

**A MIXED METHODS STUDY OF THE RESILIENCE SKILLS OF CHILDREN AND  
YOUNG PEOPLE AGED 11-15 WITH A MILD MODERATE HEARING LOSS**

By

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# **Abstract**

This study investigated the resilience skills of 29 Children and young people (CYP) aged 11-15 with a mild moderate hearing loss (MMHL). An exploration of the perceived resilience skills of the CYP with MMHL in this study were compared to the skills of their peers with expected levels of hearing (ELH) – 30 CYP and a severe profound hearing loss (SPHL) – 24 CYP. The research question asked, ‘How resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?’

There were three phases to this study: phase one involved a focus group of CYP with ELH, MMHL and SPHL. This group was asked to pilot the research tools, language assessments and the questionnaire devised specifically for the study as well as exploring the concept of ‘resilience’. The findings of the focus group that comprised of CYP with hearing as well as a hearing loss (HL) identified that resilience was a word used consistently throughout school, but they all agreed that they neither understood what it meant nor what it meant to be a resilient person. The phrases associated to the researcher’s definition of resilience used as part of the research were presented to the CYP and they discussed what each phrase meant to them. In phase two, all 83 participants; 30 ELH, 29 MMHL and 24 SPHL completed assessments of receptive and expressive language and the specifically devised

questionnaire. The language assessments highlighted that the CYP with MMHL presented abilities commensurate with their chronological age. The questionnaire responses identified differences between learners with MMHL and those with ELH and SPHL. The key areas related to explaining their HL and audiological equipment to others; lack of organisational skills; leading a team; discussing emotions with close family and friends, and communication skills. Phase three involved semi-structured interviews with a group of nine CYP with MMHL to drill down into the questionnaire responses and address some of the themes the analysis highlighted.

The data from phase two and three suggested that CYP with MMHL lacked the skills underpinning resilience and were unable to demonstrate such skills in everyday activities. They identified that, because of their higher language abilities, they received limited support from Teachers of the Deaf (ToDs). The CYP with MMHL believed specific resilience skills need to be learnt and practised. Opportunities to employ such skills in school and in social situations appear limited. A factor identified was parental anxiety associated with the belief their child would be vulnerable due to their HL.



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*“As soon as I saw you, I knew a grand adventure was about to happen.”*

*(A.A. Milne 1882 -1956)*

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## List of Abbreviations

<b>ALNCo</b>	Additional Learning Needs Coordinator
<b>AOAE</b>	Automated Otoacoustic Emission
<b>ASK</b>	All Special Kids
<b>BAHA</b>	Bone Anchored Hearing Aid
<b>BATOD</b>	British Association of Teachers of the Deaf
<b>BPVS</b>	British Picture Vocabulary Scale
<b>BSAG</b>	Bristol Social Adjustment Guide
<b>BSA</b>	British Society of Audiology
<b>BTE</b>	Behind The Ear
<b>CALIS</b>	Children’s Anxiety Life Interference Scale
<b>CAQDAS</b>	Computer-Assisted Qualitative Data Analysis Software
<b>CATS</b>	Children’s Automatic Thoughts Scale
<b>CBCL</b>	Child Behaviour Check List
<b>CI</b>	Cochlear Implants
<b>CRIDE</b>	Consortium for Research in Deaf Education
<b>CYP</b>	Children and Young People
<b>DLD</b>	Development Language Disorder
<b>DfE</b>	Department for Education

<b>DHH</b>	Deaf/Hard of Hearing
<b>DoH</b>	Department of Health
<b>EF</b>	Executive Function
<b>ELH</b>	Expected level of hearing
<b>EOWPT</b>	Expressive One Word Picture Vocabulary Test
<b>GCSE</b>	General Certificate of Secondary Education
<b>HA</b>	Hearing Aid
<b>HI</b>	Hearing Impairment
<b>HIRB</b>	Hearing Impaired Resource Base
<b>HL</b>	Hearing Loss
<b>IPA</b>	Interpretative Phenomenological Analysis
<b>IRR</b>	Inter-Rater Reliability
<b>IT</b>	Information Technology
<b>LA</b>	Local Authority
<b>LSA</b>	Learning Support Assistant
<b>MMHL</b>	Mild Moderate Hearing Loss
<b>NatSIP</b>	National Sensory Impairment Partnership
<b>NHSP</b>	Newborn Hearing Screening Programme
<b>ONS</b>	Office of National Statistics
<b>PCHL</b>	Permanent Childhood Hearing Loss
<b>PSD</b>	Personal and Social Development

<b>PSHRE</b>	Personal, Social, Health and Relationship Education
<b>QToD</b>	Qualified Teacher of the Deaf
<b>RA</b>	Radio Aid
<b>ROWPT</b>	Receptive One Word Picture Vocabulary Test
<b>SATs</b>	Standardised Assessment Tasks
<b>SD</b>	Standard Deviation
<b>SDQ</b>	Strengths and Difficulties Questionnaire
<b>SDT</b>	Self-Determination Theory
<b>SENCo</b>	Special Educational Needs Coordinator
<b>SEND CoP</b>	Special Educational Needs and Disability Code of Practice
<b>SLD</b>	Speech and Language Delay
<b>SLT</b>	Speech and Language Therapist
<b>SPSS</b>	Statistical Package for the Social Sciences
<b>SSIS</b>	Social Skills Improvement Rating Scales
<b>TA</b>	Thematic Analysis
<b>TA</b>	Teaching Assistant
<b>TASIT</b>	The Awareness of Social Interference Test
<b>ToD</b>	Teacher of the Deaf
<b>UMHL</b>	Unilateral Mild Hearing Loss

<b>USNHL</b>	Unilateral Sensorineural Hearing Loss
<b>UMHL</b>	Unilateral Mild Hearing Loss
<b>USA</b>	United States of America



# Chapter 1: Introduction

*“Where shall I begin, please your Majesty?” he asked.*

*“Begin at the beginning,” the King said, gravely, “and go on till you come to the end: then stop.”*

(Carroll, 1866)

This introductory chapter will present the following background to the study:

- The purpose of the study.
- The structure of this thesis.
- The context of the study and why this area was of interest to the researcher and academia.
- An explanation of deafness and the terminology used to identify levels of deafness, the number of deaf children within the UK and the importance of the current study.
- Research methodology and theoretical framework for this study.

The term ‘deaf’ will be used throughout the thesis when referring to all CYP with HL and a specific level of deafness is not identified. The levels of HL will be clarified in section 1.4

The specialist teachers supporting deaf CYP are Qualified Teachers of the Deaf (QToD) or

Teachers of the Deaf (ToD). ToD usually refers to a teacher who is not yet qualified but

undergoing training for the mandatory qualification; they will work with deaf CYP under

supervision of a QToD. In this thesis, a ToD will include both a QToD and ToD as professionals

working with and supporting deaf CYP. QToD will be used when the context specifically relates to a qualified and skilled professional.

### **1.1 The purpose of the study**

The employment figures for people without a disability or identified medical / health issue is 79%, compared to 65% of people with HL (Hearing Link Services, 2022). Kivunja (2015) presents the skills and qualities that YP should possess as life and career skills to positively enter the work environment in the 21<sup>st</sup> Century. These skills include;

- Flexibility and adaptability that enables a person to respond to different situations within the work environment. Within this category employers are looking for people to be able to respond effectively to praise and criticism in order to improve their work performance.
- Initiative and self-direction. This area enables a person to set their own goals and to identify areas within their life and work that they can improve and then to be self-motivated to instigate the learning or acquisition of these new skills.
- Social and cross-cultural skills. Language and communication skills are important within employment. Kivunja (2015) suggest that within the 21<sup>st</sup> Century all workplaces require their employees to present with social and language skills that allow them to interact with colleagues and customers /clients face-to-face and using

digital platforms. Cooperation and teamwork are essential for humans within society, but presentation of such skills is important for an employer.

- Productivity and being accountable. As an employer this allows a company or service to continue to grow, they require their employees to manage their own time and time to complete jobs, present themselves as professional and responsible adults as well as maintaining positive outlook even when working on challenging tasks, this therefore links to the ability to problem solve.
- Leadership and responsibility skills. This area includes a variety of skills a person needs to demonstrate. It may involve working collaboratively with other people taking on the responsibility for an area delegated to them which they then have to plan how the task will be completed. Leadership as discussed by Kivunja (2015) are qualities that can be taught and practised by a person, they are not necessarily innate.

Kivunja (2015) discusses the skills and qualities that employers in 21<sup>st</sup> Century are looking for from all employees. As YP they will learn such skills but require opportunities to practice and develop the qualities required by employers. Having the opportunity to gain a job provides a deaf person with positive well-being and increases their outlook and quality of life (O'Connell, 2022; Svinndal et al., 2020). There are several barriers presented to deaf people gaining employment or when in employment. Social attitudes towards deaf people is presented as one area of challenge (Stokar and Orwat, 2018). Easterbrooks et al. (2013) and

Lott et al. (2019) suggest that some misconceptions and stereotypes of deaf people held by colleagues and employers can involve the feelings that deaf people can be unreliable, not as academically or intellectually competent as hearing people, lacking in social and communication skills and present as dependent rather than having the ability to be independent. It is important that such stereotypes are challenged and the empirical research conducted by O'Connell (2022) in Ireland with people who use Irish Sign language, concluded that such misconceptions should be looked in to and challenged.

The term resilience will be defined as part of the Literature Review (see 2.3.7) however a brief explanation of the researcher's view considers resilience as a set of traits or skills that allows a person to positively deal with and address different scenarios in their life (Easterbrooks et al., 2013; Ginsburg and Jablow, 2005). This current study investigates the resilience skills of CYP with MMHL, that is a fluid set of skills that a person can learn and apply to different situations and environments (Pooley and Cohen, 2010)

This study investigates the resilience skills of 29 Children and young people (CYP) aged 11-15 with a mild moderate hearing loss (MMHL). An exploration of the perceived resilience skills of the CYP with MMHL in this study were compared to the skills of their peers with expected levels of hearing (ELH) – 30 CYP and a severe profound hearing loss (SPHL) – 24 CYP. The research question asked, 'How resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?'

## **1.2 The structure of this Thesis.**

The thesis contains seven chapters. This chapter (Chapter 1 – Introduction) identifies the reasons why the researcher chose this phenomenon to research. Two personal accounts of challenges experienced by CYP with MMHL are presented, along with definitions and descriptions of deafness and the terminology employed within this thesis. It concludes with a consideration of the models of disability and deafness adopted within this study.

Chapter 2 provides a review of the literature associated with the research in four main sections. The researcher has chosen to discuss resilience and being resilient in Part Three to allow the educational context for CYP with MMHL including educational provision and support (Part One) and social, emotional and language skills that develop during childhood and adolescence (Part Two) to be presented. This will enable the researcher to focus on resilience and being resilient, reflecting on the discussion in Parts One and Two. Finally, a summary of the research and the definition of resilience as well as associated concepts will be provided.

Chapter 3 considers the Methodology. A structured approach is presented in this chapter, identifying key points that enable a researcher to focus on the research design and identify the research question.

This study was carried out in three phases. Phase One was a focus group and involved the piloting of a questionnaire devised for the study. Other research tools such as the language assessments and vignettes were discussed with the focus group to consider appropriateness of the language and accessibility of the questionnaire. The information gathered from the focus group and the changes made to the research tools as a result of the feedback is presented in Chapter 4. Within Phase Two, the three groups of CYP participating in the study, those with ELH, MMHL and SPHL, completed receptive and expressive language assessments. The questionnaire was also presented to all three groups during Phase Two. Interviews with selected pupils with MMHL only, were undertaken as part of Phase Three. The data gathered in Phase Two of the study, language assessments and questionnaires (quantitative data), were analysed and the analysis and findings are presented in Chapter 5. Chapter 6 presents the outcomes of the interviews (qualitative data) of only the CYP with MMHL.

Chapter 7 pulls the findings of both sets of data together in the discussion chapter and related to the literature presented in Chapter 2.

Finally, Chapter 8 (Conclusion) reflects on the key aims of the research identified in the Introduction and addresses limitations of the study. The implications for practice and how the study contributes to the area of resilience skills of CYP with MMHL are considered, before suggesting how the findings highlight the need for further research in the future.

### **1.3 The context of the study<sup>1</sup>**

As a QToD I have worked with CYP of various ages, with a variety of needs related to their deafness who used different audiological equipment. Each CYP was unique and required an individual approach to the support they received from a ToD. Two CYP in particular made me reflect on policies and practices relating to deaf CYP, influenced my work as a QToD and provided my motivation to begin this research journey. I will present the stories of Rachel and Jack (names changed to provide anonymity) to provide a context for this research.

#### **1.3.1 Rachel**

Rachel was 10 years old when I met her. My first encounter with Rachel was at an interdisciplinary meeting following a tympanoplasty operation. She was new to my caseload and I learnt that she had suffered bouts of otitis media (glue ear) when younger, as a result of recurring colds and throat infections. She had been issued with two post aural hearing aids (HA) to alleviate the impact of the resulting fluctuating HL and had use of an assistive listening device, a radio aid (RA), to provide clearer access to the teacher's voice in class.

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<sup>1</sup> IN THIS SECTION OF THE THESIS ONLY, FIRST-PERSON PRONOUNS WERE USED AS THE RESEARCHER WANTED TO PRESENT HER PERSONAL CONTEXT AND REASONS FOR WANTING TO CONDUCT THE STUDY. THROUGH THE REST OF THE THESIS, THIRD-PERSON PRONOUNS WERE USED.

