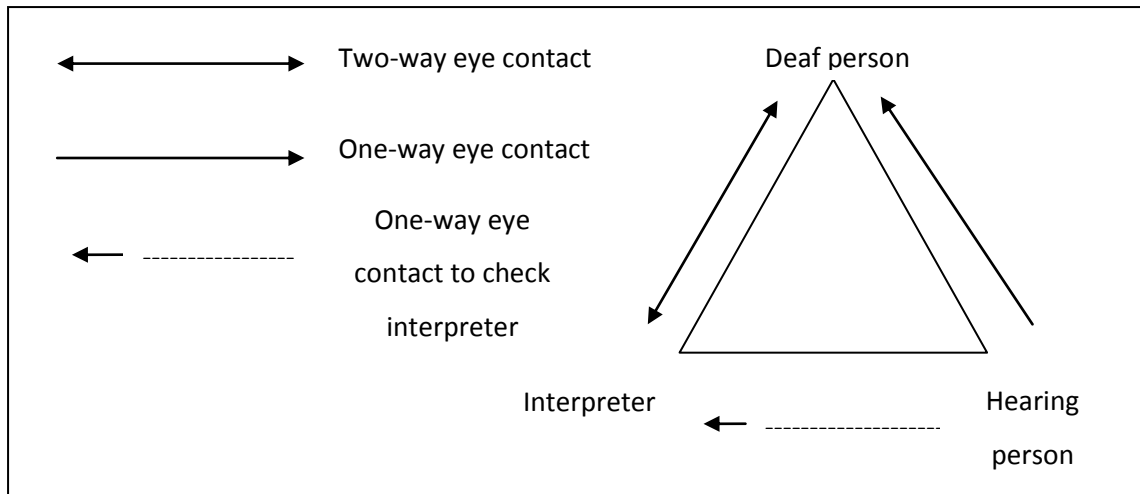
7.0   Summary of personal and professional learning

Communicating as a hearing person with a deaf person, I have become aware of the different processes involved. I learnt that it is not a simple exchange of verbal information between two people which usually occurs naturally in a hearing environment. But that communication between me and a deaf person requires concentration on accessing sign language, lip-reading, body language, interpreters, and the right environment to ensure that deaf people continue to feel included in the conversation. In communicating with deaf people, I am more confident practicing my skills in sign language and attempting to integrate into the deaf world. This has helped me to better understand, not only the communication needs of deaf people, but also given me more awareness of deaf identity and the deaf culture. My own challenges and feelings of isolation in communicating with a deaf person have helped me to better understand the experiences for deaf people and the isolation they can experience through their integration with hearing people. Consequently, observing the challenges some deaf people face when communicating with hearing people, has given me the confidence to face similar challenges when communicating with deaf people. My experience throughout the research and clinical process has supported my personal and professional learning as a scientist-practitioner therapist. The skills I learnt will support my future career, as they have enabled me to develop the confidence to adapt my communication to suit the needs of the clients in my clinical work. Making the effort to understand the individual communicative and cultural needs of a deaf person from my perspective as a hearing white British therapist has helped me to improve the engagement in my relationship with deaf clients and colleagues.

8.0   References

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Appendix A

Ethical approval letters

Coventry University: Research Registry Unit

ETHICS REVIEW FEEDBACK FORM
(Review feedback should be completed within 10 working days)

Name of applicant: Hayley Ford..................................... **Faculty/School/Department:** HLS……

Research project title: Bilingualism and Deafness: Version 1: Comments by the reviewer

1. **Evaluation of the ethics of the proposal:** It is my opinion that this proposal will meet the ethical requirements required if the recommended changes are made. I recommend that a further confidentiality agreement is required for the interpreter to ensure they respect the confidentiality and anonymity of all research participants. The interpreter, if utilised, should sign this prior to any interviews being carried out.

2. **Evaluation of the participant information sheet and consent form:** The participant information sheet should be extended to include the following sections: - What if I agree and then wish to withdraw from the project?   - Will my data and involvement be kept confidential?   - What will happen to the results of the study?   - Who has reviewed the study?   The consent form is appropriate and meets ethical requirements.

3. **Recommendation:** (Please indicate as appropriate and advise on any conditions. If there are any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer). ☐   Approved - no conditions attached ☐   X Approved with minor conditions (no need to resubmit) I approve this proposal providing the recommended changes are made. ☐   Conditional upon the following – please use additional sheets if necessary (please re-submit application) ☐   Rejected for the following reason(s) – please use other side if necessary ☐   Further advice/notes - please use other side if necessary **Name of reviewer: Dr Helen Liebling-Kalifani** ....   **Signature:** **Date: 12th March 2010** ....

Coventry University ethical approval confirmation

Coventry University
Priory Street
Coventry CV1 5FB
Telephone 024 7688 7688

Professor Ian M Marshall
Pro-Vice-Chancellor (Research)

Coventry University

TO WHOM IT MAY CONCERN

RRU/Ethics/Sponsorlet

23 March 2010

Dear Sir/Madam

Researcher's name: Miss Hayley Ford
Project Title: The benefits and challenges of language development in bilingualism within deafness: The views of deaf young people and their hearing Parents

The above named student has successfully completed the Coventry University Ethical Approval process for her project to proceed.

I should like to confirm that Coventry University is happy to act as the sole sponsor for this student and attach details of our Public Liability Insurance documentation.

With kind regards

Yours faithfully

Professor Ian Marshall
Pro-Vice-Chancellor, Research

Enc

Pro-Vice-Chancellor's Office
Direct Line 024 7679 5293
Fax 024 7688 8030

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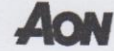
Commercial Insurance

158 Edmund Street
Birmingham
B3 2HB
tel: 0121 253 3100
fax: 0121 212 1200

TO WHOM IT MAY CONCERN

1 August 2009

Dear Sirs

Re: Coventry University and Coventry University Enterprises Ltd and ACUA Ltd

We act as Insurance Brokers for the above and set out below brief details of the Employers and Public and Products Liability risks placed with Insurers in accordance with their normal policy terms, conditions and exceptions: -

Employers' Liability

Renewal Date: 1 August 2010
Limit of Indemnity: £25,000,000 any one event.
Insurer: QBE
Policy No: Y016796QBE0109A

Public/Products Liability

Renewal Date: 1 August 2010
Limit of Indemnity: £25,000,000 any one occurrence/unlimited but in respect of products the basis of indemnity is in the aggregate
Insurer: QBE
Policy No: Y016796QBE0109A

Cover includes Indemnity to Principals and liability in connection with or arising out of members of the Board of Governors. The Geographical limits are worldwide.

We hope that the foregoing information is sufficient for your purposes but if you require any further details please do not hesitate to contact this office.

Yours faithfully
for AON LIMITED

ALISON RAY CERT CII
CLIENT SERVICE ADVISOR
Direct Dial No. 0121 253 3256
Email: alison.ray@aon.co.uk

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93

QBE

CERTIFICATE OF EMPLOYERS' LIABILITY INSURANCE (a)

(Where required by regulation 5 of the Employers' Liability (Compulsory Insurance) Regulations 1998 (the Regulations), one or more copies of this certificate must be displayed at each place of business at which the policy holder employs persons covered by the policy)

1. Name of policy holder   Policy No **Y016796QBE0109A**
   Coventry University, Coventry University Enterprises, Acua Limited

2. Date of commencement of insurance policy   **01/08/2009**

3. Date of expiry of insurance policy   **31/07/2010**

We hereby certify that subject to paragraph 2:

1. the policy to which this certificate relates satisfies the requirements of the relevant law applicable in Great Britain, Northern Ireland, Isle of Man, Island of Jersey, Island of Guernsey, Island of Alderney; or any offshore installations in territorial waters around Great Britain and its Continental Shelf **(b)**: and;

2. (a) the minimum amount of cover provided by this policy is no less than £5 million **(c)**; or

   (b) the cover provided under this policy relates to claims in excess of [£] but not exceeding [£].

3. the policy covers the holding company and all its subsidiaries

Signed on behalf of QBE Insurance (Europe) Limited and QBE Casualty Syndicate 386 (Authorised Insurers)

Notes

(a) Where the employer is a company to which regulation 3(2) of the Regulations applies, the certificate shall state in a prominent place, either that the policy covers the holding company and all its subsidiaries, or that the policy covers the holding company and all its subsidiaries except any specifically excluded by name, or that the policy covers the holding company and only the named subsidiaries.

(b) Specify applicable law as provided for in regulation 4(6) of the Regulations.

(c) See regulation 3(1) of the Regulations and delete whichever of paragraphs 2(a) or 2(b) does not apply. Where 2(b) is applicable, specify the amount of cover provided by the relevant policy.

Important

The Employers' Liability (Compulsory Insurance) Regulations 1998 requires that you keep this certificate or a copy for at least 40 years. Extra copies of the certificate will by supplied upon request.

The Insurers' obligations under this policy are several and not joint and are limited solely to the extent of their individual subscriptions. Please see the policy for full details.

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National Research Ethics Service

Birmingham, East, North and Solihull Research Ethics Committee

REC Offices
Osprey House
Albert Street
Redditch
B97 4DE
Telephone: 01527 587575
Facsimile: 01527 587503

16 April 2010

Miss Hayley Ford
Trainee Clinical Psychologist
Clinical Psychology Department
Coventry University
Priory Street, Coventry
CV1 5FB

Dear Miss Ford

Study title:	The benefits and challenges of language development in bilingualism within deafness: The views of deaf young people and their hearing Parents
REC reference number:	10/H1202/32
SSA reference number:	10/H1206/39

Thank you for your application to conduct the above research as local Principal Investigator for Coventry University. We can confirm that the application was received on 15 April 2010.

An assessment of the suitability of the local Principal Investigator, site and facilities will be made by this Committee. We will notify the main Research Ethics Committee The Black Country Research Ethics Committee within 25 days of receiving your application whether or not there is any objection to the research being conducted locally.

It is the responsibility of the main REC to confirm the favourable opinion for this site, taking account of the advice from this Committee. The main REC will notify the decision to the Chief Investigator for the study. It is the responsibility of the Chief Investigator to notify the local Principal Investigator at each site.

Yours sincerely

Mrs Karen Green
Committee Co-ordinator

Copy to: Dr Eve Knight
Coventry University
Priory Street
Coventry
CV1 5FB

This Research Ethics Committee is an advisory committee to West Midlands Strategic Health Authority

Non-NHS: Derbyshire REC

NHS

National Research Ethics Service

Derbyshire Research Ethics Committee

1 Standard Court
Park Row
Nottingham
NG1 6GN

Telephone: 0115 8839461
Facsimile: 0115 9123300

14 April 2010

Miss Hayley Ford
Trainee Clinical Psychologist
Doctorate of Clinical Psychology
Priory Street
Coventry
CV1 5FB

Dear Miss Ford

Study title:	The benefits and challenges of language development in bilingualism within deafness: The views of deaf young people and their hearing Parents
REC reference number:	10/H1202/32
SSA reference number:	10/H0401/37

Thank you for your application to conduct the above research as local Principal Investigator for the Royal School for the Deaf Derby. We can confirm that the application was received on 12 April 2010.

An assessment of the suitability of the local Principal Investigator, site and facilities will be made by this Committee. We will notify the main Research Ethics Committee, The Black Country Research Ethics Committee, within 25 days of receiving your application whether or not there is any objection to the research being conducted locally.