Rachel had been told that, around the age of ten, she would have the tympanoplasty procedure to remedy the effects of repeated incidents of glue ear and removing the need for her to use a HA. This is common, as the orientation of the eustachian tube changes around this age meaning that fluid in the middle ear drains more effectively and the condition is less common (Malik and Ghadiali, 2019; NDCS, 2017). The operation would remove any remaining fluid and repair scarring to the tympanic membrane (ear drum).

During this post-operation meeting, it was revealed that post-operation assessments had identified a permanent mild-moderate HL. Concerns were raised that Rachel's behaviour had changed considerably both at home and in school and she had become very aggressive. It was suggested that the operation may have caused cognitive damage. Rachel's MMHL did not meet the criteria for referral to the Deaf Child and Adolescent Mental Health Services (Deaf CAMHS), a section of Child and Adolescent Mental Health Services (CAMHS), that specifically supports deaf children aged 0-18 with SPHL and who use British Sign Language (BSL) (Whitman, 2021). An initial meeting with 'mainstream' CAMHS proved unproductive for both Rachel and the professionals who lacked expertise in deafness.

As I worked with Rachel, it emerged that her diagnosis of a permanent HL had caused her anger and frustration. She felt the adults around her, specifically her parents, teachers, doctors and audiologist had lied to her, initially telling her the HAs were a temporary measure but now saying they would be needed permanently. The work I completed with



Rachel highlighted that she didn't have the resilience skills to understand her HL and to work through the diagnosis and what it may mean now and for her future.

### **1.3.2 Jack**

I was asked to meet 15 year old Jack who had been prescribed two behind the ear (BTE) HA for a moderate HL, but had not worn them for approximately three years. The meeting was to support his final year of secondary school and transition to a post-16 pathway.

I was informed that Jack would probably not meet with me as he had turned down the last two annual visits by another ToD, so it was pleasing when he attended and agreed to meet me on four other occasions to talk about his HL. Jack enjoyed taking part, and showed skill, in a range of sports, particularly football. He was in a local community football team and had been talent spotted by several top clubs, yet when he had wanted to play in his school football team, he was told that it was dangerous for him to play football because he wore HA. He had moved to his current school two and half years prior to my meeting and had made the decision not to wear his HA or to tell people about his HL so that he could play in the school football team.

He was now considering his future and had an aspiration of going on to college to do a mechanical engineering course, but due to not wearing his HA for over two years his grades had slipped and he was concerned about being accepted on to a course. Thinking about future employment, Jack was concerned that if he didn't wear his HA he would miss

information or instructions from a line manager. He wanted to know more about his HL and audiological equipment he should use. In addition, he wanted to know how to tell people he had a HL so they understood that he was not being rude if he didn't acknowledge them. This had been a particular issue for Jack during the last 12 months prior to our meeting.

#### **1.4 What is deafness?**

The terms 'deaf' or 'deafness' can invoke a variety of stereotypical images. There can be a perception that it is something that happens to people in old age or that every deaf person communicates using sign language.

The level of hearing from a medical or audiological perspective is presented in decibels (dB) and relates to the person's ability to recognise a transmitted sound. An audiologist will test a person's hearing with sounds produced through pure tone audiometry, primarily over the frequencies: 250, 500, 1000 and 4000 Hertz (Hz) where most speech sounds are produced. Following the assessment, the scores are averaged out and a category or level of deafness / HL identified: mild, moderate, severe, or profound (See Table 1). Ears may display a different level of loss, but the classification is based upon the average in the better ear. Thresholds averaging less than 20 dB in the better ear denotes ELH, with average thresholds above this indicate a HL, or deafness.

Descriptor	Average hearing threshold levels (dB HL)
Mild HL	21-40 dB
Moderate HL	41-70 dB
Severe HL	71-95 dB
Profound HL	95 dB+

Table 1: Audiometric Descriptors British Society of Audiology (BSA) (2018)

When objects vibrate they produce a sound, the vibration is invisible but transmits from the source outwards and sounds vary in frequency and loudness (National Deaf Children's Society (NDCS), 2007). The results of a hearing test are plotted on an audiogram, which has two measures, the amplitude of a sound is recorded on the vertical axis in decibels and the frequency (pitch) on the horizontal axis in Hertz (see Figure 1). Frequency and loudness are qualities that are quantifiable and can be measured scientifically. Frequency is measured as the sound waves travelling through air and pitch is identified as a person's perception of the sound wave and therefore this could be viewed as subjective (Suits, 2019).

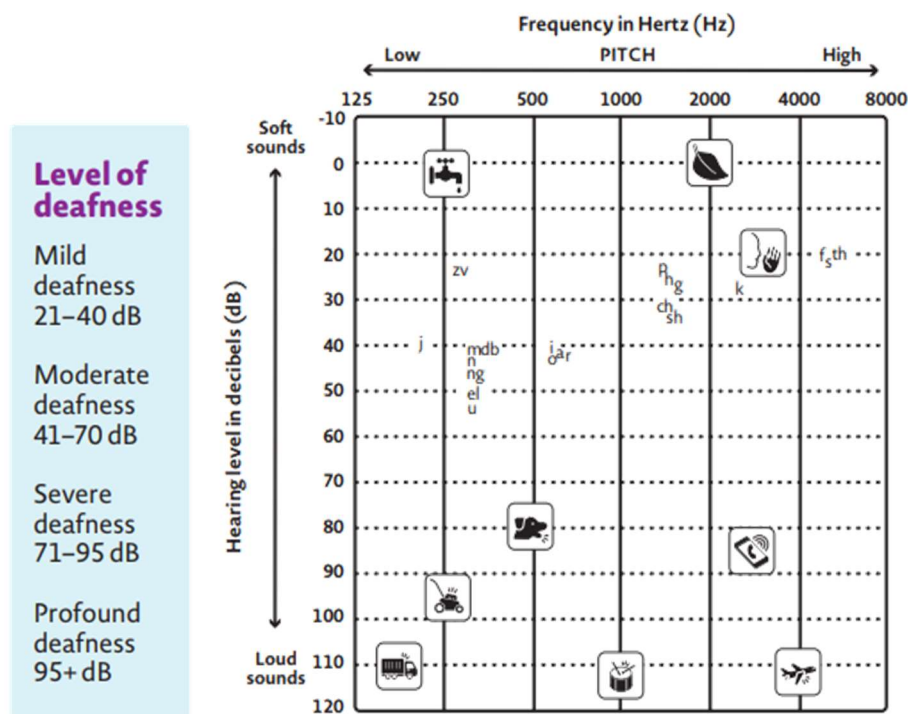


Figure 1: Audiogram with visual representation of the loudness and frequency of a range of everyday sounds. (NDCS, 2019:18)

Figure 1 demonstrates where speech sounds are located on the audiogram which is within 20-60 dB, therefore a person with a HL greater than 20dB would find accessing elements of everyday speech increasingly challenging, as well as a range of environmental sounds.

#### 1.4.1 Cultural definition of deafness

People identified as deaf can also be documented culturally, as deaf or Deaf and both terms are used and recorded in research and documents. A culture can be described as a group of people who possess recognisable traits, language, beliefs / ethos or way of life (Kymlicka, 1995). The term Deaf, with a capital D, refers specifically to people sharing a culture related to their deafness and who will often have BSL as their first or only language. The term deaf

(no capitalisation) generally refers to people with any level or type of deafness and irrespective of their preferred mode of communication.

Copp (1992:187) described society as a collective group of people, but within the group or society there can be subgroups who hold different beliefs, morals or languages. Kymlicka (1995) discussed that culture is a word used readily to categorise different groups and presented the term 'societal culture', that is, people who affiliated with a specific culture were provided with a 'meaningful way of life' (p.76). This system would enable a person who associated with a specific culture, to have a system that would guide their education, beliefs, and social engagements and was also focused around a shared language. It would guide and envelop their private and public lives. From this presentation of culture within society, it can be seen and understood why some people using BSL affiliate to a Deaf Culture or refer to the Deaf Community.

In society there are people who are defined as deaf audilogically, however they do not choose to communicate or need to communicate using a sign language or signed communication. This group of deaf people would not refer to themselves as Deaf with a capital D and would not associate or affiliate with a Deaf Culture.

As is common practice in the UK (NDCS, British Association of Teachers of the Deaf (BATOD)), within this thesis the term 'deaf' will be used to refer to anybody audilogically assessed as

having a HL greater than 20dB, unless quoting literature. Other terms such as Hard of Hearing or Hearing Impaired are used within research and these will only be used if quoting from literature. Such terms are usually not specific and relate to a person with any level of HL recorded across the range and anything recorded as a loss identified above 20dB (Dalton, 2011).

The term HL has been used within the study as requested by the CYP who participated in the research. They selected the terminology as they understood that audilogically they were identified as having a level of deafness; however they had some residual hearing therefore felt that HL was a more appropriate and acceptable term than 'deafness'. The term HL will be used within the Methodology, Findings and Discussion Chapters and will be used for those with a MMHL and SPHL. The CYP who were not identified as having a HL, will be identified as CYP with ELH. This term was again selected by the CYP in this study.

#### **1.4.2 Number of deaf CYP within the UK**

Data provided by the Consortium for Research in Deaf Education (CRIDE), 2019 recorded that there were at least 53,954 CYP aged 0-19 years of age in the UK who were deaf. The data by CRIDE is recorded annually and this report was detailed as the ninth annual report. The CRIDE (2019) data was used in this research as it identified deaf children throughout the UK, at the time of writing there was not a UK wide CRIDE (2020) report. The participants in

this study are from across the UK, not solely from England, therefore the researcher chose to reflect on the last UK wide data.

CRIDE considered the data relating to the specific numbers of deaf CYP, their location and how they were being taught, such as specialist provision, mainstream school. The collection of such data allows support to be tailored to the needs of deaf learners and their families. CRIDE (2019) reported that 78% of deaf CYP are educated within mainstream. The 2019 CRIDE report indicated that 64% of severely or profoundly deaf CYP communicated through the use of spoken Welsh or English, 22% of the CYP who were severely or profoundly deaf communicated using sign language and spoken language and only 9% solely communicated through the use of sign language. This is an interesting consideration as previously it was presented that the use of sign language and the Deaf culture was a significant factor that separated this group of people from the rest of the deaf society. The statistics suggest that there is a relatively small number of severely/profoundly deaf CYP who only communicate using sign language, a larger proportion are considered sign bilingual. Sign bilingualism refers to a person using two modes of communication or languages, with one being sign language. In the UK sign bilingualism will often relate to British Sign Language (BSL) and spoken English (Pickersgill, 1998; Plaza-Pust, 2016).

### **1.4.3 Early identification and Newborn Hearing Screening Programme (NHSP)**

In 2006 the Newborn Hearing Screening Programme (NHSP) was rolled-out throughout England (NDCS, 2016). NHSP is a screening check that is completed very soon after birth with an aim of detecting HL as early as possible. For hospital births, the screening check is ideally completed within a few hours of the birth and before the mum and baby leave to go home. For births outside of hospital, the aim is for the screening check to be completed within four to five weeks (Department of Health (DoH), 2012). The screening is carried out soon after birth and if a HL is suspected the child will be referred for further investigation.

It is considered that between one and two babies per 1,000 are born with a permanent HL (Public Health England, 2019). A permanent childhood hearing loss (PCHL) within the moderate, severe, or profound range will have a bearing on the child's oral language skills and development (Moeller et al., 2007; Luckner and Cooke, 2010). CYP require receptive and expressive language skills to enable them to develop abilities within literacy. Those identified with a PCHL who experience difficulty with language acquisition may have trouble with learning skills that rely upon language competency, for instance reading and writing (Wauters et al., 2006). The challenges deaf CYP experience with language skills will be discussed further in Literature Review (Chapter 2).

The advent of the NHSP enabled HL to be detected as soon after birth as possible to allow babies to receive support of professionals including specialist teachers, ToDs and access to



assistive technologies that can enhance access to sound; HA, RA or CI (Thomas and Johnson, 2008). The optimum time to identify the HL is when the baby is very young as this is when the foundations of language develop; Thomas and Johnson (2008) identify this period as the sensitive period.

### **1.5 Research methodology and theoretical framework of this study.**

*‘There is no single blueprint for planning research. Research design is governed by ‘fitness for purpose’. The purposes of the research determine the design of the research which in turn, informs the methodology.’*

*(Cohen et al., 2018:173)*

There is no established protocol in regards to how the area of research methodology and theoretical framework should be addressed. The methodology section should present a holistic view about why the research is important within the chosen field and does not consider the small details of the research or how the data will be collected, as this relates specifically to the research methods (Cohen et al., 2018).

To consider the research methodology and theoretical framework for this study the following questions will be considered:

- Who will benefit from the research?
- Who are the audience for this research?
- What will the research add to the area of education?

### **1.5.1 Who will benefit from the research?**

Rachel (1.2.1) and Jack (1.2.2) were CYP with MMHL who required support from a ToD to develop skills that could mean they felt more resilient. The researcher believed that neither pupil demonstrated resilience skills, and both struggled to find strategies to help themselves in everyday situations. Both CYP had MMHL and this study aimed to consider if the challenges they experienced were similar to those of other CYP with MMHL.