It is the responsibility of the main REC to confirm the favourable opinion for this site, taking account of the advice from this Committee. The main REC will notify the decision to the Chief Investigator for the study. It is the responsibility of the Chief Investigator to notify the local Principal Investigator at each site.

Yours sincerely

Mrs Lisa Gregory
Mrs Lisa Gregory
Committee Co-ordinator

Email: lisa.gregory@nottspct.nhs.uk

Copy to: Dr Eve Knight, Coventry University

This Research Ethics Committee is an advisory committee to East Midlands Strategic Health Authority
The National Research Ethics Service (NRES) represents the NRES Directorate within the

NHS

National Research Ethics Service

The Black Country Research Ethics Committee
Osprey House
Albert Street
Redditch
Worcestershire
B97 4DE

Telephone: 01527 587573
Facsimile: 01527 587503

18 May 2010

Miss Hayley Ford
Coventry University
Clinical Psychology Department
Priory Street, Coventry
CV1 5FB

Dear Miss Ford

Study Title: The benefits and challenges of language development in bilingualism within deafness: The views of deaf young people and their hearing Parents

REC reference number: 10/H1202/32
Protocol number: 2

The Research Ethics Committee reviewed the above application at the meeting held on 10 May 2010. Thank you for attending to discuss the study.

Documents reviewed

The documents reviewed at the meeting were:

Document	Version	Date
Covering Letter		19 March 2010
REC application		22 March 2010
Protocol	2	12 March 2010
Investigator CV	Hayley Ford	12 March 2010
Participant Information Sheet: Appendix 6: Information Sheet for deaf bilingual young people	2	12 March 2010
Participant Information Sheet: Appendix 7: Information Sheet for the hearing parents of the deaf bilingual young people	2	12 March 2010
Participant Consent Form: Appendix 8: Written consent to take part for all deaf bilingual young people being interviewed	1	12 February 2010
Participant Consent Form: Appendix 4: Written consent form to be contacted	1	12 February 2010
CV - Dr Eve Knight		17 March 2010
CV - Dr Sylvia Green		16 March 2010
Appendix 1: Interview Schedule: Deaf Bilingual young people	1	12 February 2010
Appendix 2: Questionnaire: Hearing Parents of the deaf bilingual young people	1	12 February 2010
Appendix 3: Poster for display at professional and social	1	12 February 2010

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networks for the deaf		
Participant Consent Form: Appendix 9: Written consent to take part for all hearing parent's completing questionnaires	1	12 February 2010
Appendix 5: Covering letter	1	12 February 2010
Appendix 10: Debriefing sheet for deaf bilingual young people	1	12 February 2010
Appendix 11: Debriefing sheet for hearing parents of the deaf bilingual young people	1	12 February 2010
Appendix 12: Record of participant data	1	12 February 2010
Appendix 13: Flowchart	1	12 February 2010
Participant Consent Form: Appendix 14: Written consent for interpreters for the interviews with deaf bilingual young people	1	12 March 2010
Evidence of insurance or indemnity	AON	01 August 2009
Certificate of Employers' Liability Insurance (a) 01/08/2009 - 31/07/2010		
Letter from Pro-Vice Chancellor - Research		23 March 2010

Provisional opinion

The Committee would be content to give a favourable ethical opinion of the research, subject to receiving a complete response to the request for further information set out below.

The Committee delegated authority to confirm its final opinion on the application to the Chair.

The Committee said they felt the tapes should not be erased immediately and advised that tapes are normally kept for two years.

You agreed to keep the tapes.

The Committee advised that Information Sheets should say that direct quotes may be used anonymously.

You said you were happy to do this.

The Committee said the questionnaires for parents may have long answers and there should be more space or it could state if you have more to say please use another sheet of paper.

You agreed to this.

The boxes on the Consent Forms should have space for initials. The Parents' Consent Form has the apostrophe in the wrong place and "I would not like to take part " should be removed.
You agreed to this.

The Committee asked you to change the word "literature". Most people think of book/s when they see this word.

You agreed to this.

The Committee asked the researcher to be more specific about "needs-led basis".

You agreed to this.

98

10/H1202/32   Page 3

The Committee sought reassurance that the Patients Information Sheets will be on headed paper.

You confirmed that it would be.

Further information or clarification required

- The Patient Information Sheets should say that direct quotes may be used anonymously.
- The questionnaires should either have more room for comment or participants should be told to use another sheet of paper if necessary.
- The Parents' Consent Form should have "I do not wish to take part" removed and the apostrophe in the correct place.
- Change the word "literature".
- Please be more specific about "needs-led basis".

The REC nominated the Co-ordinator to be a point of contact should further clarification be sought by the applicant upon receipt of the decision.

When submitting your response to the Committee, please send revised documentation where appropriate underlining or otherwise highlighting the changes you have made and giving revised version numbers and dates.

If the committee has asked for clarification or changes to any answers given in the application form, please do not submit a revised copy of the application form; these can be addressed in a covering letter to the REC.

The Committee will confirm the final ethical opinion within a maximum of 60 days from the date of initial receipt of the application, excluding the time taken by you to respond fully to the above points. A response should be submitted by no later than 15 September 2010.

Membership of the Committee

The members of the Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

10/H1202/32	Please quote this number on all correspondence

Yours sincerely

Anne McCullough [Mrs] *on behalf of*
Dr Jeff Neilson
Chair

Email: anne.mccullough@westmidlands.nhs.uk

99

Enclosures: List of names and professions of members who were present at the meeting
and those who submitted written comments.

Copy to: Dr Eve Knight
Clinical Psychology Department
Coventry University
Priory Street
Coventry
CV1 5FB

Mr Tom Jinks
R & D Department
Dudley and Walsall Mental Health Partnership Trust
76 Ida Road
Walsall
West Midlands
WS2 9SS

NHS

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The Black Country Research Ethics Committee

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11 June 2010

Miss Hayley Ford
Coventry University
Clinical Psychology Department
Priory Street, Coventry
CV1 5FB

Dear Miss Ford

Study Title:	The benefits and challenges of language development in bilingualism within deafness: The views of deaf young people and their hearing Parents
REC reference number:	10/H1202/32
Protocol number:	

Thank you for your letter of 24 May 2010, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements.   Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.   *Where the only involvement of the NHS organisation is as a Participant Identification Centre, management*

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permission for research is not required but the R&D office should be notified of the study. Guidance should be sought from the R&D office where necessary.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

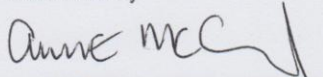| Document	Version	Date
Covering Letter		19 March 2010
REC application		22 March 2010
Protocol	2	12 March 2010
Investigator CV	Hayley Ford	12 March 2010
Participant Consent Form: Appendix 4: Written consent form to be contacted	1	12 February 2010
CV - Dr Eve Knight		17 March 2010
CV - Dr Sylvia Green		16 March 2010
Appendix 1: Interview Schedule: Deaf Bilingual young people	1	12 February 2010
Appendix 3: Poster for display at professional and social networks for the deaf	1	12 February 2010
Appendix 5: Covering letter	1	12 February 2010
Appendix 12: Record of participant data	1	12 February 2010
Appendix 13: Flowchart	1	12 February 2010
Evidence of insurance or indemnity	AON	01 August 2009
Certificate of Employers' Liability Insurance (a) 01/08/2009 - 31/07/2010		
Letter from Pro-Vice Chancellor - Research		23 March 2010
Participant Information Sheet: Information Sheet for deaf bilingual young people	3	24 May 2010
Participant Information Sheet: Information Sheet for hearing parents	3	24 May 2010
Questionnaire: Questionnaire for Hearing Parent's	2	24 May 2010
Response to Request for Further Information		24 May 2010
Participant Consent Form: Consent Form for deaf bilingual young people	2	24 May 2010
Participant Consent Form: Consent Form for hearing parents'	2	24 May 2010
Debriefing sheet for deaf bilingual young people	2	24 May 2010
Debriefing sheet for hearing parents	2	24 May 2010
Participant Consent Form: Consent Form for Interpreter of the deaf	2	24 May 2010

Statement of compliance

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After ethical review

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure.   If you wish to make your views known please use the feedback form available on the website.

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Progress and safety reports
- Notifying the end of the study
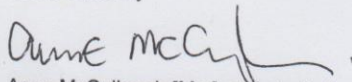
The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

10/H1202/32	Please quote this number on all correspondence

Yours sincerely

Anne McCullough [Mrs] *on behalf of*
Dr Jeff Neilson
Chair

Email: anne.mccullough@westmidlands.nhs.uk

Enclosures: "After ethical review – guidance for researchers"

Copy to: Dr Eve Knight
          Clinical Psychology Department
          Coventry University
          Priory Street
          Coventry
          CV1 5FB

          Mr Tom Jinks
          R & D Department
          Dudley and Walsall Mental Health Partnership Trust
          76 Ida Road
          Walsall
          West Midlands
          WS2 9SS

Clinical Governance Dept

Date: 5th July 2010

Dear Miss Ford

Letter of access for research

This letter confirms your right of access to conduct research through Dudley and Walsall Mental Health Partnership Trust for the purpose and on the terms and conditions set out below. This right of access commences on 5/7/2010 and ends on 5/07/2011 unless terminated earlier in accordance with the clauses below.

You have a right of access to conduct such research as confirmed in writing in the letter of permission for research from this NHS organisation. Please note that you cannot start the research until the Principal Investigator for the research project has received a letter from us giving permission to conduct the project.

The information supplied about your role in research at has been reviewed and you do not require an honorary research contract with this NHS organisation. We are satisfied that such pre-engagement checks as we consider necessary have been carried out.

You are considered to be a legal visitor to Dudley and Walsall Mental Health Partnership Trust premises. You are not entitled to any form of payment or access to other benefits provided by this NHS organisation to employees and this letter does not give rise to any other relationship between you and this NHS organisation, in particular that of an employee.

While undertaking research through Dudley and Walsall Mental Health Partnership Trust you will remain accountable to your employer Coventry University but you are required to follow the reasonable instructions of Dr Sylvia Glenn, Clinical Psychologist in this NHS organisation or those given on her/his behalf in relation to the terms of this right of access.

Where any third party claim is made, whether or not legal proceedings are issued, arising out of or in connection with your right of access, you are required to co-operate fully with any

investigation by this NHS organisation in connection with any such claim and to give all such assistance as may reasonably be required regarding the conduct of any legal proceedings.

You must act in accordance with policies and procedures, which are available to you upon request, and the Research Governance Framework.

You are required to co-operate with Dudley and Walsall Mental Health Partnership Trust in discharging its duties under the Health and Safety at Work etc Act 1974 and other health and safety legislation and to take reasonable care for the health and safety of yourself and others while on Dudley and Walsall Mental Health Partnership Trust premises. You must observe the same standards of care and propriety in dealing with patients, staff, visitors, equipment and premises as is expected of any other contract holder and you must act appropriately, responsibly and professionally at all times.

You are required to ensure that all information regarding patients or staff remains secure and *strictly confidential* at all times. You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice (http://www.dh.gov.uk/assetRoot/04/06/92/54/04069254.pdf) and the Data Protection Act 1998. Furthermore you should be aware that under the Act, unauthorised disclosure of information is an offence and such disclosures may lead to prosecution.

You should ensure that, where you are issued with an identity or security card, a bleep number, email or library account, keys or protective clothing, these are returned upon termination of this arrangement. Please also ensure that while on the premises you wear your ID badge at all times, or are able to prove your identity if challenged. Please note that this NHS organisation accepts no responsibility for damage to or loss of personal property.

We may terminate your right to attend at any time either by giving seven days' written notice to you or immediately without any notice if you are in breach of any of the terms or conditions described in this letter or if you commit any act that we reasonably consider to amount to serious misconduct or to be disruptive and/or prejudicial to the interests and/or business of this NHS organisation or if you are convicted of any criminal offence. As from 26 July 2010, your HEI employer may initiate your Independent Safeguarding Authority (IISA) registration (where applicable), and thereafter, will continue to monitor your ISA registration status via the

on-line ISA service. Should you cease to be ISA-registered, this letter of access is immediately terminated. Your employer will immediately withdraw you from undertaking this or any other regulated activity. You MUST stop undertaking any regulated activity.

Your substantive employer is responsible for your conduct during this research project and may in the circumstances described above instigate disciplinary action against you.

Dudley and Walsall Mental Health Partnership Trust will not indemnify you against any liability incurred as a result of any breach of confidentiality or breach of the Data Protection Act 1998. Any breach of the Data Protection Act 1998 may result in legal action against you and/or your substantive employer.

If your current role or involvement in research changes, or any of the information provided in your Research Passport changes, you must inform your employer through their normal procedures. You must also inform your nominated manager in this NHS organisation.

Yours sincerely

Roger Abnett

Clinical Governance Facilitator

cc: Clinical Governance

              HR department Coventry University

Honoury contract: Dudley & Walsall MHPT

Date 23/8/10

Dear Hayley Ford

Honorary Contract

I have pleasure in offering you an Honorary Contract with Deaf CAMHS, Dudley & Walsall Mental Health Trust as Trainee Clinical Psychologist. The Honorary Contract will commence on 11th October 2010 and will terminate on 17th March 2011. You will be responsible to Neil Norman, Team manager, and you will be supervised by Dr Sylvia Glenn, Principal Clinical Psychologist, with whom you should agree your hours of duty.

Clinical Supervision
Due to the nature of the duties you will be undertaking you must seek the prior approval of your supervisor before commencing any treatment on clients without supervision.

Confidentiality and Data Protection
In the course of your work you are likely to have access either routinely or on occasion to confidential information, either about our clients, our employees or the Trust's affairs. It is a condition of this Honorary Contract that you will not divulge or discuss such information except in the proper performance of your normal duties. In addition, patient and staff records must never be left in such a manner that unauthorised persons can gain access to them and must be kept in safe custody when no longer required. Any breach of these rules will be a matter for disciplinary action, which may include the immediate termination of this contract.

In the case of personal information which is held on a computer, word processor or similar automatic processing equipment the Data Protection Act has added the force of law to these duties of security and confidentiality. If you use or otherwise come across personal information that is stored on or produced from such equipment, then you are under a legal obligation to ensure that it is not passed on in any unauthorised way or accidentally destroyed or mislaid. In the event of failure to do so, you face the possibility of prosecution over the above disciplinary action.

Any doubts or queries you may have about compliance with the requirements of either confidentiality or the Data Protection Act should be raised with your supervisor/manager or with the Confidentiality and Security Manager, who is based at St John's House.

Personal Property
The Trust accepts no responsibility for damage to, or loss of personal property. You are, therefore, advised to take out an insurance policy to cover your personal property against all risks.

Trust Property
You have a duty to take care of the Trust's property, especially any entrusted to you. Theft of the Trust's property will render the offender liable to dismissal. Unauthorised removal of equipment and property from the Trust's premises will be regarded as a serious matter.

Similarly, at the end of this contract, you must not retain any of the Trust's property or documentation nor, for the avoidance of doubt, any copies. Before leaving, you will be required to sign an undertaking that all the Trust's property has been returned.

Health and Safety
You have a duty under health and safety legislation to take reasonable care for the health and safety of yourself and of others who may be affected by your actions or behaviour, and to co-operate with the Trust or any other person in performing or complying with any statutory duties or requirements. It is also an offence to interfere with or misuse anything provided in the interests of health, safety or welfare. You must observe any safety rules applicable to you and wear any protective clothing appropriate to the task being performed. You must familiarise yourself with fire precautions in your place(s) of work and attend fire lectures and fire drills when instructed. Failure to observe safety requirements will be regarded as a serious matter.

Sickness and Other Absences
If you are prevented by sickness or any other reason from attending for duty, you should notify your supervisor without unreasonable delay.

If you agree to accept this Honorary Contract, I should be grateful if you would sign both copies of this letter, returning one copy to me and retaining the other for yourself.

Yours sincerely

Dr Sylvia Glenn   **Neil Norman**
Principal Clinical Psychologist   **Team Manager**

I have received a copy of this document and agree to be bound by its contents.

Signed.. Dated..............................

Document Details

Author	Shane White
Department	Head of HR Policy, Governance and Best Practice
Document Type	Manager Guidance
Document Title	Honorary Contract
Version	0.1
Date of Creation	16 May 2003
Date of Review	January 2008

Table 3:   **Process of gaining ethical approval**

Ethics	Contacts	Dates	Outcome	Action
Coventry University peer review	Research Registry Unit Coventry University ethics.uni@coventry.ac.uk	Application sent [**15.02.10**]	Peer review feedback [**12.03.10**)	Approved with minor amendments
REC	Senior Manager	Booked review [**18.03.10**]	Reference **10/H1202/32**	Submit to Black Country REC
Black Country REC	Committee Coordinator	Application posted [**23.03.10**]	Received letter Application 'valid'	Sent for ethical approval at REC [**10.05.10**]
R&D	Dudley and Walsall Mental Health Partnership Trust	Application posted [**26.03.10**]	Request to e-mail application [**25.04.10**]	Access letter of approval [**05.07.10**]
Non-NHS SSI	Birmingham East, North and Solihull REC Coordinator	Application posted [**09.04.10**]	Letter of receipt received [**16.04.10**]	**Non-NHS ethical approval given**
Non-NHS SSI	Derbyshire REC Coordinator	Application posted [**09.04.10**]	Letter of receipt received [**14.04.10**]	**Non-NHS ethical approval given**
Black Country REC	Ethics Meeting Russell Hall Hospital, Dudley.	Attended meeting [**10.05.10**]	10 days to feedback.	Await feedback
Black Country REC	Ethics Meeting Russell Hall Hospital, Dudley.	Feedback received [**18.05.10**]	60 day clock starts after resubmission.	Resubmit with minor amendments.
Black Country REC	Ethics Meeting Russell Hall Hospital, Dudley.	Resubmission [**01.06.10**]	60 day clock starts.	Await feedback
Black Country REC	Ethics Meeting Russell Hall Hospital, Dudley.	Letter received [**10.06.10**]	Favourable opinion	**NHS ethical approval given. Data collection can begin** [**21.06.10**]
Coventry University peer review	Research Registry Unit Coventry University ethics.uni@coventry.ac.uk	Confirmation for educational establishments and networking.	E-mail confirmation given [**20.09.10**]	**Data collection can include further sampling**

Appendix B

Search strategy and table of papers reviewed for Chapter One

Search strategy process for Chapter One [Eight steps] [May – October 2010]

Step 1: Bilingualism [Title] + Sub-theme [Subject terms]

	Cognitive development	Language development	Education	Psychological well being	Cultural identity	Social identity	Self-esteem	Mental Health	Total
PsycINFO	153	244	168	1	11	24	0	4	605
Medline	4	24	9	0	2	1	0	3	43
CINAHL	3	13	9	1	1	0	0	0	27
Total	160	281	186	2	14	25	0	7	**675**

Step 2: Filters: English only, references available, 1990-current year + peer reviewed journals.

	Cognitive development	Language development	Education	Psychological well being	Cultural identity	Social identity	Self-esteem	Mental Health	Total
PsycINFO	36	61	60	1	8	10	0	0	176
Medline	0	3	2	0	0	0	0	0	5
CINAHL	0	0	0	0	0	0	0	0	0
Total	36	64	62	1	8	10	0	0	**181**

Step 3: Filters: Journal articles only [Not included deafness or sign language reference]

	Cognitive development	Language development	Education	Psychological well being	Cultural identity	Social identity	Self-esteem	Mental Health	Total
PsycINFO	24	23	38	0	5	6	0	0	96
Medline	0	0	0	0	0	0	0	0	0
CINAHL	0	0	0	0	0	0	0	0	0
Total	24	23	38	0	5	6	0	0	**96**

	Cognitive development	Language development	Education	Psychological well being	Cultural identity	Social identity	Self-esteem	Mental Health
Cognitive development								
Language development	22							
Education	7	16						
Psychological well being	0	1	3					
Cultural identity	1	2	3	3				
Social identity	0	0	0	0	0			
Self-esteem	0	0	0	0	0	0		
Mental Health	0	0	0	0	0	0	0	
TOTAL	**30**	**18**	**6**	**3**	**0**	**0**	**0**	
								57

Step 5: Cited Journal articles with keywords and filters

Step 3 rendered **96** journal articles. After allowing for a cross-search of duplicated journal articles in step 4 [same journal article found through multiple searches], this rendered **68** cited journal articles.

Step 6: Exclusion of journal articles **[Table 1, p.115]**

Journal articles were assessed as to whether they explored the consequences of bilingualism on a child's psychosocial development. Of the remaining 68 journals, exclusion of **49** journal articles rendered **19** remaining journals. The **49** journal articles were removed as they reviewed other areas of bilingualism: [1] reading and writing, [2] parental or counsellor bilingualism, [3] language assessment tools, [4] Linguistics and/or policies of bilingualism, [5] Literature review, and [6] gender differences.

Step 7: Searching through remaining journal articles for secondary references

The remaining **19** journal articles were checked secondary references focussing on psychosocial development. This identified **1** further journal article which fitted into psychological well-being.

Step 8: Identifying consequences of bilingualism for literature review

For the **20** remaining journals, each article was reviewed to highlight relevance to psychosocial development. Whilst some of the remaining journal articles included consideration of more than one area of a child's development, they were selected on the basis of their primary focus. Those that only focused on cognitive development or educational achievement without considering psychosocial development were then excluded. This identified **8** journal articles which focused on cognitive development only, which were excluded **[Table 1, p.115]**. There were **12** remaining journal articles [**Table 2, p.23**].