The CRIDE survey (2019) identified that 78% of deaf children were educated within mainstream settings, which was the case with Rachel and Jack. Neither of whom had access to the regular, specialist support a Hearing Impaired Resource Base (HIRB) attached to a mainstream school could have provided. Both required specialist support and interventions; however, were their situations unique or do most CYP with MMHL require targeted support to learn skills associated with resilience? The outcome of this study would look to be of value to CYP with MMHL, by identifying the challenges they may experience in acquiring resilience skills and therefore considering additional support that may be of value.

### **1.5.2 The audience for this research**

As CYP with MMHL, Rachel and Jack received an annual visit from a ToD. In researching the phenomenon of whether CYP with MMHL require specialist support in schools to acquire resilience skills, this research is of interest to school staff, particularly Special Educational Needs Coordinators (SENCOs) or Additional Learning Needs Coordinators (ALNCOs) in

England and Wales. SENCos/ALNCos coordinate support for all pupils with additional needs within schools. They inform teachers and learning support assistants (LSAs) about the support, strategies and equipment needed by pupils with additional needs, including those with a HL. As both Rachel and Jack required a programme of work from a ToD, the outcome of this research could be of interest to training and qualified ToDs, Hearing Impaired Teams/Sensory Support Teams and the team coordinators. Hearing Impaired Teams/Sensory Support teams comprise advisory teachers who work peripatetically to support children and CYP at home or in various education settings. The criteria for CYP to be added to ToD caseloads and the level of support regarding the number and frequency of visits often relates to academic and language ability. Academic and language abilities are sections on the National Sensory Impairment Partnership (NatSIP) Eligibility Framework (NatSIP, 2017) used by many LAs to identify level of ToD support. The CRIDE survey, 2019 identified that the NatSIP Eligibility Framework (NatSIP, 2017) was used by 145 (82%) of services to identify ToD support. Rachel and Jack didn't meet the criteria to warrant support with language or academic skills, but their stories suggest they did require support in understanding the implications of their HL. Understanding how CYP with MMHL learn and develop resilience skills for specific aspects of life will inform ToD practice. Additionally, findings of the study may support those coordinating the caseloads of ToDs and identify CYP who would benefit from their input.

### **1.5.3 Models of disability and deafness adopted in the current study**

A discussion of deafness and HL, including how different levels of hearing are defined was provided in subsection 1.4. The combination of the level of HL and other factors unique to each child can cause CYP to require specialist support and teaching to develop communication skills (2.2.3) and language that can facilitate academic achievements (2.2.4). The support and differentiation of the curriculum available to deaf children is identified within the Special Educational Needs and Disability Code of Practice (2014) (SEND CoP) (2.2.2) under the section discussing sensory needs. This document states that, ‘Some children and young people require special educational provision because they have a disability which prevents or hinders them from making use of the educational facilities generally provided....Many children and young people with vision impairment (VI), hearing impairment (HI) or a multi-sensory impairment (MSI) will require specialist support and/or equipment to access their learning, or habilitation support.’ (DfE/DoH, 2014:98).

The term ‘disability’, when associated with HL and deafness can affect how a person is perceived (Lane, 2002). Lane (2002) discussed deafness and disability with a colleague who argued that disability could be explained as a restriction in the ability to complete a task as a result of an impairment, and deafness is that reduction in the function of hearing. This meant deafness was a disability.

There are two main models of disability: medical and social. Historically, the medical model was the predominant view of disability focussing on the principle that a person was either 'disabled' or 'not disabled' (Areheart, 2008; Eichhorn, 2002). The medical model sees disability as resulting from the diagnosis of a condition with no consideration to ability or how the diagnosis affects the person, if at all. Identifying a HL is a medical process (1.4) and the assessments identify no HL or a degree of HL, therefore it could explain why deafness was - and in some situations, is - viewed under the medical model.

Within the medical model, the term the 'goldilocks dilemma' has been used in assessing when the level of disability is 'just right' (Areheart, 2008). It could be identified that the impairment has a significant impact on the person's life and the person is viewed as 'too disabled'. Alternatively, they may not be 'disabled enough' to access support services: there is no objective measure of the 'right' level of disability within this model (Areheart, 2008).

This study focussed on CYP with MMHL, a group likely to fall into the category of 'not disabled enough' to access support from ToDs due to the level of their HL. Criteria provided by the Eligibility Framework (2017) are used by LAs and Sensory Support Teams to determine the measure of need, and level of HL is one element (2.2.2). Rachel's story (1.3.1) highlighted how she tried unsuccessfully to access mental health services (Deaf CAMHS) following the sudden diagnosis of a PCHL. This was an example of how CYP could be considered 'not disabled enough' to access support services or programmes.

This research does not use the medical model as a theoretical framework, but will question whether the assessment criteria for accessing additional support is appropriate and whether methods other than medical or clinical should be used.

An alternative to the medical model is the social model of disability - it is not the person and the diagnosis that disables someone, but society. This includes physical and institutional barriers that can prevent access to the environment and activities, and other people's attitudes (Areheart, 2008). The concepts behind the social model of disability were initially used by Oliver in the mid 1970's and the term social model of disability was then used in his research in 1983, *Social Work with Disabled People* (Oliver, 2013). The example of Jack (1.3) presented how attitudes and perceptions of his HL and the equipment he used restricted his involvement in his environment and his desire to be in the school football team. This current study aimed to investigate whether CYP with MMHL experience challenges as a result of perceptions of their HL and society's views of what they can or can't achieve. In looking at the resilience skills of this group, the study considers the opportunities CYP are provided with to practise skills to enable them to present as resilient.

The theoretical framework of this study follows the social model of disability as discussed. The model has some limitations and should not be seen as a replacement for the medical model. Oliver (2013:1024) reviewed his original 1983 work and, although generally celebrating the positive impact of the social model, he described the concept as taking on '...a life of its own...' He discussed that there were positive changes as a result of this

approach such as a range of training and provision of awareness training, accessibility audits and new legislation to support people with disabilities. However, it was viewed that due to the range of changes a concise statement to explain and cover all aspect of the advancements that occurred under this model was challenging (Areheart, 2008; Samaha, 2007).

Shakespeare (2013), however, suggested that various dichotomies exist within the social model, one being the need to clarify impairment. Through the social model, deaf awareness training could be identified and presented to a staff team within a school and they may learn BSL; however, the impairment remains, the child is still affected by the HL that can impact upon their energy levels or ability to concentrate.

This current study primarily considered the social model of disability, but the sociocultural theory of human development presented by Vygotsky also influenced the theoretical framework. This is similar to the social model in that it considers society's role in teaching CYP skills to enhance development but specifically explores how social interaction (with parents, teachers and friends) can support children in learning skills. Vygotsky identifies a process called the 'zone of proximal development' (ZPD), which involves scaffolding tasks to enable a child to move from theory to independently using and applying a skill (Vygotsky, 1980). To acquire skills from current ability to new learning, the ZPD requires social interaction and planning to build confidence and competency (Vygotsky, 1980). In this study,

the researcher investigated the skills the CYP felt they had and whether they were learning how to practise the skills to build up a bank of resilience aptitudes.

## **1.6 Conclusion**

The Introduction has presented the background context for this research. The researcher presented two CYP; Rachel and Jack who required support from a ToD, but due to their level of HL they would not meet local authority criteria to receive regular ToD support, only an annual monitoring visit. The two pupils eventually did receive the identified support and made good progress; however, access to specialist professionals was through luck rather than identified need. An interest in understanding the needs of CYP with MMHL initiated this research.

A clarification of deafness from the medical or audiological perspective was presented and the terminology used to categorise different levels of deafness was explained. The number of deaf children within the UK that was concurrent with the time of this research and therefore the most appropriate to cite, were at least 53,954 and 78% of the CYP were educated within mainstream settings rather than specialist provision (Consortium for Research in Deaf Education, 2019). This information was of interest to the researcher when developing the research question, that is do CYP with MMHL receive the support they require to learn and practise skills in order to present as resilient in various everyday



situations. The information and data presented in this section provided a general context for the research and will be discussed further within the Literature Review (Chapter 2)

The final section of this chapter discussed how the researcher will present the research study; Review of Literature, Methodology, Data Analysis, Findings, Discussion and Conclusion.

## Chapter 2: Literature Review

*“Literature is the art of discovering something extraordinary about ordinary people and saying with ordinary words something extraordinary.”*

*Boris Pasternak (1890-1960)*

### 2.1 Introduction

This literature review consists of four sections that will present a background and a context for the research that considered the resilience skills of CYP with MMHL. Initially the research for literature began with key words associated with the area of study and entering them into databases such as Web of Science. Vocabulary presented included; resilience, adolescents, deaf. The original searches collated very few if any documents and recommended the search was broadened. The search vocabulary was considered to ensure that precise concepts and words were used. The different and broader vocabulary did present several documents, but the research did not link to the identified area of study for example it considered family resilience of children with CI or resilience skills of pre-school children who use sign language. With limited specific research associated to the focus of this study, the researcher decided to consider studies relating to deaf CYP in general and then reflect on how the information could apply to the needs of those with MMHL. The researcher explored the research

associated with MMHL and social and emotional skills that are required if a person is to be considered as resilient. The Literature Review is presented in three parts.

Part one will look at the educational context of CYP with MMHL. The CRIDE data associated with the number of deaf CYP recorded by LAs, discussed in the introduction (1.4.2), will be considered. Secondly, academic attainment and language and communication skills of deaf CYP will be discussed.

Part Two will explore literature relating to non-academic aptitudes, including social and emotional development, defining these terms and explaining why it is important that all CYP develop such competencies from infancy through to adolescence. The possible link between difficulty in acquiring adequate social and emotional skills during this period and the impact on mental health will be presented.

The researcher will consider the skills and aptitudes CYP with ELH gain and then identify the difficulties deaf CYP experience in acquiring them. There is, again, limited research on the social and emotional skills of CYP with MMHL, therefore the information gathered from Parts One and Two will be used to consider the challenges this group may experience and why.

Part Three will focus on common definitions of resilience and the researcher's definition that will be used in this research study. Current research relating to the importance of social and

emotional resilience skills will be presented using studies involving CYP with ELH and reflect on how the findings may manifest in those with a HL.

Finally, a summary of this chapter will be presented as Part Four.

The structure of each section will be:

- Introduction, presenting the key elements to be discussed,
- Discussion, a dialogue relating to the key principles and concepts will be discussed and considering an expected trajectory for those with ELH and then how this relates to CYP with MMHL.

Summary, this will conclude each section and will contain a summary of the discussion and literature.

## **2.2 PART ONE: Educational provision and academic achievements of deaf children**

### **2.2.1 Special Educational Needs and Disabilities' policies and protocols**

#### **2.2.1.i Special Educational Needs and Disabilities Code of Practice (SEND CoP)**

In England there have been considerable changes in the support of children and CYP with special educational needs and disabilities (SEND) and their families. In 2014, a new Code of Practice (SEND CoP) was developed and published jointly by the Department for education (DfE) and Department of Health (DoH), (DfE and DoH, 2014), replacing the version that had

been in place since 2001. There were a number of failings with the old system that did not reflect contemporary society, prompting a review of the educational system and SEND policies and protocols (Warnock, 2005; Warnock and Norwich, 2010; House of Commons Select Committee, 2006; Lamb, 2009; Lamb, 2019). It is important to note that the new SEND CoP (2014) was for England; the other countries within the UK; Scotland, Northern Ireland and Wales had their own curriculum documents or were in the process of developing them. The Additional Learning Needs Code for Wales (2021) and the SEND CoP (2014) in England presented a radical change to the way CYP with SEND and their families accessed support from education, health and social care services. The focus of the new SEND CoP was enabling professionals from these services to communicate effectively and to develop multi-professional and joint working, addressing the failings identified in the Lamb Inquiry (2009). In relation to deaf CYP, it identified that CYP with sensory impairments, which includes those with a hearing impairment, benefit from support as they require specialist equipment to enable them to access the curriculum (DfE and DoH, 2014) and there was also a need for them and their families to be at the centre of planning provision.

Lamb, (2009:2) discussed providing a ‘.... unique opportunity now to make a real and lasting change for future generations of children.’ For deaf CYP and CYP with HL this would provide an opportunity to ensure different services, such as health (audiology) and education worked together. The Lamb Inquiry in 2009 and various governmental SEND reviews resulted in the updating of the National Curriculum (2014), SEND CoP (DfE /DoH, 2014) and The Children and Families Act (2014). The initial SEN CoP (2001) and its successor presented

the entitlement of all children to a broad and balanced curriculum. These measures have provided access to the curriculum for all pupils. The outcome of such legislation has meant reasonable adjustments should be made in terms of physical access as well as differentiation of the curriculum.

#### 2.2.1.ii NatSIP Eligibility Framework and support for deaf CYP

The SEND CoP (2014) provided guidance relating to inclusive opportunities and access to the curriculum, but the mainstream teacher was held responsible for the delivery of the curriculum. As identified by CRIDE (2019), 78% of deaf children of school age were educated in mainstream schools without access to a resource provision or regular access to a ToD as assessed on need using NatSIP Eligibility Framework (NatSIP, 2017). Table 2 presents data from CRIDE (2019) relating to the number of children and CYP who are identified with each level of HL.

	Unilateral	Mild	Moderate	Severe	Profound	Total
2011	5,685 (15%)	11,524 (31%)	12,063 (32%)	3,956 (10%)	4,546 (12%)	37,774 (100%)
2013	7,038 (16%)	11,688 (28%)	11,688 (28%)	4,607 (11%)	5,365 (13%)	42,221 (100%)
2015	8,307 (19%)	12,192 (28%)	13,868 (31%)	4,439 (10%)	5,261 (12%)	44,067 (100%)
2017	9,661 (20%)	12,660 (26%)	15,481 (32%)	4,655 (10%)	5,746 (12%)	48,203 (100%)
2019	10,872 (22%)	13,173 (26%)	15,684 (31%)	4,408 (9%)	5,833 (12%)	49,970 (100%)

Table 2 Changes in the number and proportion of children living in the UK, by level of deafness since 2011 CRIDE 2019:

The data show that the percentage of CYP with MMHL from 2011 to 2019 reduced, however the numbers have increased from 23,587 (63%) to 28,857 (57%). The increased number of deaf CYP could be due to early identification as a result of the implementation of NHSP (1.4.3) or improved accuracy in the information provided to CRIDE year on year. It is also important to state that the information presented by the CRIDE reports is based upon the accuracy and consistency of the data provided by LAs.

It has been highlighted that 78% of deaf CYP are educated within mainstream school, with access to, and support from, a peripatetic ToD and the allocation of time being assessed on need. Some CYP with a unilateral (one sided) hearing may not receive any ToD support. Many LAs across England and Wales use the NatSIP Eligibility Framework as a way of providing parity of provision access across LAs (NatSIP, 2021). CRIDE (2019) reported that 93% (122/131) of LAs in England used the Eligibility Framework and 100% (15/15) of those in Wales. The approximate number of CYP with a HL supported by an individual ToD is identified within Table 3. The figures from CRIDE (2019) are based upon the number of ToDs currently in training or who hold the Mandatory Qualification (identified as QToDs). The figures are not a representation of the caseload of every peripatetic ToD, but the figures show that with 78% of children and CYP with a HL being educated within mainstream, the numbers presented per ToD is high, approximately 62 in England and 59 in Wales. The eligibility framework provides a vehicle to allow sensory support teams to ensure those with specific needs, as identified in the criteria, receive the support required from a ToD.

	Number of deaf children for each peripatetic Teacher of the Deaf.
England	62
Northern Ireland	58
Scotland	38
Wales	59

Table 3 Ratio of deaf children per ToD. (CRIDE, 2019:18)



A child or young person with a MMHL receives a lower score within the Eligibility Framework as demonstrated in Table 4 NatSIP (2017:14)

Criterion 1: Degree of HI (using British Society of Audiological descriptors)		Score
a	Does not meet the minimum unaided threshold for classification of HL. (Do not continue with the completion of this form)	0
b	Unilateral/Fluctuating conductive HI	3
c	Mild HI/CI functioning as mild HI 6	6
d	<ul style="list-style-type: none"> <li>Moderate longstanding conductive HI/Moderate HI/CI functioning as moderate HI</li> <li>Mild HI with conductive overlay/Unilateral HI with conductive overlay</li> <li>Neo-natal conductive HI and throughout early years/Functional moderate loss due to auditory neuropathy</li> </ul>	8
e	<ul style="list-style-type: none"> <li>Severe HI (including significant high frequency)/CI functioning as severe HI</li> <li>Moderate HI with conductive overlay/Functional severe loss due to auditory neuropathy</li> </ul>	10
f	<ul style="list-style-type: none"> <li>Profound HI/Profound functional loss due to auditory neuropathy/CI functioning as profound HI</li> </ul>	12

Table 4 Degree of HI (using BSA descriptors) NatSIP, 2017

The discussion has presented the numbers of CYP with MMHL and considered the level of support that may be provided by ToD. The review of literature will now consider the academic progress of deaf children and why support from a ToD is of benefit.

## **2.2.2 Academic achievements of children and young people with a hearing impairment.**

### **2.2.2.i Formal exam achievement of deaf children**

*‘Deaf pupils failed by education system for fifth consecutive year.’*

(National Deaf Children's Society (NDCS), 2020a)

The statement and title presented by NDCS (2020) addresses the data collated by the DfE in relation to the General Certificate of Secondary Education (GCSE) results. GCSE exams are completed at the end of Year 11, the end of compulsory secondary education when pupils are aged 15 and 16. It is a powerful headline and suggests that over the last 5 years, from 2014-2019 deaf CYP on average did not perform as well as their hearing peers. NDCS (2020) report that deaf CYP, on average, achieved a full grade less, compared to their hearing peers and not only has this statistic been recorded over the last 5 years, but the gap between deaf CYP and their hearing peers appears to be widening rather than narrowing (NDCS, 2020).

The statistics discussed by NDCS (2020) highlighted that approximately 48.2% of all pupils identified with a HL achieved a grade 4 at GCSE, this compares to 71% of pupils with ELH. Key Stage 2 (KS2) standardised assessment tasks (SATs) are completed in primary school to monitor educational progress and are completed in Year 2 (6-7 year olds) and Year 6 (10 -11

year olds) in England. The KS2 SATs results in 2019 were reported to highlight similar gaps as 44% of deaf children achieved an expected level in reading, writing and maths compared to 74% of their peers with no identified HL (NDCS (2020). It must be noted that the data does not distinguish between the achievements gained by pupils with different levels of HL, MMHL or SPHL but includes all pupils with an identified HL, that is a loss greater than 20dB as explained in subsection 1.4.

The data demonstrates the gap between CYP with a HL and those with ELH and over several reports the gap does not appear to be reducing or being addressed. The data as stated, does not specifically discriminate between the achievements of CYP with different levels of HL; however, a study by Archbold et al. (2015) presented a suggestion that CYP with MMHL often have to work harder in school than those with ELH. In considering this point, Antia and Rivera (2016) researched the support provided by itinerant teachers of the deaf in America, the equivalent of peripatetic ToDs in UK. Their longitudinal study considered the support provided by the itinerant ToDs and the impact on academic and non-academic outcomes. Support often decreased as the children got older, but how the support was originally identified as a need was not standardised as there were various factors influencing a school or teacher's decision. Academic achievement was a factor in assessing the level of support, but other influences included supporting transition from middle to high school, parental request and, in their survey, teachers identified that some students received support who did not need it. Antia and Rivera (2016) reported that the level of the HL was used by teachers as a guide to level of specialist support required. This view was supported by Daud

et al. (2010) in the study of academic performance of primary age children in Malaysia, where they concluded that young children with a mild HL did not perform as well academically as their hearing peers. Their hypothesis was that academic results are affected by HL and this highlighted the need to screen children early to identify it. Such screening has been introduced within the UK, but this is not translating into higher academic scores and deaf CYP in general are still not achieving academically in line with their peers as reported by NDCS (2020). The research by Antia and Rivera (2016) and Daud et al. (2010) was conducted in America and Malaysia respectively and it is important that the results of such research are not used to identify possible issues within the UK as educational systems vary between countries in relation to compulsory school age and attendance, when exams are completed and to ToD support available.

#### 2.2.2.ii Challenges in academic learning experienced by deaf learner that may affect exam success

Deaf CYP face challenges with language and communication skills, executive function (EF) development, memory, social interaction and mathematical understanding (Knoors and Marschark, 2018; Marschark and Hauser, 2012; Marschark et al., 2002). It remains a concern that deaf CYP, despite early identification of a HL, access to amplification, educational support and specialist teaching from ToDs, are still behind their peers in reading skills (Harris and Terlektsi, 2011; Marschark et al., 2002; Marschark et al., 2009; Nikolarazi and De Reybekiel, 2001). Research conducted by Harris and Terlektsi (2011:32) considered the

reading and spelling skills of adolescents with CI and HA and, although not directly associated with the CYP with MMHL, they concluded ‘..deaf adolescents continue to find literacy challenging, and it appears that many will require specialist support throughout their time at school.’ This view is supported by Nikolarazi et al. (2013) who considered the use of visual aids and multimedia to support the reading comprehension skills of deaf children in Greece. Their research concluded that visual aids and visual resources increased the engagement of deaf learners, a view also presented by Dowaliby and Lang (1999) and, Lang and Steely (2003). The research focussed on deaf learners who communicated using sign language or were identified with SPHL. The research by Nikolarazi et al. (2013), however, highlighted the need for support to use the resources effectively and efficiently. The need for direct teaching of the visual resources was also highlighted in previous research, (Hannus and Hyönä, 1999; Nikolarazi and Vekiri, 2012; Peeck, 1993). The research conducted by Hannus and Hyönä (1999) considered the interaction of low and high ability pupils, not specifically those with a HL. Peeck (1993) also considered pupils in general rather than those with a HL although the research by Nikolarazi and Vekiri (2012) considered those with a HL including participants who used Greek Sign language. The research was conducted with older children in Greece, but it was considered relevant to the present study in relating to the difficulties experienced by learners with an identified HL in general, and the strategies that could support them and address the challenges. The research presented highlights that CYP with HL can and do experience challenges in relation to language development, however the research does not often specify the level of the HL and if is identified then CYP with SPHL can often be the key focus, especially those who use a sign language (Lang and Steely, 2003

and Nikolarazi et al., 2013). This current research study investigated research that considered CYP with MMHL and concluded that very little research looked at the language development needs of those with MMHL. This was an important factor as the Eligibility Framework (NatSIP, 2017) that is used to assess the level of support from a ToD and specialist teaching considers level of language ability as a key indicator of need. The limited research of the language development of CYP with MMHL could suggest this is not a priority need.

It is sometimes stated that, due to limited hearing, deaf CYP are assumed to be visual learners (Dowaliby and Lang, 1999; Marschark and Hauser, 2012; Marschark et al., 2013). A visual learner, as opposed to a verbal learner, would be a learner who would achieve academic skills and learn primarily through the presentation of visual materials (Marschark et al., 2013). However, there is no specific research to support the view that deaf CYP are more likely to be a visual learner when compared to their hearing peers. Marschark et al (2013) report that deaf CYP did consider themselves to be visual learners possibly due to the use of a visual sign language, but there was no current research to support the hypothesis, this suggests that this is an under researched area of study.

While deaf CYP have specific and individual learning needs, it cannot and should not be assumed that they learn in the same way as their peers with ELH (Marschark et al., 2002; Marschark and Hauser, 2012; Marschark et al., 2012). Deaf CYP may use different modes of language and communication. CRIDE (2019), highlighted earlier (1.4.2), found that 64% of

severely or profoundly deaf CYP communicated using spoken Welsh or English and 22% of the children with SPHL used sign language. Using different modes of language and communication may present challenges within the curriculum and interacting with peers in school. Group or collaborative activities, can be a barrier to their learning and affect their engagement and achievements within the curriculum (Ridsdale and Thompson, 2002).

The discussion so far has presented the challenges that deaf CYP can experience within school and accessing the curriculum. As described earlier, there have been several changes to the National Curriculum and the SEND CoP that have identified that CYP are individuals and need to be at the centre of the curriculum a school presents (DfE (2014a). Teachers can use the knowledge of the variety of learning skills and styles to support differentiation of the curriculum, which is a key element of both the SEND CoP (2014) and the National Curriculum DfE (2014a). It must, however, be stated that there are deaf learners who excel.

### **2.2.3 Language and Communication**

*‘....the acquisition of language is a critical component of normal development for both deaf and hearing children.’*

(Marschark and Hauser, 2012:39)

Marschark and Hauser (2012) suggest that language development is essential not only to enable a person to communicate with others, but also to enhance the improvement of social

skills, cognition and other language skills. They describe how language acquisition can sometimes appear a straightforward process; however, this is not the case even for CYP with ELH, but especially for those with HL.

As a result of early diagnosis through NHSP, deaf babies receive support from various professionals such as Audiologists, ToDs and Speech and Language Therapists (SLT). They may also receive amplification devices such as HA to provide enhanced access to sound (Knoors and Marschark, 2012). It has been acknowledged that early identification of HL has a positive effect on language development (Moeller, 2000; Muse et al., 2013; Pimperton et al., 2016; Yoshinaga-Itano et al., 1998).

Comparisons with the language skills of their hearing peers is, however, questioned.

McGowan et al. (2008) looked at how speech development was influenced by early identification of a HL, access to amplification and early intervention. The research had a sample size of 10 children, with and without an identified HL, and it concluded that, even with early identification, speech production was not as developed as in those with what they termed 'normal hearing'. Children with any identified HL greater than 20dB find accessing some sounds difficult to hear and this is linked to a difficulty in speech production (McGowan et al., 2008).

Sahlén et al. (2018) assert that deaf children experience specific difficulties with language development and spoken language acquisition. In a child with ELH who experienced such



difficulties it is termed Development Language Disorder (DLD); however, when the same difficulties are identified in a child with a HL it is termed language impairment. 'Despite medical, technical, and pedagogical advances, the risk for language impairment is still much higher in deaf and hard-of-hearing (DHH) children than in hearing peers.' (Sahlén et al., 2018:129). The improvement in identification and technology is not appearing to have a knock-on effect on language development; however, the acquisition of language is required to access the curriculum as well as to develop social interaction skills and to create friendships. Language development and speech production is directly affected by an identified HL (Davis et al., 1986; Delage and Tuller, 2007; Briscoe et al., 2001; Moeller et al., 2010). Sahlén et al. (2018) suggest that up to 50% of deaf children could meet the criteria to be identified as having DLD and this applies to CYP who use HA (Briscoe et al., 2001) as well as those with CI (Geers et al., 2016).