Number of journal articles identified at each stage of the search strategy

Steps	Search Strategy	Number
1	Bilingualism [Title] + Sub-theme [Subject terms]	**675**
2	Filters: English only, references available, 1990-current year + peer reviewed journals	**181**
3	Filters: Journal articles only [Not include deafness or sign language references]	**96**
4	Cross-search of journal articles to identify number of duplicated articles	57
5	Cited Journal articles using keywords and filters	**68**
6	Exclusion of journal articles [N=49]	**19**
7	Searching through remaining journal articles for secondary references [**N=1**]	**20**
8	Identifying consequences of bilingualism for literature review [Exclusion **N=8**].	**12**

Key: search term 'Bilingualism' [Title] and the following search terms [keywords]:

Cognitive development: 🟥 Language development: 🟧 Education: 🟨 Cultural identity: 🟦 Social identity: 🟪

Reasons for removal: 🟦

Table 1: Exclusion of journal articles for Chapter One: Page 1

#	Author	Year	Title of article	Reasons for removal
1	Al-Khatib, M. A.	2006	Aspects of bilingualism in the Arab world: An introduction.	Introduction.
2	Allen, S.	2007	The future of Inuktitut in the face of majority languages: Bilingualism or language shift?	Literature review.
3	Baker, R.	1995	Communicative needs and bilingualism in elderly Australians of six ethnic backgrounds.	Assessment tools.
4	Bialystok, E.	1997	Effects of bilingualism and biliteracy on children's emerging concepts of print.	Reading and writing.
5	Bialystok, E.	2007	Cognitive effects of bilingualism: How linguistic experience leads to cognitive change.	Literature review.
6	Bialystok, E.	2009	Bilingualism: The good, the bad, and the indifferent.	Literature review.
7	Bialystok, E. McBride-Chang, C. & Luk, G.	2005	Bilingualism, Language Proficiency, and Learning to Read in Two Writing Systems.	Reading and writing.
8	Blair, S. L & Cobas, J. A.	2006	Gender Differences in Young Latino Adults' Status Attainment. Understanding Bilingualism in the Familial Context.	Gender differences.
9	Bilaniuk, L. & Melnyk, S.	2008	A tense and shifting balance: Bilingualism and education in Ukraine.	Literature review.
10	Bosch, L. & Sebastian-Galles, N.	2003	Simultaneous Bilingualism and the Perception of a Language-Specific Vowel Contrast in the First Year of Life.	Linguistics of bilingualism.
11	Byers-Heinlein, K. Burns, T.C. & Werker, J. F.	2010	The roots of bilingualism in newborns.	Parental bilingualism.
12	Craik, F. & Bialystok, E.	2005	Intelligence and Executive Control: Evidence from Aging and Bilingualism.	Literature review.
13	Dilans, G.	2009	Russian in Latvia: An outlook for bilingualism in a post-soviet transitional society.	Linguistics and policies of bilingualism
14	Edwards, J.	2004	Bilingualism: Contexts, Constraints, and Identities.	Literature review.
15	Fader, A.	2001	Literacy, Bilingualism, and Gender in a Hasidic Community.	Reading and writing.
16	Feng, A.	2005	Bilingualism for the minor or the major? An evaluative analysis of parallel conceptions in China.	Literature review.
17	Fernandez, R.C.	2000	No hablo inglés: Bilingualism and multiculturalism in preschool settings.	Literature review.
18	Francis, N.	1999	Bilingualism, writing, and metalinguistic awareness: Oral–literate interactions between first and second languages.	Reading and writing.

	Author	Year	Title of article	Reasons for removal
19	Garratt, L.C. & Kelly, T.P.	2008	To what extent does bilingualism affect children's performance on the NEPSY?	Assessment tools.
20	Gonzalez, V.	2006	Profiles of Cognitive Developmental Performance in Gifted Children: Effect of Bilingualism, Monolingualism, and Socioeconomic Status Factors.	Assessment tools.
21	Guijarro-Fuentes, P. & Geeslin, K. L	2008	Introduction to language acquisition, bilingualism, and copula choice in Spanish.	Literature review.
22	Helot, C. & Young, A.	2002	Bilingualism and language education in French primary schools: Why and how should migrant languages be valued?	Language awareness programmes.
23	Hogan-Brun, G. & Ramonienė, M.	2004	Changing Levels of Bilingualism across the Baltic.	Linguistics and policies of bilingualism.
24	King, K. & Fogle, L.	2006	Bilingual Parenting as Good Parenting: Parents' Perspectives on Family Language Policy for Additive Bilingualism.	Parental bilingualism.
25	Kuo, L.J.	2010	Beyond cross-language transfer: Reconceptualizing the impact of early bilingualism on phonological awareness.	Linguistics of bilingualism.
26	Laurent, G.	2007	Linguistic knowledge and subject knowledge: How does bilingualism contribute to subject development?	Linguistics of bilingualism.
27	Laurent, A. & Martinot, C.	2009	Bilingualism and phonological segmentation of speech: The case of English-French pre-schoolers.	Reading and writing.
28	Laurent, A. & Martinot, C.	2010	Bilingualism and phonological awareness: The case of bilingual (French–occitan) children.	Reading and writing.
29	Leikin, M. Schwartz, M. & Share, D. L.	2010	General and specific benefits of bi-literate bilingualism: A Russian–Hebrew study of beginning literacy.	Reading and writing.
30	Lin, A.M.	1996	Bilingualism or linguistic segregation? Symbolic domination, resistance and code switching in Hong Kong schools	Linguistics and policies of bilingualism.
31	Martin, D.	2003	Constructing Discursive Practices in School and Community: Bilingualism, Gender and Power.	Linguistics and policies of bilingualism.
32	Meisel, J. M.	2007	The weaker language in early child bilingualism: Acquiring a first language as a second language?	Achieving bilingualism.
33	Mumtaz, S. & Humphreys, G. W.	2001	The effects of bilingualism on learning to read English: Evidence from the contrast between Urdu-English bilingual and English monolingual children.	Reading and writing.
34	Newman, M. Trenchs-Parera, M. & Ng, S.	2008	Normalizing bilingualism: The effects of the Catalonian linguistic normalization policy one generation after.	Linguistics and policies of bilingualism.

Exclusion of journal articles for Chapter One: Page 3

	Author	Year	Title of article	Reasons for removal
35	Norbert, F.	2002	Modular perspectives on bilingualism.	Literature review.
36	Pérez-Leroux, A.T. Pirvulescu, M. & Roberge, Y.	2009	Bilingualism as a window into the language faculty: The acquisition of objects in French-speaking children in bilingual and monolingual contexts.	Linguistics of bilingualism.
37	Ramos-Sánchez, L Atkinson, D. R. & Fraga, E. D.	1999	Mexican Americans' bilingual ability, counselor bilingualism cues, counselor ethnicity, and perceived counselor credibility.	Counsellor bilingualism.
38	Reyes, I.	2006	Exploring connections between emergent biliteracy and bilingualism.	Reading and writing.
39	Rodríguez, J. L & Cadiero-Kaplan, K.	2001	Bilingualism & biliteracy: Issues of equity, access, & social justice for English language learners: Introduction to this special issue.	Reading and writing.
40	Sánchez, L.	2006	Bilingualism/Second-Language Research and the Assessment of Oral Proficiency in Minority Bilingual Children.	Assessment tools.
41	Shwartz, M. Leikin, M. & Share, D. L	2005	Bi-literate bilingualism versus mono-literate bilingualism: A longitudinal study of reading acquisition in Hebrew (L2) among Russian-speaking (L1) children.	Reading and writing.
42	Song, J.	2010	Language ideology and identity in transnational space: Globalization, migration, and bilingualism among Korean families in the USA	Language ideology.
43	Siyambalapitiya, S. Chenery, H. J. & Copland, D. A.	2009	Bilingualism and aging: Reversal of the cognate advantage in older bilingual adults.	Linguistics of bilingualism.
44	Thompson, R.H	2003	Basing Educational Anthropology on the Education of Anthropologists: Can Bilingualism and Biculturalism Promote the Fundamental Goals of Anthropology Better than Multiculturalism?	Education of anthropologists.
45	Vaish, V.	2007	Bilingualism without diglossia: The Indian community in Singapore.	Linguistics of bilingualism.
46	Valdés, G.	2005	Bilingualism, Heritage Language Learners, and SLA Research: Opportunities Lost or Seized?	Linguistics and policies of bilingualism.
47	Walch, E. Chaudhary, T. Herold, B. Obladen, M.	2009	Parental bilingualism is associated with slower cognitive development in very low birth weight infants.	Parental bilingualism.
48	Wickstrom, B-A.	2005	Can bilingualism be dynamically stable? A simple model of language choice.	Parental bilingualism
49	Wright, S.C. Taylor, D.M. & Macarthur, J.	2000	Subtractive bilingualism and the survival of the Inuit language: Heritage-versus second-language education.	Achieving bilingualism.

Exclusion of journal articles for Chapter One: Page 4

Further exclusion of Journal articles not considering psychosocial development [N=8] Key: *Cognitive development:*

Author	Year	Title of article	Methodology			Nature of study	Main findings
			Study	Measures	Sample size		
Bialystok, E & Shapiro, D.	2007	Ambiguous benefits: the effect of bilingualism on reversing ambiguous figures.	Quantitative *Two studies*	[1] Digit span. [2] Children's Embedded Figures [3] Peabody Picture Vocabulary. [4] Ambiguous figures task. [1] Digit span. [2] Ambiguous figures task [3] Embedded figure task [4] Opposite worlds task [5] Raven's Matrices. [6] Dimensional Change Card sort task.	48 children [6 years old] half were bilingual and half were English monolingual. 53 children [5.5 years old] half were bilingual and half were monolingual.	Two studies in which monolingual and bilingual children attempted to identify the alternative image in a reversible figure. Second language was a number of minority languages.	Bilingual children were more successful than monolinguals in seeing the other meaning in the images. The second study found that performance was related to success in the post-switch phase of the dimensional change card sort task.
Goetz, P.J.	2003	The effects of bilingualism on theory of mind development.	Quantitative	[1] Peabody Picture Vocabulary test. [2] Appearance-reality test. [3] Level 2 perspective-taking tasks. [4] False-belief tasks (contents). [5] False belief task (transfer).	104 children: 32 English monolingual, 32 Chinese monolingual and 40 bilingual Chinese-English speakers [3 and 4-year-olds].	Examines whether an individual's linguistic knowledge, as a speaker of a particular language or as a bilingual, *influences theory of mind development.*	4-year-olds in each group performed better than 3-year-olds. Both monolingual groups performed similarly, and the bilinguals performed better than monolinguals.
Kharkhurin, A.V.	2010	Sociocultural differences in the relationship between bilingualism and creative potential.	Quantitative	Data collected in the United States and Iran was reanalysed. [1] Picture naming test. [2] Abbreviated Torrance Test for Adults.	Russian-English bilinguals and English monolinguals in US, and Farsi-English bilinguals in US. Arab and Farsi monolinguals in Iran.	To investigate whether bilinguals and monolinguals show different patterns of creative performance in different sociocultural settings.	The influence of bilingualism on creative potential shows that the contribution of bilingual development to creative potential differs across cultures.