The NHSP has certainly improved the identification of babies born with a HL, particularly a moderate to profound HL, and this identification can enable provision of amplification equipment at a much earlier time than was previously provided (Wood et al., 2015). Miller and Newman (2005) suggested the age for identification of a HL prior to NHSP was approximately two to three years. Now, babies identified through the screening have access to specialist professionals including ToDs and various amplification aids to support access to sound within weeks. It is important to identify that a HA does not present the wearer with what can be considered normal hearing or within the expected range (Sahlén et al., 2018). Wood et al. (2015) identified that during the first seven years of NHSP the number of

children being screened increased. From their study in 2012/13, the average age of children identified with bilateral PCHL being fitted with a HA was 82 days following the screening and subsequent detailed assessments (Wood et al., 2015).

Anne et al. (2017) reviewed 429 studies and recognised that children with a severe to profound unilateral sensorineural hearing loss (USNHL) experience a delay in their language and communication, but little was known about those with a mild or moderate USNHL and Mahomva et al. (2021) concurs with this view. Although they employed a small number of participants (34), 20 with MMHL and 14 SPHL, there was not a significant correlation for SLD between those with MMHL and SPHL but there was a difference between those with MMHL and the general population. Mahomva et al. (2021) identified that of those with a mild USNHL 25% (5/20) had a SLD and those with moderate USNHL 49% (9/20), this was compared to 5.9% of the general population.

Research by Tomblin et al. (2014) identified participants through NHSP data and concluded that speech and language development was enhanced for the identified cohort by the use of the HA and that the longer the participants had used the technology also influenced the results positively. Early identification of a HL through the NHSP enables access to audiological equipment that can support the development of speech and language. This identification of a HL and access to equipment is beneficial as those with MMHL are more at risk of DLD compared to those in the general population without an identified HL (Halliday et al., 2017; Mahomva et al., 2021).

#### **2.2.4 Executive Function**

It was identified in section 2.2.3 , that deaf CYP experience challenges with executive function (EF) (Knoors and Marschark, 2018; Marschark and Hauser, 2012; Marschark et al., 2002). EF is believed to be a set of specific skills that allow a person to control and self-regulate their behaviour, specific cognitive development and mechanisms that enable the person to successfully work towards, and complete, an intention or target (Anderson, 2002; Blair, 2016; Figueras et al., 2008; Jones et al., 2020). Jones et al. (2020:400), propose that there are three specific proficiencies associated with EF ‘...the resistance to interference (inhibition); the ability to flexibly shift from one mental frame of focus to another (cognitive flexibility), and the ability to hold and manipulate information in the mind (working memory).’ These skills can be further defined as, the ability to plan and organise; instigation and monitoring of tasks and accepting constructive comments to enhance the work; the ability to maintain attention and be flexible; control of impulsive or spontaneous reactions in order to give measured responses; the ability to identify long-term ambitions and set targets to achieve these, as well as completing short-term activities that receive no initial reward, but will support this long term objective, and working memory (Miyake et al., 2000; Zelazo, 2015). A person does not need to have competency in all the EF skills and at times they may succeed with one element and find another challenging (Baddeley, 1998; Figueras et al., 2008; Garavan et al., 2002; Miyake et al., 2000).

Figueras et al. (2008) and Verhoeven et al. (2011) identified that language and EF skills are closely linked, which supports the previous point that some CYP may achieve some skills linked to EF whilst others experience difficulty, depending on their language competencies and development. EF skills are considered important for children's cognitive development and positive mental health (Kusche et al., 1993; Miller et al., 2011) and therefore EF is necessary for CYP to function effectively and efficiently within classrooms (Blair and Razza, 2007).

In literature, there appears to be an established association between language development and EF (Fuhs and Day, 2011; Fuhs et al., 2014; Kuhn et al., 2016). It is known that deaf CYP experience difficulties acquiring language due to restricted access to sound and engagement with early language and communication, both oral and sign (Marschark and Hauser, 2012; Moeller, 2000; Moeller et al., 2010; Yoshinaga-Itano et al., 1998). Jones et al. (2020), however, considered that, although that research does consider a link between language and EF, there was no research to investigate the developmental link between the two areas. Their study looked at expressive language development of children aged 6 to 11 years of age and reassessed them two years later, using one group of children with ELH and another comprising children with an identified HL. The participants completed a group of nonverbal EF activities, and their expressive language scores were assessed. The results showed that those identified with HL were behind their peers when first tested and the gap, did not increase, when retested two years later. The researchers suggested that the language

development for those with HL was affected by a reduction in the quality of parent-child relationship and communication in the early years.

Expressive language is considered to be a useful indicator of language abilities in general (Jones et al., 2020), but can also highlight other language capabilities (Marchman and Fernald, 2008), behaviour and social skills (Dawson and Williams, 2008), and the child's academic skills, particularly in literacy (Biemiller, 2003). Jones et al. (2020) considered several hypotheses relating to language development and EF, including that enhanced language skills, resulted in better EF capabilities (Zelazo and Frye, 1998).

An alternative perspective suggested that tasks that were viewed within the category of EF could assist in the development of language skills and vocabulary (Diamond, 2013; Weiland et al., 2014). In regard to language and EF in children with HL, a longitudinal study by Botting et al. (2017), found that deaf CYP executed EF tasks less efficiently, presenting the hypothesis that language facilitated EF, but that EF did not support language development. The study by Jones et al. (2020) followed up Botting et al.'s 2017 study and concluded, 'In the case of deafness, poorer language learning experience caused by reduced quality of parent-child interaction and accessible language input may have a detrimental impact on EF development.' (Jones et al, 2020:403). They suggest that vocabulary development and EF skills after early childhood are affected by situations relating to a specific group such as language delayed deaf children and this does affect and influence other development.

The study by Jones et al. (2020), looked at the relationship between language development and EF, comparing results of children with ELH and those with an identified HL, but the levels of the HL were not specified. It is the researcher's view that it can be difficult to determine language development and EF skills of those with MMHL as studies that look at language development of deaf children primarily consider those with SPHL or do not specify the degree of the HL (Svirsky et al., 2000; Geers et al., 1981; Nicholas and Geers, 2006) or those who received CI (Nikolopoulos et al., 2004; Cruz et al., 2013; Inscocoe et al., 2009; Peterson, 2004; Peterson et al., 2016).

It is suggested that deaf CYP experience difficulties with language acquisition when compared with those without an identified HL, and that competency in language affects EF skills (Diamond, 2013; Weiland et al., 2014). Delage and Tuller (2007) considered the hypothesis that language skills of CYP with MMHL identified as below expected levels, would reach an expected level over a period as the child develops and matures. They concluded that in their study of 19 French speaking adolescents, that this hypothesis was not true and that language skills did not normalise over the period of maturation. There is a thought that, due to deaf children making similar errors to their peers with ELH that they developed language in a similar trajectory, and research monitored these differences (Poizner et al., 1990; Chilosi et al., 2013; Geers et al., 2003). The study by Delage and Tuller (2007) concludes that the link between the level of an identified HL and an impairment in language acquisition is complex, but language ability is not directly affected by deafness. In their study of adolescents with MMHL, they reported that language ability remained underdeveloped

during an important time of maturation and proposed further studies with this group through childhood to adolescence. This appears to be an important proposal if considering that language development is required to allow an individual to develop EF attributes, as stated earlier.

### **2.2.5 Summary**

In this section it was established that 78% of deaf CYP are educated within mainstream schools and a significant number of these, 28,857 (57%), are those identified as having a MMHL. Most LAs and Hearing Support/Sensory Support teams use the NatSIP Eligibility Framework's criteria to grade needs to ensure those CYP having the greatest need receive the highest level of support from a ToD. This means that a CYP with MMHL would receive a lower score, leading to fewer visits from a ToD. Research (Harris and Terlektsi, 2011; Knoors and Marschark, 2018; Marschark and Hauser, 2012; Marschark et al., 2002; Sahlén et al., 2018) provides data on academic attainments of CYP identified as deaf, but there is little if any investigation into achievements linked to different levels of HL. The discussion did, however, present findings that deaf CYP are not performing as well academically as their hearing peers, with NDCS (2020) reporting that, on average, they achieved at least a grade lower than children with EHL. This statistic had been gathered over a five year period and it appears that the gap had not diminished. In investigating why this might be, language development of deaf CYP and the challenges they experience was presented.

CYP with MMHL are reported to experience language difficulties along the same learning trajectory as those with ELH (Geers et al., 2003) but there are also differences (Delage and Tuller, 2007). A current area of research considers the link between language and EF as EF skills are considered an important attribute that enables CYP to participate in a range of classroom tasks. A child requires a variety of language abilities to develop EF skills so if they have a HL and the language abilities are affected, this will in turn affect EF competencies.

## **2.3 PART TWO Social and emotional development of deaf children**

*‘The mental health of children with hearing impairment (HI) is of potential concern as their social-emotional development may be negatively impacted by difficulties in communication.’*

(Stevenson et al., 2015)

### **2.3.1 Social and emotional development and difficulties experienced by children with SEN**

Social and emotional skills are essential in enabling a person to achieve success in life (Calderon and Greenberg, 2011). Feuerstein and Jensen (1980) and Greenberg et al. (2017) suggest that the ability to acquire and effectively use social and emotional can have a direct impact upon exam success and career opportunities. We begin to learn social and emotional skills in early childhood and as we mature and progress through adolescence and early



adulthood we are able to apply the skills learnt in different situations(Calderon and Greenberg, 2011). Calderon and Greenberg (2011) identify the role of family, society, school and education settings as well as culture play in the child's ability to learn and practice social skills. The child themselves also play a vital part in social and emotional skills acquisition and development this may relate to personality as well as individual's cognitive ability.

It is identified that some children especially those identified as having special educational needs (SEN) can experience difficulties learning social and emotional skills (Vlachou et al., 2016). Without the social skills this can lead to social isolation which in turn prevents the child from acquiring the necessary social skills (Guralnick, 1987) Vlachou et al. (2016) discusses that it is important to understand the needs and abilities of individual groups of children who are identified as having SEN, this is a heterogeneous group and therefore generalising their needs will not explain why some experience difficulties. Within this wide category of SEN could be pupils with autistic spectrum condition (ASC). ASC is a lifelong condition that can mean the person experiences difficulty with language and expected society social rules because a person with ASC will see the world from a different perspective (Health for young people, 2022). A further example presented by Celeste (2007) describes the play of pre-school children with a visual impairment as being predominantly solitary and exploratory play rather than interactive and manipulating play learning to use toys and equipment functionally. The inclusion of children within the same environment or setting as their peers without a visual impairment does not mean the child will learn the social skills required in order to engage in cooperative play. Without the development of social skills the

two groups become separate and the child with a visual impairment can continue to find social interaction skills difficult (Celeste, 2007).

Children with HL, even those who attend mainstream education, can find social interaction and social relationships difficult due to language and communication barriers (Antia et al., 2011). Dammeyer (2010) suggested that if a CYP with HL had underdeveloped sign or oral language skills this did affect their psychosocial abilities with an increase in difficulties of between 20% and 50% compared to their hearing peers. In contrast a study of 57 7-12 year olds with HL was conducted by Andersson et al. (2000) who found that when the social competencies of this group was compared to that of 214 CYP with ELH, the data gathered from the parent and teacher questionnaires showed there was no difference between the two groups.

### **2.3.2 Definition of social and emotional skills**

The quotation from Stevenson et al. (2015) expresses concern that deaf CYP experience mental health problems as a result of poor social and emotional skills. If a doctor diagnoses a patient with anaemia, they look for the cause and consider treatment such as a diet providing iron rich foods. Similarly, if a study has identified a problem such as that made by Stevenson et al. (2015), it should be investigated further.

It is important in the first instance to consider what is meant by 'social and emotional skills', to identify why deaf CYP struggle to acquire these and what support can be provided to explicitly teach these skills.

An exact and unequivocal definition of what is meant by social and emotional skills is difficult to establish, as the term and the language associated with it has evolved over several years (Goodman et al., 2015). In considering cognition and cognitive skills, Goodman et al (2015) suggest it is understood that this relates to specific proficiencies that enable people to develop skills in language and communication, numeracy and problem solving, and literacy. Social and emotional skills, they argue, are less precise as they involve a person's views, opinions and beliefs, interaction skills as well as self-confidence and self-control that allow regulation of behaviour and self-motivation. Heckman and Kautz (2012:2) described attributes that were not cognitive as 'soft skills' which included motivation, aspirations and goals, and elements that related to personality. They considered that when assessing someone's cognitive ability, data and scores can be gathered that demonstrate gaps in learning relating to important skills people required for their future careers and lives. They discussed that soft skills are as important as the cognitive skills and in a review of their work in 2013 changed the terminology from 'soft skills' to 'character skills'. An extensive list of personality traits to explain character skills were presented, '..perseverance ("grit"), self-control, trust, attentiveness, self-esteem and self-efficacy, resilience to adversity, openness to experience, empathy, humility, tolerance of diverse opinions, and the ability to engage productively in society.' (Heckman and Kautz, 2013:6). Although a wide list of aptitudes were

presented, the authors considered that it is important to acquire both cognitive and character skills: an individual is not born with a proficiency in each element, but they can be addressed and improved through work and specific teaching.

The terminology associated with social and emotional skills can appear vague as presented by Heckman and Kautz in 2012 and 2013. Other terminology that is used to classify skills needed alongside academic achievement includes emotional intelligence, people skills, and personality skills, identified by Goodman et al. (2015) in a review considering the long-term effects of the social and emotional skills taught and acquired in childhood. This review focussed on five broad areas of what they considered encompassed social and emotional skills:

1. Self-perceptions and self-awareness
2. Motivation
3. Self-control and self-regulation
4. Social skills
5. Resilience and coping.

Each of these will now be considered in relation to deaf children and, in particular, research involving CYP who have MMHL.

### **2.3.3 Self-perceptions and self-awareness**

In order to discuss and understand this area in relation to children and CYP with HL, it is important to define the terminology. Goodman et al. (2015:15) suggest, 'Self-perception and self-awareness relate to a child's knowledge and perception of themselves and their value, and their confidence in their current abilities and a belief in their efficacy in future tasks.'

Research indicates that deaf CYP appear to experience difficulties associated with psychological confidence and happiness when compared to their peers with no identified HL (Farrugia and Austin, 1980; Hindley et al., 1994a; Hintermair, 2007; Hintermair, 2008). There are various factors influencing this, including mode of communication, educational provision and setting, and identity (Mance and Edwards, 2012). The placement of CYP in specific school settings, such as specialist provision or mainstream, is often related to level of hearing, and also cognitive ability and communication skills (Mance and Edwards, 2012). The research considering whether school provision is a significant factor affecting self-esteem of deaf children is inconclusive. A study by Manfredi (1993) suggested that deaf CYP who were mainly oral communicators and attended mainstream school, experienced increased social anxiety compared to those who attended specialist provision but this view is not necessarily supported by other research (van Gurp, 2001; Keilmann et al., 2007; Mejstad et al., 2008a). The small scale study completed by van Gurp (2001) looked at the self-concept of deaf students in three different settings within the Canadian educational provision: a specialist provision, a coeducational setting comprising a specialist provision adjoining mainstream school, and a resourced provision situated within a mainstream school. They concluded that

the ability levels of students were more of a factor than school provision. This supported a previous hypothesis that students without an identified additional learning need, who are considered high achieving academically, have a lower self-concept if educated with peers of a similar academic ability, whereas, if educated with students with a lower academic ability, they have a higher self-concept: the Big Fish in a Small Pond hypothesis (Marsh and Parker, 1984). As established earlier, 78% of deaf CYP in the UK are educated within mainstream settings (CRIDE (2019) and, due to the challenges within language and academic ability, the researcher suggests that deaf CYP may not consider themselves to be the Big Fish.

The view that educational provision affects self-concept and self-esteem in deaf CYP is not supported by Kluwin et al. (2002), but they did concur with the view that language abilities could impact upon the self-concept skills of deaf CYP. Silvestre et al. (2007) agree, advocating that conversational skills and abilities were associated with positive self-concept. They considered the proposition that when deaf CYP were educated within oral mainstream schools, they did not feel they connected with, and felt dissimilar to, their peer group. Silvestre et al. (2007) reported that the group in their study highlighted experiences of bullying and teasing by their peers with ELH due to their possible cosmetic differences through the use of HA, and academically. This view differed from those who attended specialist Schools for the Deaf. The reason, according to Silvestre et al. (2007), was that Schools for the Deaf celebrate a positive Deaf Culture and this therefore does not highlight the differences that Marsh and Parker (1984) described as a factor in what may affect a person's self-concept.

The principle of self-concept can be explained as ‘...how we view ourselves, and self-esteem (or self-worth) is how we feel about this perception’ (van Gurp (2001:56). If deaf CYP believe that, academically and linguistically, they are not as competent as their hearing peers, how do they feel about this and how does it affect their aspirations? Van Gurp (2001) suggested that what a person aspires to do or be is affected by what they believe they are capable of achieving. It has been considered that this view may be affected by school setting and the academic as well as linguistic abilities of other students. It may be appropriate for schools to reflect on how deaf CYP view themselves and how they work with all students to develop individual self-concepts and celebrate skills personal attributes not just academic. In this literature review, it has been discussed that Deaf CYP who have a shared language; a signed language and culture, and those who have ELH, who use spoken language, relate to a shared culture and peer group. Both of these groups, when educated in the associated provision (either School for the Deaf or mainstream) present with more established views of who they are and how they relate to their comparable peers. Hintermair (2007) supports this view, but also considers a group who are viewed as biculturally deaf: these are people who have a language derived from their heritage, that is sign language, but can access the socially dominant oral language. They suggest that the group which experiences a challenge comprises those who are marginally acultural: these could be CYP with MMHL educated within a mainstream school. This group do not access sign language, BSL or the Deaf Culture and experiences difficulty within the socially dominant language. This challenge can impact CYP as they develop a personal identity as it is important for a person to know which social group they relate to in order to develop a personal and social identity (Hintermair, 2007).

The importance of being part of a social group and its link to self-esteem and self-concept has been considered. If a deaf CYP experiences challenges with social communication or language it can negatively impact on their ability to develop a social network, leading to feelings of being ostracised, of incongruity and, due to this, loneliness and seclusion from what they perceive as their peer or social group. This observation was made by Leigh and Stinson (1991), specifically in relation to CYP who were deaf and oral, which would correspond to the cohort of CYP with MMHL and educated within mainstream provision. Challenges relating to communication and subsequent isolation and estrangement from their peers was also presented by Bat-Chava et al. (2005). This raises the question of what the social peer group of CYP with MMHL is if they experience challenges in identifying with either Deaf CYP or those with ELH. The difficulties are not always experienced if the CYP feel they have a social group to relate to and that their group have an understanding of deafness or HL. (Stinson and Whitmire, 1990; Stinson et al., 1996). In 1996, Stinson et al observed that CYP who were identified as hearing-impaired and who attended mainstream secondary school reported they had less opportunity to mix with peers who also had an identified hearing impairment, a group they felt they related to, and their emotional ratings were higher with this group. There may be a variety of reasons for not engaging with a specific peer group, such as being the only young person in the school or year group with an identified HL. When the CYP interacted with hearing peers, their emotional rating did not increase, supporting the view that social group that reflects a hearing-impaired person's language and culture is important and affects self-esteem and self-perception.



#### 2.3.4 Motivation

*‘This can be characterised as the reasons for which individuals strive towards goals. It includes the belief that effort leads to achievement, distinguishes whether goals are set by other people or by oneself, and the value that is attached to the goal in question, aspiration and ambition.’*

(Goodman et al., 2015:7)

In considering motivation and deaf CYP, the researcher identified that there was limited, or no, published research relating specifically to CYP with MMHL. The research available considered how motivation affected deaf CYP to acquire specific skills such as learning what is termed a ‘second language’ (L2) for those who have sign language as their first language (L1) (Rydén, 2015) or, as described by Jarvis and Iantaffi (2006), the need to challenge the views and expectations of teachers in the challenges of Deaf CYP sometimes learning two languages.

The research associated with CYP who are deaf and who sign considered their motivation to learn a second language. This research was used to extract the concept of motivation in relation to CYP with a HL or described as deaf. The concept of motivation and CYP with a HL is associated with social psychology, especially how the environment and the people surrounding a child/young person influences their motivation (Allport, 1954; Henry, 2012; Rydén, 2015). It is considered in social psychology that motivation envelopes three areas: self-determination, intergroup contacts and interactions and the understanding or

psychology of oneself (Rydén, 2015). Rydén (2015), explains that behaviour theorists prior to 1970 considered that the major influence for motivation was extrinsic, comprising environmental factors around a person, and after this, psychologists considered more intrinsic processes and cognition. The intrinsic approach reflected on what was occurring within a person's mind and how that affected their ability to complete a task or achieve a specific goal. The intrinsic school of thought is the most commonly considered approach and links to the self-determination theory (SDT) (Rydén, 2015).

Having explained the concept of motivation, it is important to consider the information in relation to CYP with HL. Howson (1922), reported that at the time the concept of motivation and motivating students with their learning was a relatively new concept. They suggested that the education of hearing students had over years been able to evolve but CYP who were identified as being deaf were primarily educated within residential schools for the deaf. He goes on to discuss how such schools for the deaf, without intending to, had presented education that had motivated their students and the schools developed approaches to motivate their students within their learning.

As discussed above, there have been many changes within the curriculum and educational provision, especially since 1922. The CRIDE (2019) data suggest that 78% of children and CYP identified with HL are educated within mainstream schools. There has been little research into the concept of motivation of deaf children since Howson (1922), the main focus being the motivation of CYP to learn a second language, that is English alongside sign (Rydén,

2015), dynamics that affect why deaf CYP are reluctant to use technology (Kuzu, 2011) or perceptions of teachers and student teachers related to the motivation of deaf students to learn specific skills (Jarvis and Iantaffi, 2006).

Goodman et al. (2015) discussed intrinsic and extrinsic motivation and how the latter is important in influencing a person's ability to achieve an aspiration, target or goal. Teachers and ToDs are interested in this element of motivation as it needs to be considered when working with CYP deciding what they want to achieve beyond school. Extrinsic motivation is required as the exam success is important in the plan to enable the path to a chosen career (Goodman et al., 2015). Figures from Office of National Statistics (ONS) (2019), highlighted that the employment levels of the cohort 18-24 years olds declined during 2019, as seen in the table below. This was the only group during the period July to September 2018 compared with July to September 2019 which recorded a decrease in number, with a reduction of 109,000 employed compared to the statistics recorded the previous year. This was compared to an increase of 136,000 for those aged 25-34. (The statistics for 2019 were selected for consideration as COVID-19 led to shut-down in many occupations and created atypical employment patterns.)

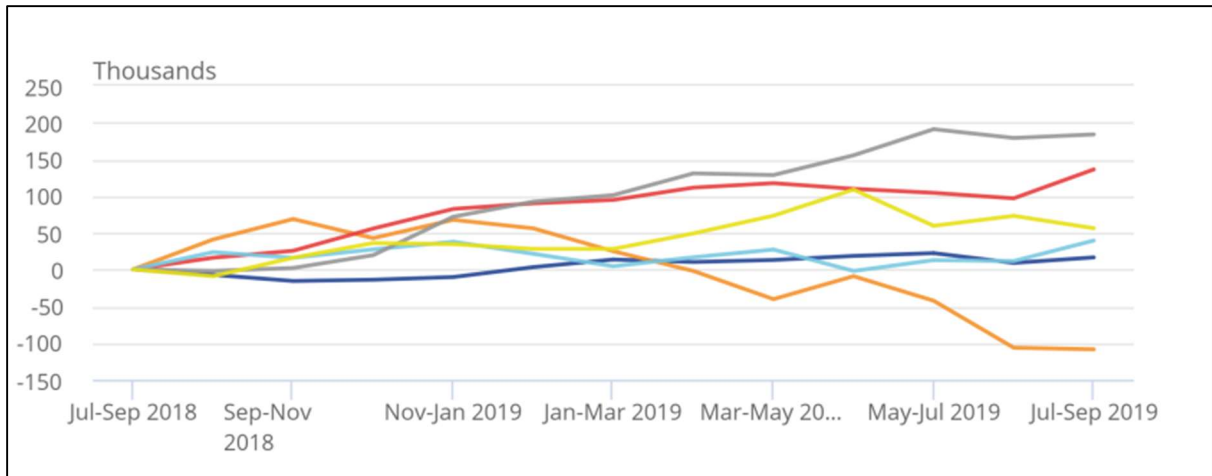


Figure 2: Office of National Statistics (ONS) (2019:6)

The statistics do not specify the percentage of people aged 18-24 who were identified as having HL. The discussion around employability is important as the definition of extrinsic motivation suggested that a person is motivated to complete tasks to achieve a goal, or aspiration. For CYP aged 11-15, many goals are associated with a future achievement, including GCSE or A level exams that may possibly lead to a desired outcome such as college or university or opportunities within their chosen career. This career planning and development is important for CYP during this stage in their lives and can enable the transition from school to work or career to be effective (Punch et al., 2004).

### 2.3.5 Self-Control and self-regulation

*‘Self-control and self-regulation refer to how children manage and express emotions, and the extent to which they overcome short-term impulsivity in order to prioritise higher pursuits.’*

(Goodman et al., 2015:28)

This section considers social and emotional attributes CYP need in order to develop into confident adults as they transfer from education to jobs and careers. The specific social skills will be discussed in more depth in the next sub-section and therefore the understanding of emotional skills in relation to deaf CYP and those identified with HL will be considered first. Calderon and Greenberg (2011:177) highlight the key fact that, ‘Establishing healthy social-emotional development is a critical foundation for life success.’ This highlights the significance attributed to learning these qualities to support future career and vocational aspirations and to aid them in achieving academic success that will enable them to pursue planned aspirations (Feuerstein and Jensen, 1980; Goleman, 1995; Goleman, 2001).

A person who presents self-control often demonstrates persistence as well as perseverance, concentration and alertness which come from the work of Rutter et al. (1970). Goodman et al. (2015) consider these behavioural traits and present the assessments that have used the work of Rutter et al (1970) to construct the measure of a person’s self-control, Achenbach’s Child Behaviour Check List (CBCL) (Achenbach and Ruffle, 2000) and Bristol Social Adjustment Guide (BSAG) (Shepherd, 2013).

The attributes of emotional behaviour as presented by Rutter et al. (1970) continue to be discussed and elaborated upon and Greenberg and Kusche (1993), cited in Calderon and Greenberg (2011:177), presented a further list of what they considered were the elements of social and emotional skills:

- A competency in communication
- Independent thinking skills
- The ability to identify and process emotions and feeling of other people as well as their own
- Appreciating and understanding different perspectives within a given situation and presenting flexibility in their response
- To be considered trustworthy as an individual that others can rely upon as well as presenting oneself respectfully
- Personal understanding of one's beliefs, values and culture
- Using skills and behaviours to successfully work towards appropriate targets and goals.