Author	Year	Title	Method	Instruments	Sample	Aim	Findings
Kovacs, A.M.	2009	Early bilingualism enhances mechanisms of false-belief reasoning.	Quantitative	A standard Theory of Mind [ToM] task, a modified ToM task and a control task involving physical reasoning.	32 Romanian-Hungarian bilinguals and 32 Romanian monolingual children [3-year-olds].	Early bilingualism may enhance ToM development or other capacities required by ToM tasks.	Bilingual children showed an advantage on both ToM tasks but not on the control task. This success may be due to their well-developed control.
McLeay, H.	2003	The Relationship Between Bilingualism and the Performance of Spatial Tasks.	Quantitative	A series of spatial test items involving the comparison of diagrams of pairs of knotted ropes.	41 subjects; 11 Welsh/English bilinguals and 30 monolingual English. All subjects were students on teacher training course.	To explore the evidence that bilinguals demonstrate cognitive advantages over monolinguals.	Bilinguals performed the tasks quicker than monolinguals. As well as showing greater proficiency overall, bilinguals were better able to deal with the more complex tasks.
Ricciardelli, L.A.	1992	Bilingualism and cognitive development in relation to threshold theory.	Quantitative	*English proficiency:* [1] Peabody Picture Vocabulary Test. [2] Form M. [3] Vocabulary and sentences from Wechsler Preschool and Primary Scale of Intelligence. *Italian proficiency:* [1] Alternative version of PPVT. [2] Form M. [3] New tests.	57 Italian-English bilingual children and 55 English monolingual children [5 or 6 years old].	Examined the relationship between *bilingualism and cognitive development, as predicted by threshold theory.*	Bilingual superiority was found only for those children who had attained a high degree *of bilingualism, and not for those children who* had attained lower degrees of *bilingualism.*

Exclusion of journal articles for Chapter One: Page 6

Siegal, M. Lozzi, L. & Surian, L.	2009	Bilingualism and conversational understanding in young children.	Quantitative Two experiments	*Experiment* *[1] Conversational Violations* Test to identify responses as violations of conversation. *Experiment [2]* [1] Day-Night tasks. [2] Card Sort tasks. [3] Vocabulary measures in Italian and Slovenian and the Conversational Violations Test. [4] Peabody Picture Vocabulary Test.	*Experiment [1]* 41 children: 19 Italian monolinguals and 22 Slovenian–Italian bilinguals. *Experiment [2]* 122 children: 43 Italian monolinguals and 41 Slovenian monolinguals and 38 Slovenian–Italian bilinguals.	Investigates whether *bilingualism confers* an advantage on *children's conversational understanding.*	Though comparatively delayed in L2 vocabulary, *children who were bilingual in* Italian and Slovenian generally outperformed those who were either monolingual in Italian or Slovenian. *Bilingualism can* enhance effective communication.
Verhoeven, L.	2007	Early bilingualism, language transfer, and phonological awareness.	Quantitative Longitudinal design.	*Language proficiency* [1] Auditory Discrimination. [2] Receptive and vocabulary. [3] Function Word Comprehension. [4] Sentence Imitation. [5] Story Comprehension. *Phonological awareness* [1] Rhyming. [2] Word objectification. [3] Phoneme segmentation. [4] Word blending.	75 Turkish–Dutch bilingual children from 27 kindergarten classrooms [age 5-6 years]. Language 1 and Language 2 abilities were measured at the beginning and end of kindergarten.	Investigates the relations between *early bilingualism and phonological awareness.* The relation to children's *phonological awareness was* examined.	Turkish was found to be the dominant *language* on both measurements. In addition to the expected longitudinal relations, there was evidence for *transfer* from L1 to L2.

Appendix C

Recruitment and Participant Information

THE UNIVERSITY OF **WARWICK**   **Coventry University**   **Dudley and Walsall** **NHS**
Mental Health Partnership NHS Trust

The recruitment process for all research participants will be the same. However, the method for collecting the data will be different. A sign interpreter will be available if needed. All participants will be a minimum age of 16 years.

1. Interviews with deaf bilingual young people

2. Questionnaires with hearing parents of deaf bilingual young people from group 1

Service recruitment
Services will be provided with covering letters, information sheets and consent forms specific to the participants.

↓

Participant recruitment
Potential participants will be contacted by participating services. Potential participants will be given a covering letter, information sheet and consent to be contacted form.

↓

Consent to be contacted
Through returning the consent to be contacted form, potential participants will provide the chief researcher with their contact details. The chief researcher can now directly contact participants to find out more about whether they would like to take part.

↓ (left)   ↓ (right)

Consent to be contacted <u>not</u> returned
No further contact

Consent to be contacted <u>returned</u>
The chief researcher can now contact potential participants directly to find out if they would like to know more about the research and whether they have made a decision about taking part.

Participants <u>NOT agreeing</u> to take part
No further contact

Young people <u>agreeing</u> to take part in an INTERVIEW
The chief researcher can now arrange to meet with the participant for an interview. **Consent form completed at time of interview.**

Parent's <u>agreeing</u> to take part in completing a QUESTIONNAIRE
The chief researcher can now arrange to provide a copy of the questionnaire to the participant. **Consent form given with questionnaire at time of interview with their child or sent out and returned in the post.**

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Coventry
University

Dudley and Walsall NHS
Mental Health Partnership NHS Trust

Address of service

To whom it may concern

I am contacting you to introduce to you Hayley Ford, who is involved in a research project that is supported by us. Hayley is a Trainee Clinical Psychologist working in the NHS and training at Coventry University and University of Warwick. She is interested in deafness and bilingualism.

Hayley is looking for two groups of participants to take part in her research:
1. *Deaf bilingual young people* using both British Sign Language and English Language.
2. *Hearing parents* of the deaf bilingual young people in Group 1.

*For deaf bilingual young people: You will be seen for about 1 hour to carry out an interview to explore your views on the benefits and challenges of bilingualism within deafness. The interview will take place in your preferred form of communication (BSL or English). A sign interpreter can be available if needed. * Please see the information sheet for details.

*For hearing parents: With consent from your child who is being interviewed you will be given a questionnaire which aims to explore your views on the benefits and challenges of bilingualism within deafness from the hearing parent's perspective.

All participants are told that they do not have to take part. All details will be confidential and stored in a locked cupboard. The information will only be accessible by the researchers. **No participant will be identified by name.** I enclose with this letter an information sheet outlining Hayley's research. Should you have any further questions please do not hesitate to contact me or you can contact Hayley directly on **024 7688 8328** or **hayley.ford@virgin.net.** If you are interested, please complete the **consent to be contacted form** and return it to Hayley.

Thank you.

To be signed by Service

Information sheet for deaf bilingual young people

Hello, my name is Hayley Ford. I am a researcher at Coventry University and University of Warwick. I am doing a project to find out more about the experiences of bilingualism within deafness.

What is the project all about?

I want to explore the benefits and challenges of bilingualism in deafness from the experiences of deaf bilingual young people who use both British Sign Language and English Language.

Why have I been asked to take part?

You have been asked to take part because you are a deaf bilingual young person over the age of 16 years who uses both British Sign Language and English Language.

What would I have to do?

If you decide to take part, I will meet with you to do an interview to explore your experiences on the benefits and challenges of bilingualism. The interview can be carried out in your preferred form of communication (BSL or English). As I am a hearing Person who has only some use of BSL, a sign interpreter will be available at the interview if you need it. The interview will last about 1 hour and will be done at a time and place convenient to you. It could take place in your home. With your consent the interview will be tape-recorded for later analysis.

What are the possible disadvantages of taking part?

I do not anticipate that there will be any risk or distress to you. It is your decision as to whether you take part in an interview.

What are the benefits of taking part?

The information I get from this research will help to develop an understanding of the benefits and challenges of bilingualism in deafness. I hope that this will help to inform and provide support to families and services **as appropriate**.

What if I agree and then wish to withdraw from the study?

You have the right to withdraw from the study at any point in time without question. This will not affect the treatment you are receiving from the services involved. At the time of the interview you will be given a number, which corresponds to your data, so that should you wish to withdraw your data, you can be easily identified for it being destroyed and removed.

Will my data and involvement be kept confidential?

None of the reports will have any names written on them. You will NOT be identified. All of the information you provide will be kept confidential and stored in a locked cupboard. Only the research team involved in the study will have access to this data. **Any direct quotes taken from your interview and used in the reports will be used anonymously.**

What will happen to the results of the study?

The results of the study will be written up in a report suitable for publication. You will continue to be updated about the progress of this study and you can receive a copy of the final report.

Who has reviewed the study?

The study will be reviewed by the research team involved, peer review at Coventry University, NHS ethics committee to ensure protection of participants and Research & Development.

Who can I contact for further information?

If you have any further questions or concerns, please do not hesitate to contact myself Hayley Ford: Clinical Psychology Doctorate, School of health and Social Sciences, Coventry University, Priory Street, Coventry, CV1 5FB Telephone: 024 7688 8328 E-mail: hayley.ford@virgin.net

If you have concerns or complaints that you do not wish to discuss with me, please contact: Complaints, Registry Office, Coventry University, Priory Street, Coventry, CV1 5FB

THANK YOU FOR READING THIS

I hope that you feel happy to take part in this study.

THE UNIVERSITY OF
WARWICK   **Coventry University**   **Dudley and Walsall NHS**
Mental Health Partnership NHS Trust

Consent form to be contacted

Title of research project: The experience of bilingualism within the Deaf and the hearing world: The views of deaf young people and their hearing Parent's.

Name of chief researcher: Hayley Ford, Trainee Clinical Psychologist

Name of other researchers: Dr Sarah Kent, Dr Eve Knight and Dr Sylvia Glenn

PLEASE TICK THE BOX THAT FITS:

I agree to be contacted by Hayley Ford to receive further information about the research: ☐

Name of potential participant: _____

Are you a: Deaf Bilingual young person ☐   Hearing Parent ☐

What is your preferred form of communication?   BSL ☐   English ☐

Name of person being interviewed (if you are a Hearing Parent):_____

Please contact me by (please circle):   PHONE ☐   E-MAIL ☐   POST ☐

Phone number: _____   E-mail: _____

Postal address: _____

_____

By consenting to be contacted you DO NOT consent to participate, but only to be contacted.

…………………………………………………………………………………..   …………………….. …………………….
Name of participant   Date   Signature

…………………………………………………………………………………..   …………………….. …………………….
Name of Researcher   Date   Signature

Written consent to take part for all deaf bilingual young people being interviewed

Version: 2   Date: 24.05.10

THE UNIVERSITY OF
WARWICK   Coventry University   Dudley and Walsall NHS
Mental Health Partnership NHS Trust

Consent form for deaf bilingual young people

PLEASE COULD YOU <u>INITIAL</u> ALL THAT APPLY

I fully understand what I will be asked to do if I agree to take part: ☐

I understand that the information that I will provide in this study will be kept anonymous: ☐

I understand that the information that I provide will be stored in a locked cupboard: ☐

I understand that I have the right to withdraw my data at any point in time without

explanation: ☐

I understand that I can contact the chief researcher if I have any questions: ☐

I understand that the interview will be done in my preferred form of communication: ☐

I have been given the option of needing a sign interpreter: ☐

I WOULD LIKE to take part in this study: ☐

I WOULD NOT LIKE to take part in this study: ☐

I am happy for the interview to be tape-recorded for later transcription. ☐

I am happy for my Parent/Guardian to be given a questionnaire to give their views ☐

If you agree to take part in this study please could you print and sign your name below.

Print Name: _____   Signature: _____

…………………………………………………………………………………………….   …………………….. ……………………
Name of Researcher   **Date   Signature**

Written consent for sign interpreters for the interviews with deaf bilingual young people

Version: 2   Date: 24.05.10

THE UNIVERSITY OF **WARWICK**   **Coventry University**   **Dudley and Walsall NHS**
Mental Health Partnership NHS Trust

Consent form for sign interpreter

PLEASE COULD YOU <u>INITIAL</u> ALL THAT APPLY

I fully understand what I will be asked to do if I agree to act as the sign interpreter:

☐

I will respect the anonymity of all research participants involved:

☐

I understand that the information provided by the research participants is confidential and I will respect this confidentiality:

☐

I understand that for the research participants wishing to do the interview in sign language that I will be responsible for interpreting this information between the interviewer and the research participant:

☐

I understand that the research participant has been given the option of needing a sign interpreter:

☐

I WOULD LIKE to act as the interpreter for the named research participant:

☐

I WOULD NOT LIKE to act as the interpreter for the named research participant:

☐

If you agree to act as the interpreter could you please print and sign your name below.