This is not considered a complete list, but it does encompass many of the attributes people require and children learn as they mature through to adolescence (Calderon and Greenberg, 2011; Greenberg et al., 2003). It is thought that deaf CYP experience difficulty in gaining proficiency in these skills and, without intervention, this can lead to an adverse effect on

their mental health (Greenberg and Kusche, 1989; Marschark, 2007; Meadow et al., 1981). If these issues are not addressed, it is considered that they have a knock on effect that can result in poor social skills and psychological difficulties and conditions (Greenberg and Kusche, 1989; Marschark, 1997).

Deaf CYP can experience a challenge and delay within language development and demonstrate higher impulsivity as well as penurious emotional competency, especially associated to the language linked with emotions (Greenberg and Kusche, 1989; Calderon and Greenberg, 2011). The delay in acquiring language competencies affects the higher order skills of understanding language associated with emotions (Feuerstein and Jensen, 1980). Calderon and Greenberg (2011) explore why language associated to understanding emotions could be affected in deaf CYP. They present the argument that a young child has a natural sense of curiosity and may touch or reach out for something that causes it to break or hurt them. The child with ELH will hear the emotion in the tone of their parent's or the adult's voice and register when they tell them that it is dangerous, it may hurt them or if they broke it then it would make them sad. The label of the emotion attached to the reaction of the adult registers with the child, and they acquire an associated understanding of the emotion through this incidental learning. The deaf child may not experience the same learning as they might not be able to access the tone of voice or language used by the adults around them, and therefore labels attached to emotions and behaviours are not learnt by the child (Calderon and Greenberg, 2011). This type of incident is not planned learning but provides important and essential incidental learning in relation to emotions and the emotional

language that deaf children can find it difficult to access. The child may therefore require the emotion, language or behaviour to be explicitly taught as they have not acquired it through incidental everyday activity (Calderon and Greenberg, 2011).

The advent of NHSP and early Intervention has enabled greater access to sound through CI and HA and this has enabled deaf children to access language and develop language competencies that have an effect on socio-emotional skills and academic achievement (Sass-Lehrer and Bodner-Johnson, 2010; Traci and Koester, 2010; Yoshinaga-Itano et al., 1998). However, following the initial benefit of early diagnosis and intervention, the benefits to language development do not continue to be seen and are not maintained due to a variety of factors, including parenting approaches (Vaccari and Marschark, 1997; Young, 2010). NDCS (2016) says that over 90% of deaf children are born to hearing parents. Such parents have reported that if their child is deaf and they don't have a shared language, they may experience difficulty in providing their child with opportunities to learn specific skills (Calderon and Greenberg, 2011). Parents suggested they tried to alleviate the issues for the children, and they tried to solve the problem on behalf of their child or limited their exposure to situations that would or could present the difficulty. This, however, restricted learning opportunities for their children (Calderon and Greenberg, 2011).

This discussion highlighted that there is, again, limited research relating to the impact on self-regulation, self-perception and the ability to manage and recognise emotions for CYP identified with MMHL. There is research that discusses deaf CYP, who use sign language and



suggest they require support to understand emotions and that the language associated with emotions should be explicitly taught to deaf CYP (Calderon and Greenberg, 2011). What is identified is that language and language competencies are required to develop good emotional skills and that if a child or young person, with or without HL, experiences a difficulty this has an impact on the ability to interpret emotions and emotional language (Calderon and Greenberg, 2011; Meadow et al., 1981; NDCS, 2016).

### **2.3.6 Social Skills**

*‘Deaf children can become socially and emotionally competent if given the same opportunities as hearing children to develop self-awareness, independent thinking, and good problem-solving skills over the course of their development.’*

(Calderon and Greenberg, 2011)

Goodman (2015:34) describes social skills as, ‘...a child’s ability and tendency to interact with others, forge and maintain relationships, and avoid socially unacceptable responses. They cover communication, empathy, kindness, sharing and cooperation...’ Social skills enable a person to work efficiently, relate to and develop, as well as maintain, friendships with other people (Elliott and Gresham, 2013). Social skills play a part in in how our social capabilities and confidence change as we mature (Rose-Krasnor, 1997; Rose-Krasnor and Denham, 2009), and they are linked with developing positive mental health (Lee et al., 2010; Wichstrøm et al., 2013). Without the development of such skills, a person can experience

temporary difficulties or potentially longer term complications within academic development, psychosocial aptitudes and career and employment opportunities (Kupersmidt et al., 1990; Newcomb et al., 1993; Parker and Asher, 1987).

There are several social skills assessments or tools used to measure the social skills and social aptitudes of a child or young person, such as Social Skills Improvement Rating Scales (SSIS) (Gresham and Elliott, 2007) and The Awareness of Social Interference Test (TASIT), (McDonald et al., 2011) as well as social skills questionnaires such as Talkabout Social Skills for Children (Kelly, 1982). These tools aim to measure CYP's skills to enable any perceived gaps in their learning to be addressed.

The social skills questionnaire devised by Kelly (1982), presents four areas with each area containing a variety of questions:

1. Body language – eye contact, facial expression, gesture, distance, touch, fidgeting, posture, personal appearance.
2. The way we talk – volume, rate, clarity, intonation, fluency.
3. Conversational skills – listening, starting a conversation, taking turns, asking questions, being relevant, repairing, ending a conversation
4. Assertiveness – expressing feelings, standing up for yourself, making suggestions, refusing, disagreeing, complaining, apologising, requesting explanations.

The questionnaire should be completed by the child/young person, if appropriate, and by people who know them well such as a teacher, parent or LSA, to compare results. The questionnaire is not standardised but gives a best fit judgement that can guide any specific teaching to address areas of need identified during the analysis of the questionnaire. Deaf CYP or who have an identified HL are considered to experience challenges in acquiring social competency when compared to those with ELH (Laugen et al., 2017) and this is often recognised to be as a result of delays in language development (Hoffman et al., 2015; Stevenson et al., 2010). The research by Hoffman et al (2015) suggested that children identified with a HL did not perform as well as their peers with ELH, but did perform better than those named as 'deaf' (identified HL in the severe/profound category).

Although there is limited research within this area, the indication is that those with a mild HL also experience challenges relating to the development of the required social skills linked to difficulties in acquiring the appropriate level of language (Tharpe, 2008; Winiger et al., 2016). Laugen et al. (2017) considered children 4 – 5 years of age and, despite limitations with the research, they suggest for young children with a mild HL the level of language ability did not appear to affect the child's social skills capabilities. They did, however, report that further research was required to consider the hypothesis that children identified with HL who present with good vocabulary scores still require their social skills development to be monitored.

As stated above, research into the social skills of CYP with MMHL is currently limited and the link between language development and behaviour is mixed. Wake et al. (2006) conducted a study of 6581 pupils, of which there was a ratio of 2:1, two children with ELH: one child with mild bilateral HL. This Australian study identified that for the children who participated in their study there was not a strong correlation between a mild HL and an adverse effect on behaviour, language or reading. Wake et al. (2006) provided an alternative view to others such as, Davis et al. (1986); Moeller (2000) and Yoshinaga-Itano (1999). The study by Davis et al. (1986) of 40 children with HL from mild to severe, suggested that the positive effects of an early intervention did not appear to continue through the child's education process. Davis et al. (1986) suggested it was not possible to predict language and academic ability purely by the level of the HL. This supports Laugen et al. (2017:55), who posited '...children with Unilateral Mild hearing loss (UMHL) may experience fewer difficulties than children with moderate to profound loss because they have better auditory access. However, the severity of a condition and its outcomes are not always related.... there are good reasons to investigate the development of children with UMHL because milder HL does not necessarily imply a milder impact.'

The importance of social skills for outcomes within education, employment and health in later life has been considered in a variety of studies. Macmillan (2013) considered the employment of men who were sons of unemployed fathers and researched the factors that could contribute to the son also becoming unemployed. They identified the teaching and

acquisition of social skills, termed 'soft skills', were as beneficial as academic ability in the outcomes of such males.

The social skills and qualities that may be required in adult life evolve and change due to the situation or work the person is in and these specific skills can be identified in early childhood, but equally addressed at a later stage in a person's life (Guerin et al., 2011). The development of social skills is important and McCrae and Costa (2003) suggest that temperamental qualities, such as engagement and activity, enthusiasm and excitement-seeking and emotions, are developed particularly through childhood. Alternatively, interpersonal qualities linked to extraversion, such as being outgoing and gregarious, warmth and assertiveness, are qualities developed during adulthood. There is research linking genetic influences on a person's temperament that can also affect a child's physical development and temperament (Caspi and Roberts, 2001; Plomin and DeFries, 1985). However, developing skills to enhance a child's social skills or temperament is important: if a child is introvert it is important to address this through interventions to prevent them becoming withdrawn personalities (Carey, 2004; Gagnon et al., 2014; Kristal, 2005). It is important to directly teach children who experience a challenge in acquiring such skills; this is not necessarily changing their personality, but teaching them temperament skills that can be used within different situations and environments (Guerin et al., 2011).

If children are assessed as not demonstrating specific social skills it is important to ensure that, through interventions, they are taught them and how to apply them in different

situations. Research suggests that some social skills are difficult for deaf CYP to acquire (Hintermair, 2014; Knoors and Marschark, 2014), highlighting a need for intervention (Hintermair et al., 2017; Hoffman et al., 2014; Knoors and Marschark, 2014). This flexibility of skills and qualities a person needs and is required to demonstrate in different situations relates to the concept of resilience.

### **2.3.7 Resilience**

#### **2.3.7.i Concepts of resilience**

Whilst writing this thesis through 2020, the world has been affected by a pandemic caused by the coronavirus, COVID-19. It has been noticed by the researcher that the term 'resilience' has been used readily to describe how people or organisations need to react to a serious event. The term resilience is widely used when companies and governments/government departments consider policy changes that will make them more robust in the future. An example is schools and universities discussing making courses resilient, that is being able to quickly adapt and switch learning from a face-to-face style to an online digital platform or teaching using a hybrid approach.

The focus of this research considered the term resilience and whether the CYP with MMHL considered themselves to be resilient or were acquiring resilience skills. As discussed in this Literature Review however, resilience appears to have become a buzz word and to be an

umbrella term to encompass many views and thoughts. The concept of resilience has been reviewed through research over a long period of time and is often referred to as the ability a person has to bounce back when dealing with a challenging situation or if presented with misfortune or hardship (Pooley and Cohen, 2010).

It is important to define what is meant by resilience as there are a variety of interpretations and it is used in many different ways. The Oxford English Dictionary (2021) describe it as, '...The personal quality of a person exposed to high risk factors that often lead to delinquent behaviour, but they do not do so.' In general, it is considered to be a person's ability to respond positively, conserve or redeem a positive mental outlook or mental health, following an event or experience that is considered an adversity (Wald et al., 2006).

The use of the word resilience within research has developed through several phases. Initially it was used in an area of science that looked at non-living things or inanimate objects, physical science. The psychopathological view of resilience suggests it is a person's positive response to trauma and adversity (Rutter, 1987; Young et al., 2008). Within this view of resilience, children were considered vulnerable if they were born to parents with diagnosed psychological and psychotic difficulties such as schizophrenia or maternal dysfunction and it was how they developed positively within this background (Booth and Booth, 1999; Garmezy and Streitan, 1974; Garmezy et al., 1984; Rutter, 1987). A psychosocial view of resilience, however, considered how people were able to deal with lives that present with challenge, difficulty, or disability and how they dealt with such situations,

and this was where the phrase being able to 'bounce back' was presented (Bland et al., 1994; Pooley and Cohen, 2010; Young et al., 2008). This ability to 'bounce back' would be in response to significant life events such as physical illness or disability, being homeless, poverty or a experiencing a traumatic event such as a war, natural disaster (Herrman et al., 2011).

A further view of resilience is presented by Masten and Wright (2010) who considered that the perception of resilience is extended beyond the person and their individual traits and is associated with the interaction of the person and their environment, a constantly fluid and changing situation (Pooley and Cohen, 2010). The changing situation could relate to changes in friendships or relationships with peers, family dynamics and social support systems, and these elements can affect and contribute to a person's resilience skills. A child with a stable family and strong attachments to their mother who presents good parenting skills, and an absence of any abusive relationships can build a foundation for resilience (Herrman et al., 2011).

There is a debate in some research as to how resilience functions: is it a person's ability to present the equilibrium in psychopathology dynamics (Rutter, 2000) or a set of skills acquired by an individual in various situations that allows a person to approach challenges within life (Singer and Powers, 1993)? This, however, leads to a debate as to whether resilience skills are learnt or are innate qualities and behaviours, or a combination (Bartelt, 1994; Rigsby, 1994; Wang and Gordon, 2012).



### 2.3.7.ii Resilience and deafness

Having identified a difference of opinion relating to resilience and resilience skills, it is useful to consider the element of deafness and whether being deaf is considered a factor that challenges the person's ability to be resilient as suggested in the psychosocial view of resilience. Is deafness the adversity that a person has to overcome or is it considered a risk that a person needs to acquire life skills to deal with? (Young et al., 2008). Research does suggest that a child identified as being deaf, particularly with SPHL in early childhood, has a higher likelihood of experiencing academic and developmental challenges (Young et al., 2008). The research relates primarily to CYP with SPHL rather than those with MMHL. There is an association between deafness and mental health (Hindley et al., 1994a; Hindley, 1997); difficulties within social skills and cognitive aptitudes including thinking, reasoning, problem solving and attention (Greenberg and Kusche, 1989); challenges in relation to employment and career opportunities (Punch et al., 2004). The concept of resilience links to the way a person reacts to situations, however challenges or what could be termed risks (Rutter, 1987) could affect how a person behaves. Young et al. (2008:43) suggest that deafness in isolation is not a risk, '...deafness may be a risk indicator, but is not itself a risk mechanism.'