Print Name: _____   Signature: _____

………………………………………………………………………………………….
Name of research participant

……………………………………………………………………………………….   …………………….. …………………….
Name of Researcher   Date   Signature

THE UNIVERSITY OF
WARWICK   **Coventry University**   **Dudley and Walsall NHS**
Mental Health Partnership NHS Trust

Debriefing sheet for deaf bilingual young people

"The experience of bilingualism within the Deaf and the hearing world: The views of deaf young people and their hearing Parent's".

The majority of the **research** that has focused on bilingualism has done so from the perspective of two spoken languages. The **research** that has focused on bilingualism with one signed language and one spoken language has done so mainly from the perspective of the 'hearing community'. The **research** that has focused on this form of bilingualism from the perspective of the 'deaf' community has mainly been done with children.

This study aims to fill these gaps in the **research** by exploring bilingualism with one signed language (British Sign Language) and one spoken language (English) from the perspective of the 'deaf' community with young people who have been through education. This group was chosen as it will provide participants the opportunity to reflect on their experiences of bilingualism within deafness and how this can impact on them later in life. It was decided to focus on the views of deaf young people with hearing parents as according to the **research** this accounts for 90-95% of the deaf community. It will also allow for exploration of the benefits and challenges that may arise from the language use within this family dynamic.

Why have I been given a number? Please keep this number safe. It will be written on any information that you have provided to the research team, such as consent form, tape-recording and transcript of your interview. This number will be assigned to your name on a participant record sheet (which will be kept separate from your data) to help to accurately identify your data should you wish to withdraw from the study at any time.

What will happen to my data? Your data will be stored in a locked cupboard based at Coventry University. The tape-recording of your interview will be transcribed using a password protected computer. All of the interview transcripts will be analysed to look for themes in the views of deaf young people.

Can I be identified from the data? No. All names will be removed from the data.

Many thanks for taking part in this research. If you would like to contact the team at any time for any reason, please contact Hayley Ford or Eve Knight on 024 7688 8328 or hayley.ford@virgin.net

THE UNIVERSITY OF WARWICK   Coventry University   Dudley and Walsall NHS
Mental Health Partnership NHS Trust

Information sheet for hearing parents

Hello, my name is Hayley Ford. I am a researcher at Coventry University and University of Warwick. I am doing a project to find out more about the experiences of bilingualism within deafness.

What is the project all about?

I want to explore the benefits and challenges of bilingualism in deafness from the views and experiences of hearing parent's of deaf bilingual young people (over the age of 16 years) who use both British Sign Language and English Language.

Why have I been asked to take part?

You have been asked to take part because you are the hearing parent of one of the potential deaf bilingual young people taking part in an interview.

What would I have to do?

If you decide to take part you would be given a questionnaire either at the time of the interview with your child or sent it the post with a S.A.E provided to return directly to myself. You would be asked to complete the questionnaire to represent your views on the benefits and challenges of bilingualism from the perspective of a hearing parent with a deaf bilingual child.

What are the possible disadvantages of taking part?

I do not anticipate that there will be any risk or distress to you or your child. It is your decision as to whether you complete the questionnaire.

What are the benefits of taking part?

The information I get from this research will help to develop an understanding of the benefits and challenges of bilingualism in deafness. I hope that this will help to inform and provide support to families and services **as appropriate.**

What if I agree and then wish to withdraw from the study?

You have the right to withdraw from the study at any point in time without question. This will not affect the treatment your child is receiving from the services involved. You will be given a number, which corresponds to your data, so that should you wish to withdraw your data can be easily identified for it being destroyed and removed from the study.

Will my data and involvement be kept confidential?

None of the reports will have any names written on them. You will NOT be identified. All of the information you provide will be kept confidential and stored in a locked cupboard. Only the research team involved in the study will have access to this data. **Any direct quotes taken from your questionnaire and used in the reports will be used anonymously.**

What will happen to the results of the study?

The results of the study will be written up in a report suitable for publication. You can receive a copy of the final report if you wish.

Who has reviewed the study?

The study will be reviewed by the research team involved, peer review at Coventry University, NHS ethics committee to ensure protection of participants and Research & Development.

Who can I contact for further information?

If you have any further questions or concerns, please do not hesitate to contact myself Hayley Ford: Clinical Psychology Doctorate, School of health and Social Sciences, Coventry University, Priory Street, Coventry, CV1 5FB, Telephone: 024 7688 8328, E-mail: hayley.ford@virgin.net

If you have concerns or complaints that you do not wish to discuss with me, please contact: Complaints, Registry Office, Coventry University, Priory Street, Coventry, CV1 5FB

THANK YOU FOR READING THIS
I hope that you feel happy to take part in this study.

Version: 2   Date: 24.05.10

THE UNIVERSITY OF
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Mental Health Partnership NHS Trust

Consent form for hearing parents'

PLEASE COULD YOU <u>INITIAL</u> ALL THAT APPLY

I fully understand what I will be asked to do if I agree to take part:

I understand that the information that I will provide in this study will be kept anonymous:

I understand that the information that I provide will be stored in a locked cupboard:

I understand that I have the right to withdraw my data at any point in time without explanation:

I understand that I can contact the chief researcher if I have any questions:

I understand that I can only complete this questionnaire with consent from my child:

I WOULD LIKE to take part in this study:

If you agree to take part in this study please could you print and sign your name below.

Print Name: _____   **Signature:** _____

…………………………………………………………………………………………………….   ……………………….. …………………….
Name of Researcher   Date   Signature

131

Version: 2   **Date: 24.05.10**

Debriefing sheet for hearing parents

"The experience of bilingualism within the Deaf and the hearing world: The views of deaf young people and their hearing Parent's".

The majority of the **research** that has focused on bilingualism has done so from the perspective of two spoken languages. The **research** that has focused on bilingualism with one signed language and one spoken language has done so mainly from the perspective of the 'hearing community'. The **research** that has focused on this form of bilingualism from the perspective of the 'deaf' community has mainly been done with children.

This study aims to fill these gaps in the **research** by exploring bilingualism with one signed language (British Sign Language) and one spoken language (English) from the perspective of the 'deaf' community with young people who have been through education. This group was chosen as it will provide participants the opportunity to reflect on their experiences of bilingualism within deafness and how this can impact on them later in life. It was decided to focus on the views of deaf young people with hearing parents as according to the **research** this accounts for 90-95% of the deaf community. It will also allow for exploration of the benefits and challenges that may arise from the language use within this family dynamic.

Why have I been given a number? Please keep this number safe. It will be written on any information that you have provided to the research team, such as consent form and questionnaire. This number will be assigned to your name on a participant record sheet (which will be kept separate from your data) to help to accurately identify your data should you wish to withdraw from the study at any time.

What will happen to my data? Your data will be stored in a locked cupboard based at Coventry University. All of the questionnaires will be analysed to look for themes in the views of the hearing parents.

Can I be identified from the data? No. All names will be removed from the data.

Many thanks for taking part in this research.
If you would like to contact the team at any time for any reason, please contact Hayley Ford or Eve Knight on 024 7688 8328 or hayley.ford@virgin.net

Appendix D

Schedules

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Coventry University

Dudley and Walsall NHS
Mental Health Partnership NHS Trust

Interview schedule for deaf bilingual young people

About you and your family

1. Can you tell me about you and your family? *Prompt: Parents, siblings, age, school, work?*

2. What was the cause of your deafness? **Prompt***: How would you describe your level of deafness to someone else? What is the severity of deafness? What age was you diagnosed?*

3. Do you have any hearing aids or a cochlear implant? If so what age was this fitted? How do you feel about this? **Prompt***: What was it like adjusting to these aids?*

4. Growing up, what languages did you use at home and what languages do you use now? **Prompt***: What impact does your language use have on your role within your family?*

5. Can you tell me about the languages used in your family? *Prompt*: family, hearing, and sign?

Language use

1. *When* did you first learn to sign? *Prompt: How did you learn to sign, formal or informal?*

2. Why did you learn to sign? *Prompt: Who made the decision for you to sign: Parents or Professionals?*

3. When you sign do you use 'voice on' or voice off'? Why have you made this decision?

4. *When* did you learn English? *Prompt: Speech, reading and writing like?*

5. How well can you use the two languages of Sign and English? **Prompt***: Exams in English Language…reading, writing? What level? Exams in BSL and was this offered in education?*

6. What were you told was the best language for you to use? How do you feel about this?

7. Has your language use changed over time and if so how?

8. What impact do you think the age at which you acquire both languages has bilingualism?

Education

1. What schools, colleges, and university have you attended?

Prompt: Are they mainstream or specialist deaf schools? How do you feel about this?

2. What languages did the teachers use in school? What do you think about this?

134

3. What about with your friends at school, what languages did you and they use?

4. Did you have additional language support at school? **Prompt**: Did you receive any sign interpreter support? *How did you feel about this when you were in school now?*

5. Looking back on your time at school what language do you think would have been best for you? *Prompt*: *Have you done as well as you would have liked to have done in school?*

6. Has school given you good enough language for what you want to do now? Why? Why not?

Communication and interaction

1. What language do you prefer to use now when communicating with other people and why? *Prompt: Speech, reading and writing, sign? Where: school, work, family and friends?*

2. What is it like communicating with others that are not very competent in sign language?

3. How has your language use impacted on your hobbies and interests?

4. Some people feel that they fit in with hearing people, others with deaf people, and some that fit into both, what about you? What is this like?

Views on bilingualism

1. What was it like learning two languages?

2. What support did you get to manage the use of both languages? *Prompt: home and school?*

3. Would you say that you are more dominant in one language than the other? Why? **Prompt**: *Which language do you tend to use and which language do you prefer to use?*

4. Which language do you see as your first and which as your second language? Why?

5. Did having one language first help or get in the way of learning the second language?

      Or what has it been like using two languages at the same time?

6. What have been the **benefits**? What have been the **challenges** of using two languages? *Prompt: As part of your education, social life, family, happiness and work?*

7. How do you think your life would be different if you had only sign or only spoken language?

8. What impact do you think being bilingual has had on your life plans or will have on your future life plans? **Prompt:** *Career plans, family, relationships, children?*

9. Do you wish that anything could have been different with your language use growing up?

10. Looking back on your experiences what would your advice be about language choice to a parent of a deaf baby? **Prompt**: What would your advice be to a deaf young person learning two languages? What advice would you give to professionals helping families?

Interview Schedule process for deaf bilingual young people

About you and your family

1. Can you tell me about you and your family? *Prompt: Parents, siblings, age, school, work?*

2. What was the cause of your deafness? ***Prompt**: How would you describe your level of deafness to someone else? What is the severity of deafness?* What age was you diagnosed?

3. Do you have any hearing aids or a cochlear implant? If so what age was this fitted? How do you feel about this? ***Prompt**: What was it like adjusting to these aids?*

4. Growing up, what languages did you use at home and what languages do you use now? ***Prompt**: What impact does your language use have on your role within your family?*

5. Can you tell me about the languages used in your family? *Prompt*: family, hearing, and sign?

Language use

1. *When* did you first learn to sign? *Prompt: How did you learn to sign, formal or informal?*

2. Why did you learn to sign? *Prompt: Who made the decision for you to sign: Parents or Professionals?*

3. When you sign do you use 'voice on' or voice off'? Why have you made this decision?

4. *When* did you learn English? *Prompt: Speech, reading and writing like?*

5. How well can you use the two languages of Sign and English? ***Prompt**: Exams in English Language…reading, writing? What level? Exams in BSL and was this offered in education?*

6. What were you told was the best language for you to use? How do you feel about this?

7. Has your language use changed over time and if so how?

8. What impact do you think the age at which you acquire both languages has bilingualism?

Education

1. What schools, colleges, and university have you attended?

Prompt: Are they mainstream or specialist deaf schools? How do you feel about this?

2. What languages did the teachers use in school? What do you think about this?

3. What about with your friends at school, what languages did you and they use?

4. Did you have additional language support at school? **Prompt**: Did you receive any sign interpreter support? *How did you feel about this when you were in school now?*

5. Looking back on your time at school what language do you think would have been best for you? *Prompt*: *Have you done as well as you would have liked to have done in school?*

6. Has school given you good enough language for what you want to do now? Why? Why not?

Communication and interaction

1. What language do you prefer to use now when communicating with other people and why?

Prompt: Speech, reading and writing, sign? Where: school, work, family and friends?

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1. What was it like learning two languages?

2. What support did you get to manage the use of both languages? *Prompt: home and school?*

3. Would you say that you are more dominant in one language than the other? Why?

Prompt: Which language do you tend to use and which language do you prefer to use?

4. Which language do you see as your first and which as your second language? Why?

5. Did having one language first help or get in the way of learning the second language?

     Or what has it been like using two languages at the same time?

6. What have been the **benefits**? What have been the **challenges** of using two languages?

Prompt: As part of your education, social life, family, happiness and work?

7. How do you think your life would be different if you had only sign or only spoken language?

8. What impact do you think being bilingual has had on your life plans or will have on your future life plans? **Prompt:** *Career plans, family, relationships, children?*

9. Do you wish that anything could have been different with your language use growing up?

10. Looking back on your experiences what would your advice be about language choice to a parent of a deaf baby? **Prompt**: What would your advice be to a deaf young person learning two languages? What advice would you give to professionals helping families?

GREEN = Additions to interview schedule after **pilot interview** with deaf bilingual person.

RED = Additions to interview schedule after interview **1**.

BLUE = Additions to interview schedule after interview **2**.

PURPLE = Additions to interview schedule after interview **3**.

ORANGE = Additions to interview schedule after interview **4**.

Feedback from Speech and Language Therapist [SALT] on Interview Schedule

12th October 2010

<u>*Feedback to Hayley Ford re Interview Schedule*</u>

From: Speech & Language Therapist

_____

My line manager who is also a postgraduate student tutor had a look at your interview schedule with me and we would like to send you the following feedback:

You let us know this <u>written</u> interview schedule has/is being designed for young people (at least 16 years or older)

Is this interview schedule to be completed independently by young people who participate in your study?

If the young people have to complete it by themselves, we feel

	The test/language is too dense –i.e. too many questions and sub questions *Recommendation: reduce the interview schedule to about 10 questions*
	"How do you feel?" In our experience, many young deaf people who rely on BSL will not understand "feel" in this context and will say 'OK' too everything (too abstract)
	We identified the following words in your test that some young deaf people may not understand (–>wide range of reading ages in the young adult deaf population): Benefits; challenges; impacted; competent; dominant; siblings; diagnosed; role; adjusting...
	There are too many closed questions in this draft of your interview schedule

Regarding recruitment of subjects for your study, please write directly to [School]

Questionnaire for Hearing Parents

I am interested in exploring the views and experiences of hearing parent's with deaf bilingual children to find out what it is like having a child who can use two languages, when one is a signed language and one is a spoken language. This questionnaire will be asking you some questions about your experiences. Please say as much or as little as you feel comfortable.

About you:

1. Are you the: Mother   Father   Other (please state) …………………………

2. Can you sign?   Yes   No

3. When did you learn? …………………………………………………………………………………………………..

4. How well can you sign? ……………………………………………………………………………………………

……

About your child:

1. How old was your child when they were diagnosed as deaf? …………………………………………………

2. What was the cause of the deafness? …………………………………………………………………………………

……

3. What languages did you use with your child before they went to school?

……

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4. How old was your child when they started to learn to sign? ……………………………………………………

……

5. How did your child learn to sign? …………………………………………………………………………………………

……

……

6. How well do you think your child does in sign and English (spoken, written and reading)?

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Language use at home

1. What languages are used at home with your child? How do you feel about this?

- From the parent(s)

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- From siblings (if applicable)

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Decisions for Language choice

1. What were the decisions that you made regarding language choice for your child?

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2. What impact did these decisions have on your child's life?

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3. Have your decisions regarding language choice changed over time? Why? Why not?

……

……

……

4. What advice did you receive from professionals about language choice and how do you feel about this now?

………

………

………

………

Education

1. What schools did your child go to?   What was the language used for this education?

- Primary ………………………………………………………   ……………………………………………………………………….

………

- Secondary ………………………………………………   ………………………………………………………………………

………

2. How did you make the decisions as to what schools your child should go to and what has been the impact of these decisions, how do you feel about this? ……………………………………………………

………

………

………

………

Bilingualism

1. Now that your child defines themselves as bilingual, what do you see as the benefits and challenges of your child using two languages? ……………………………………………………………………..

………

………

………

2. Looking back what would you advise to a Parent with a deaf baby about language choice?

………

………

………

Appendix E

Analysis

Reliability and validity of Interpretative Phenomenological Analysis [IPA]

Interpretative Phenomenological Analysis

IPA is an approach to qualitative research with an idiographic focus, as it aims to explore how participants make sense of their worlds, and to understand their experiences. It is concerned with an individual's perception of an event, as opposed to an objective account, and emphasizes that research is a "dynamic process with an active role for the researcher in the process" (Smith, 2008, p.53).

Reliability and validity in IPA

In searching for connections across themes, support from Smith, Flowers, and Larkin (2009) were taken, and further procedures for ensuring reliability and validity of analysis of the data were also taken from Smith (2008). The transcripts were compiled into cases and themes were identified. This aided the process of analysing each theme, whilst maintaining the complexity of individual cases. The contextualisation process of looking at connections between themes to identify contextual elements occurred with the superordinate theme 'understanding deafness and significance of being deaf'. The subordinate themes for this superordinate have grouped together to better understand the context of understanding deafness.

The polarization process of examining transcripts for oppositional relationships occurred with the superordinate them 'belonging within their own world'. During the process of clustering themes, those fitting into 'belonging within their own world' originally created a divide between the Deaf world and the Hearing world. However, these could be based on the researcher's own assumptions that the two worlds are separate. Instead, a divide was created between being '*part o*f' and feeling '*isolated'* in the deaf and the hearing worlds. The subsumption process in which a theme acquired a superordinate status as it brought together related themes occurred for the superordinate theme 'controlling access to language'. The subordinate themes became 'influence of parents' and 'fighting the education system'.

Coding of the transcripts by more than one researcher independently was adopted to determine inter-rater reliability, and checking of the researchers themes was adopted to determine independent audits. In qualitative research the purpose of comparing the coding is to triangulate their perspectives in order to increase the consistency of the analysis. The

procedures of triangulation, disconfirming case analyses and reflexivity of the researcher are discussed. Another method of validating the data was to measure the reoccurrence of themes across cases. According to Smith, Flowers, and Larkin (2009) for an emergent theme to be classified as recurrent it needs to occur in at least a third or a half of cases.

Triangulation

Smith, Flowers, and Larkin (2009) referred to triangulation to validate date. Triangulation makes use of combinations of methods to facilitate potentially more valid interpretations. Data triangulation involves collecting accounts from a range of participants. Within this study, data were collected from a range of schools with spoken, sign and bilingual teaching. Investigator triangulation involves the use of more than one researcher to reflect multiple viewpoints. The data were shared with two clinicians supervising this research to gain multiple perspectives. Finally, method triangulation entails the use of different methods to collect information. This study primarily explores the experiences of deaf bilingual young people through interviews. But it also explores the views of their hearing parents through a questionnaire.

Disconfirming case analysis

Having identified the emergent themes the researcher looked for disconfirming cases, which involved systematically searching through the data and identifying the data that did not fit into these themes. The first theme included an emphasis on the 'value of education' being important for achieving good exam results. In deaf schools, the emphasis was on developing friendships with deaf peers to be accepted into the deaf culture. On reflection, this has already emerged within the superordinate theme of 'belonging within their own world'. The second theme is 'transitions' in their life, such as work, or into adulthood. These adjustments fit into the superordinate theme of 'belonging within their own world'.

Reflexivity and the hermeneutics cycle

According to Smith, Flowers, and Larkin (2009) the hermeneutics cycle is concerned with the dynamic relationship between the part and the whole. It is a cycle of change whereby each person has their own assumptions, beliefs and interpretations of the world. Double hermeneutics of this cycle occurs whereby the researcher is making sense of the participant making sense of their experience (**Figure 3**).

Figure 3:   **Double hermeneutics cycle**
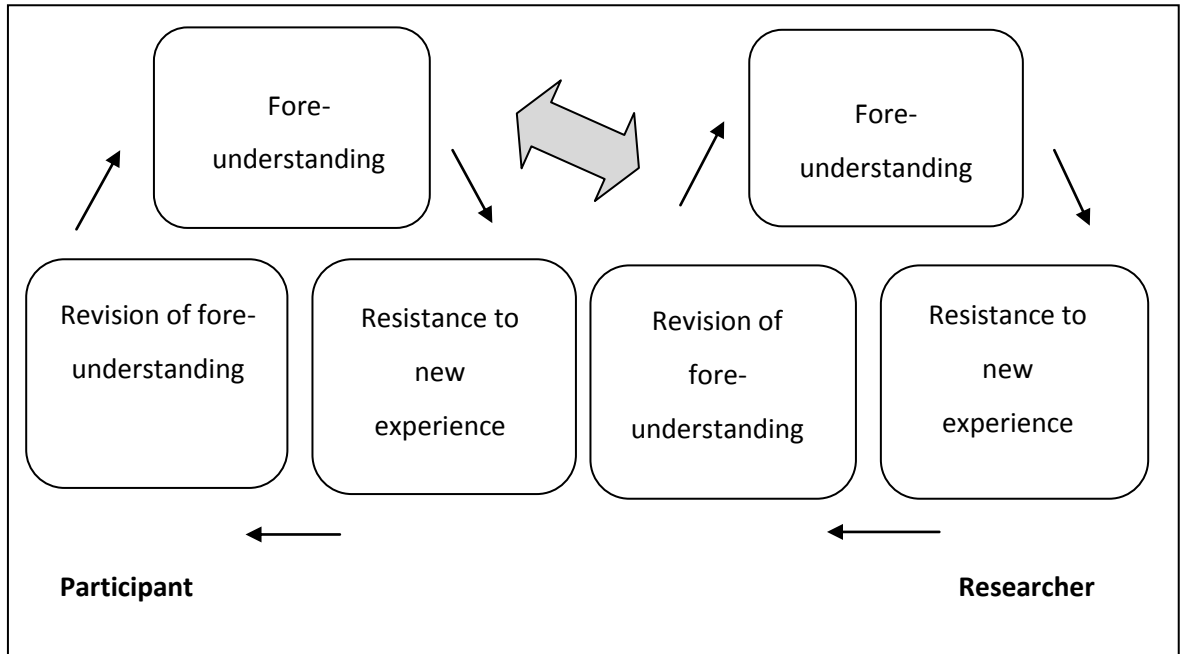
Sensitivity to context

Position of the researcher: Acknowledgement that the researcher is hearing is imperative to this research with deaf participants. During the interviews there was awareness that the participants could have been holding back in giving their views and experiences of hearing people. They may have presented with socially acceptable views towards hearing people, so as to not cause any offence. This was apparent in some of the interviews. With a deaf researcher they might have opened up more. The researcher emphasized their access to level one BSL, which is an attempt to relay some understanding of accessing their deaf world.

Position of the interpreter: A sign interpreter was available if needed, as a language bridge between the hearing researcher and deaf participant. The interpreters were only used for clarification and all participants with an interpreter chose to use spoken language for the interview. Having this triangle of people for the researcher created feelings of a divide between them, with the interpreter aligning with the participant. This was despite the environment adhering to the interpreter sitting next to the researcher so as to create visual exposure in accessing sign interpretations.

Position of the parents: For those participants who chose to have their parents present at the interview this may have influenced their responses. Being aware that their parents had ultimately influenced their language development, they may not have wished to sound ungrateful for their support by discussing their challenges within their bilingual experiences. Consequently, they may have opened up more without their parents being present. The researcher was also aware that the parents would give their own views, which meant it could have been difficult for the participant to challenge with a different perspective.

Context of the interview: The interviews took place at the participants' home, school and one through Telelink. For the interviews at home, participants could have been aware of their parents' presence, even if they were not physically in the room. The interviews at the school held a power of position for the researcher as there were links with authority figures at this school. Even though confidentiality was explained, participants could have felt uncomfortable discussing any difficulties with their education. Finally, the Telelink created some difficulty with engagement as for deaf people the visual environment is imperative.

Table 5: Chronological list of emergent themes across cases [P = Participant]

P1	P2	P3	P4	P5	P6	P7
Significance of deafness	Attach to hearing aid	Significance of deafness	Significance of deafness	Significance of deafness	Significance of deafness	Attach to hearing aid
Impact of other people	Significance of deafness	Attach to hearing aid	Impact of other people	Attach to hearing aid	Part of the deaf world	Adjustment to language
Attach to hearing aid	Impact of other people	Language choice	Attach to hearing aid	Adjustment to language	Attach to hearing aid	Impact of other people
Language choice	Adjustment to language	Adjustment to language	Adjustment to language	Self-identity	Influence of parents	Influence of parents
Influence of parents	Part of the deaf world	Part of the deaf world	Language choice	Language choice	Language choice	Significance of deafness
Not fitting into both worlds	Isolated in the hearing world	Isolated in the hearing world	Influence of parents	Isolated in the hearing world	Impact of other people	Self-identity
Part of the deaf world	Not fitting into both worlds	Self-identity	Isolated in the hearing world	Not fitting into both worlds	Adjustment to language	Part of the deaf world
Fitting into both worlds	Self-identity	Isolated in the deaf world	Fighting the education system	Part of the hearing world	Self-identity	Language choice
	Fitting into both worlds	Fighting the education system	Not fitting into both worlds	Impact of other people	Fitting into both worlds	Isolated in the deaf world
	Influence of parents	Influence of parents	Fitting into both worlds	Part of the deaf world	Isolated in the hearing world	Isolated in the hearing world
		Impact of other people	Isolated in the deaf world	Fighting the education system	Not fitting into both worlds	Fitting into both worlds
		Not fitting into both worlds	Self-identity	Fitting into both worlds	Part of the hearing world	Not fitting into both worlds
		Part of the hearing world	Part of the deaf world		Isolated in the deaf world	
		Fitting into both worlds	Part of the hearing world			

Table 6: Initial coding and emergent themes identified: Inter-rater reliability of coding

This extract is taken from identifier 2. The text in **bold** is the interviewer transcript. The remaining text is the participant transcript.

Emergent themes	Lines	Transcript	Descriptive comments	Linguistic comments	Conceptual comments
Attached to cochlear implant	41	I would say that my deafness is fully deaf when I got this [CI] thing on I can hear anything so umm once I have this on I would say on this side [left] I am a bit deaf but on this side [right] I can hear everything once I take it off I am fully deaf so...	Fully deaf with cochlear implant	Repeats fully deaf 'thing on'	Feeling detached to cochlear implant
	44	**Is it the one Cochlear implant?**	Fully deaf	'thing on' CI	
	45	Yes it helps me with hearing.			
Attached to cochlear implant	46	You said you had it [CI] fitted at two and a half years and so do you remember much about having it fitted because it is a young age isn't it?			Vulnerable period
Vulnerable	48	Not much we have talked about it what happened then I can see some photos of the scar and the bandages I had but when I had the operation I couldn't remember I was too young to remember.	Photos of scar bandage Photos of scar and bandages	scar bandage operation	
Disability Vulnerable	51	**What have you been told about that time in your life when you had it fitted?**			
	52	Talking about how many days we have been in hospital and umm the scar is big and goes across round my ear I can remember talking about having the bandages I had to shave my hair off to do the operation I had to have bandages that was about it really.	Talk with family about hospital Time in hospital	'had to have' 'about it really'	Feeling out of control Detached from self
	55	You seem quite positive about having the Cochlear Implant have I got that right that you seem quite positive?			
	57	Yeh.			
Flexibility of language	58	**Growing up what languages did you use within the home and what languages do you use now?**	Speak at home and use BSL with friends.	'We speak' 'take this off' Links to line 42.	Sense of belonging
Attached to CI Influence of parents	60	Umm we speak when I'm here [Home] but when I'm talking to my deaf friends I will use BSL when I go into the shower I take this [CI] off we can sign I won't be able to hear but I have this on most of the time we talk most of the time really we sign a little bit BSL based.	Friends with BSL	'we talk we sign' Talk BSL	Detached to cochlear implant.
Influence of parents	64	**So you change between sign and speech, are there times when you use both?**	Two languages help with deafness		
	65	Yeh.			
Flexibility of language	66	**What impact do you think having two languages has on your role within your family?**		Straight away 'With my deafness'	Connect to deaf
Hearing and deaf world are integrated	67	Umm I think it helped because with my deafness when we communicate with sign I can understand it straight away if we talk I can understand it straight away as well so I think it helped me much really.		Repeats 'straight away'	Sense of identity

Appendix F

Author guidelines for journals

Author Guidelines of Journal for Chapter One

International Journal of Bilingual Education and Bilingualism

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Manuscript preparation
1. General guidelines
- Papers are accepted in both American and British English. Consistency throughout the paper is expected.

- A typical article will not exceed 7000 words. Papers that greatly exceed this will be critically reviewed with respect to length. Authors should include a word count with their manuscript.
- Manuscripts should be compiled in the following order: abstract; keywords; main text; acknowledgments; appendixes (as appropriate); references; table(s) with caption(s) (on individual pages); figure caption(s) (as a list).
- Abstracts of no more than 200 words are required for all papers submitted.
- Each paper should have 5 or 6 keywords.
- One author should be identified as the Corresponding Author.
- For all manuscripts non-discriminatory language is mandatory. Sexist or racist terms should not be used.
- Authors must adhere to SI units. Units are not italicized.
- When using a word which is or is asserted to be a proprietary term or trade mark, authors must use the symbol ® or TM.

2. Style guidelines
Description of the Journal's article style, Quick guide
Description of the Journal's reference style, Quick guide
Any consistent spelling style is acceptable. Use single quotation marks with double within if needed.
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Guide to using mathematical symbols and equations

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Author Guidelines of Journal for Chapter two

Deafness and Education International

Scope and Types of Contribution
Deafness & Education International is an international peer reviewed journal providing a forum for teachers and other professionals involved with the education and development of deaf infants, children and young people. Submissions may fall within the areas of linguistics, education, personal-social and cognitive developments of deaf children, spoken language, sign language, deaf culture and traditions, audiological issues, cochlear implants, educational technology and educational issues that impinge on deaf children and young people.

Types of Contribution Include:
• **Original Research Papers should usually be a maximum of 7000 words**, authors intending to submit longer papers should contact the editor. Papers should be divided into the following sections: Introduction; Methods; Results; Discussion.
• Short Communications/Work in Progress Reports should contain a maximum of 1500 words. These should describe completed projects of short duration or short papers on incomplete new projects
• Case Reports should be a maximum of 3000 words and should include an introduction, report of case/s and discussion.
• Book Reviews should be emailed in a Microsoft Word Document to the Book Reviews Editor, Stevie Mayhook (steviem@ewing-foundation.org.uk). Reviews should include full citation information for the reviewed book.

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Articles must be submitted online at http://dei.edmgr.com. Instructions on how to register and submit a paper online are available at this URL and author tutorials can be found here.

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When submitting a revised article you must upload: (i) a text file in MS Word or rtf format, containing the revised text, references, tables and figure captions, prepared to the specification outlined below. LaTeX2e files will also usually be acceptable; (ii) a separate high resolution image file of each figure (see guidelines below); (iii) a response to the referees' comments, as a Word or PDF file.

Conflict of Interest Notification: Relationships that could be viewed as presenting a potential conflict of interest must be disclosed to the Editor at submission stage, on the title page, or on a separate sheet following the title page. If there are no conflicts of interest, authors should explicitly state that there are none.

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In preparing the manuscript as a Word or rtf file, there is no need to format the article to a specific layout or template, but please include italic or bold type where necessary. Manuscripts must be written in English. Double spacing should be used throughout all portions of your manuscript and all pages should be numbered consecutively. Consistency in spacing, punctuation, and spelling is essential. **The journal uses 'ize' spellings, e.g. 'characterize' not 'characterise'.**

Papers should be set out as follows with each section beginning on a separate sheet: title page, conflict-of-interest notification, abstract and key words, text, acknowledgements, references, tables, captions to illustrations.

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The abstract should consist of not more than 250 words summarising the contents of the article.
References should be presented in the Harvard style. References should be cited in the text as: (author, date: page). Where reference is made to more than one work by the same author, published in the same year, identify each citation in the text as follows: (Collins, 1998a), (Collins, 1998b). Where multiple authors are listed in the reference, please cite in the text as 'Maxwell et al. (1999)'.An alphabetical references section should follow the text, formatted as follows: (where possible the DOI for the reference should be included at the end of the reference)

Journal articles: Lepore, F.E. (2002) 'False and non-localizing signs in neuro-ophthalmology', Current Opinion in Ophthalmology 13 (1): 371-374.

Book: Hare, R.D and Schalling, D. (1978) Psychopathic Behaviour: Approaches to Research. New York: Wiley.

Article in Book: Rance, G. Dowell, R.C. (1997) 'Speech processor programming', in. G.M. Clark, R.S.C Cowan and R.C. Dowell (eds) Cochlear Implantation for Infants and Children – Advances, pp. 147-170. San Diego: Singular.

E-Journal: Evans, C. (2009) 'Altered amino acid excretion in children with autism', Nutritional Neuroscience 11(3), URL (consulted August, 2009): http://www.ingentaconnect.com/content/maney/nns.

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