It is also important to consider that personality traits, as identified earlier, can mean that a person who is presented with a challenge or risk such as having HL identified, may overcome the challenge while others are significantly affected by the issues it presents (Rutter, 1987). 'However, resilience cannot be seen as a fixed attribute of the individual. Those people who

cope successfully with difficulties at one point in their life may react adversely to other stressors when their situation is different. If circumstances change, resilience alters.’ (Rutter, 1987:317). This suggests, as described by Young et al. (2008), that resilience is not a fixed attribute but a set of skills that a person acquires in their emotional and social skill toolbox that they use when the appropriate situation arises. An example could be a CYP with HL confidently communicating with their friends in a cafe because they are facing each other, and the deafness is not impacting upon the social situation. However, in the dinner hall at school there is a challenge as there are more children in the room, dinner staff talking and large room that acoustically is a difficult environment to listen in - the environment then presents a challenge to the CYP.

A further view regarding deafness as a risk factor in relation to resilience, concerns the person’s culture, linguistic character and personality (Padden and Humphries, 1988) as opposed to the actual audiological HL or deafness. It is important to encourage and support deaf CYP to understand the culture related to being deaf sometimes referred to as Deaf identity (Hintermair, 2007). Without this sense of understanding, the person could feel vulnerable and at risk and present with lower psychological well-being than those who hold a strong sense of identity either hearing or deaf (Hintermair, 2008). Young et al. (2008) pose the question that if a child or young person achieves success within a sign language and is part of the Deaf Community, will this provide resilience, does this reduce the risk for the child and terms this as ‘resistance to conformity’? If the child is able to linguistically communicate within the Deaf Culture using sign and in a hearing community using speech,

as described as by Hintermair (2007) as biculturally deaf, will this reduce the perceived risk factors and allow the deaf person to be more resilient? This, however, is a different perspective for CYP with MMHL as they are considered acultural (Hintermair, 2007) and this could be presenting deafness or HL in a medical model approach that it is something to overcome or address and is therefore considered a disability (Young et al., 2008).

Freitas et al. (2021) completed a detailed review of literature associated to empirical research that considered the association of deafness and resilience. In their study they considered studies from different countries, between 2000 and 2019 that had been peer reviewed and involved deaf CYP aged between 3 and 18. Using seven academic search databases and their selection criteria Freitas et al. (2021) identified eleven research papers that met the criteria and from these none specifically considered MMHL although three studies did specify that those with MMHL were included in the wider sample of deaf pupils: Hall et al. (2018); Hintermair (2007); Hintermair (2006). In conclusion Freitas et al. (2021) suggest that there is currently limited research considering the development of resilience skills and deaf children. The peer reviewed research they considered demonstrated that there was a need to consider assessments that would measure the needs of deaf children compared to those with ELH. Freitas et al. (2021) identified that future research should include data from several sources, that is CYP, parents, teachers, peers and proposed health professionals could be used to gather data, a view that had been presented six years earlier by Batten et al. (2013). For a CYP to have the necessary social and emotional skills to present as confident individuals in a variety of situations and environments, then adults need to

work collaboratively to teach specific skills and provide opportunities for the CYP to use them in their everyday lives. (Freitas et al., 2021)

Deafness or HL considered a disability could be considered as a further challenge for deaf CYP developing resilience skills (Young et al., 2008). If resilience for CYP with MMHL is considered in this way, they will be starting from a more negative perspective than peers with ELH and people may have lower expectations of them due to the perceived disability (Rutter, 1987). Linking the concept of resilience to deafness is not helpful as the dialogue becomes about children who are deaf succeeding despite of their deafness or have overcome their deafness. Those children who are not able to acquire specific skills despite their deafness, then, are not resilient. This view of disability and deafness as a disability is not helpful or respectful to deaf children and ‘...runs the risk, paradoxically, of reinforcing low expectations for the majority and making success unexpected rather than normal.’ (Young et al., 2008:44).

Young et al. (2008) argue that the concern within literature relating to resilience is that researchers often have a predetermined view of what it means and focus on how to build up someone’s resilience skills, without initially clearly defining what resilience means. This means a person will either be viewed as resilient if successful or not resilient if unsuccessful. Young et al. (2008) presented research by Jackson and Martin (1998) who looked at the resilience skills of CYP who had been in the care system to investigate why some of the cohort were identified successful and others were not. The research related to academic

achievement of children who had been in care, and being in care was identified as the significant challenge. Jackson and Martin (1998) reported that studies indicated 75% of adolescents from care had poor academic skills or no recognised academic skills, defined as five GCSE results of Grade C and above, compared to 60% of CYP who had not in care (Fletcher-Campbell, 1996). The study used academic attainment as an indicator that the CYP had overcome the adversity and despite of everything were achieving.

The research identified in this literature review has aimed to clarify what resilience means, as the word is used in various conversations as highlighted at the beginning of this section. The literature associated to resilience skills presented in this discussion suggests that if a person (hearing) is resilient then they overcome an adversity such as being in care (Jackson and Martin, 1998). An alternative view of resilience relates to academic achievements of deaf CYP: Charlson et al. (1999); Koester and McCray (2011); Listman et al. (2011); Listman and Kurz (2020); Rogers et al. (2003). The measure of the achievements of the deaf child or young person was measured against peers with ELH and considered whether they had bridged the gap between the deaf and hearing environments and academic achievement. Listerman et al. (2011:294) did, however, present the suggestion ‘...we believe that being deaf, in and of itself, is not a risk factor, but that parents and teachers who are ill-prepared to guide deaf adolescents how to live in this world as deaf beings are risk factors to those adolescents’ resilience development.’ Young et al. (2008) questioned what the outcome of being resilient is, considering the research discussed above is it overcoming the perceived adversity of being deaf or is it being able to achieve academic scores comparable to their

peers. Koester and McCray (2011) also looked at children with SPHL who were born to deaf parents and reflected that they were considered as protective factors due to the way they engaged with their deaf child and developed specific social and emotional skills. They did not suggest that hearing parents should not be considered as being capable of raising a deaf child, but that having a deaf role model was beneficial and enabled the deaf child to be an efficient and effective communicator and this was their view of resilience. Koester and McCray (2011) conducted a case study of three deaf students and, although academic achievement was again considered the success criterion for resilience and overcoming what was considered an obstacle, other traits were recorded by their teachers. Within the study by Koester and McCray (2011) the successful students displayed qualities of being able to problem solve, independence, being assertive and being a good-natured person able to regulate and use appropriate emotions. These qualities were seen as important resilience characteristics and that successful deaf students displayed these as well as their academic ability.

Recently, researchers have started to explore the issue of resilience skills and children and CYP with MMHL, some examples of which are: Hatamizadeh et al. (2020) and Tomblin et al. (2020). In a similar way to the earlier research considering CYP with SPHL, resilience has been considered as overcoming the barrier of having HL and achieving academic success in curriculum subjects. Tomblin et al. (2020) used language scores and literacy skills including reading, grammar, spelling as a measure and concluded that children with MMHL did not differ to those with ELH. The research looked at the effect of HA as a support to speech and

information to allow children to learn the skills required and concluded that the children with a HL ‘..show resilience by performing at a level comparable to a matched control group of hearing peers.’ It was suggested that this was as a result of consistent use of the HA. Hatamizadeh et al. (2020) looked at the effectiveness of school-based interventions to enhance a young person’s resilience skills and worked with the view that resilience was the process of a person overcoming negative risk factors. The conclusion to this study presented that the participants benefited from working on school-based interventions that taught skills around resilience and emotional and behavioural difficulties by focussing on understanding emotions, behavioural control and solving peer relationship problems. Pre and post measures on the Connor-Davidson Resilience Scale Strengths and Difficulties Questionnaire (SDQ) demonstrated improvements, albeit short-lived.

A database search of recent studies relating specifically to resilience and children and CYP with MMHL identified five articles. These were: Ahlert and Greeff (2012), Egbert (2014), Radovanović et al. (2020), Yazdanipour et al. (2021) and Young et al. (2008). The research completed by Ahlert and Greeff (2012) considered the resilience skills families in South Africa required when their child was identified with a HL due to family and cultural views and perceptions. Egbert (2014) identified that deaf and hard of hearing children will gain from learning to understand a healthy mindset that can lead to developing resilience skills. This article presented practical strategies to support CYP, but did not specifically identify different levels of HL nor present why deaf CYP may find learning some skills challenging. The Radovanović et al. (2020) research was conducted in Serbia and looked at the resilience

skills of a group of deaf and hearing impaired CYP, primarily those with SPHL, 37/55 (67.2%) with 18/55 (32.7%) CYP with moderate to severe and a moderate HL. They concluded that the data identified that this group of participants achieved average scores and some were also in the higher range, although did suggest that individual data should be identified to consider specific needs of CYP particularly relating to transition from different school provisions. Yazdanipour et al. (2021) completed research in Iran with a group of twenty-two 5-6 year olds with a HL ranging from moderate to severe. They considered the effects of an intervention programme called Group Theraplay and concluded that the intervention did have a positive effect on the social and emotional resilience skills of the children within the research. The final article by Young et al. (2008) presented a review of literature relating to deaf children and CYP and resilience.

The presentation of current research relating to deaf CYP, whether severe to profound or mild to moderate, suggests that in using the term 'resilience', researchers are considering the view of overcoming the barrier of being deaf and achieving success academically or linguistically when compared to their hearing peers. Young et al. (2008) suggest that resilience is a system building a person's aptitude to learn and acquire skills as well as addressing obstacles socially that can prevent a deaf person achieving their aspirational goals. There is further research required to investigate why deaf children and CYP do not appear to achieve their potential. This could help families and professionals guide students to understand the challenges they experience and assist in the development of resources and interventions that could support deaf CYP to gain the skills required. When developing



future studies, researchers must be precise in their definition of resilience to ensure clarity of focus. (Young et al., 2008).

### **2.3.8 Summary**

This section considered social, emotional and resilience skills. It identified that within research there is not a universal definition of resilience therefore it is challenging to interpret the research related to this area. The concept presented by Goodman et al. (2015) was used to develop the discussion associated to social and emotional resilience skills for CYP with MMHL. The identified areas of focus were:

1. Self-perceptions and self-awareness
2. Motivation
3. Self-control and self-regulation
4. Social skills
5. Resilience and coping.

The discussion relating to self-perception and self-awareness presented the challenges CYP with a MMHL may experience due to not feeling they relate linguistically or culturally to either a Deaf Community or an oral or hearing community. Marsh and Parker (1984) suggested the concept that high achievers often present with high self-esteem if they are amongst lower achievers, and Van Gurp (2001) suggested that what a person aspires to do or be is affected by what they believe they are capable of achieving. The CYP discussed in

Part Two are mostly educated within mainstream settings and could therefore be seen as small fish in a big pond, with reported difficulties in acquiring language skills impacting on academic achievements

Young children are often motivated by intrinsic targets, that is they complete a task because they enjoy it. As they mature, these intrinsic motivators reduce and extrinsic rewards become more prominent. Motivation is however affected by a person's self-belief as suggested earlier.

Self-control and self-regulation concern the importance of understanding one's own emotions and those of others. To develop a competency in this area, a person requires language skills; however, studies identified that deaf children and CYP experienced a difficulty in emotional competency, especially developing language associated with emotions (Greenberg and Kusche, 1989; Calderon and Greenberg, 2011). Without this emotional competency and self-regulation a person can experience behavioural problems or be seen as impulsive (Rutter et al., 1970).

A child or young person requires the ability to develop the social skills as described by Goodman (2015:34), '...a child's ability and tendency to interact with others, forge and maintain relationships, and avoid socially unacceptable responses. They cover communication, empathy, kindness, sharing and cooperation...'. They need to develop an individual perception of who they are (self-perception), their own beliefs and views, and

personal motivation. Initially, social skills were identified as soft skills, but the importance they have in a person's character was reviewed and they are often now called character skills (Heckman and Kautz, 2013).

The concept of resilience was discussed, and the challenge related to the definitions of resilience which often relates to a person's ability to bounce back following adversity or being able to succeed despite a trauma or hardship (Pooley and Cohen, 2010). There is little research related to resilience skills of CYP who are deaf or have a HL, and the research that is available often adheres to this definition of resilience. The review of literature by Freitas et al. (2021) identified eleven empirical research studies between 2000 and 2019 association of deafness and resilience and only three included CYP with MMHL included in the sample. The trauma or risk that is considered is deafness: if children succeed then they are considered resilient as they have overcome their deafness. Pooley and Cohen (2010) presented an alternative perception of resilience in that it is a collection of skills or traits that a person has and that a person selects which characteristic or quality is required for the situation or environment they are in. This is the view of resilience that the researcher will consider in this research. An understanding of the needs of CYP with MMHL has not been explicitly explored or qualitative research that specifically asks what skills they require to present as resilient.

## **2.4 PART THREE – Review of literature conclusions and implications for this research study**

An audiological assessment clarifies the child or young person's level of hearing. Anything above a 20dB is considered as being audiological deaf and is categorised as mild, moderate, severe, or profound (see 1.4). The numbers of identified deaf CYP have increased and this could be due to NHSP that is completed shortly after birth with CRIDE (2019) data identifying that 78% of deaf children educated within mainstream schools. It was identified that a PCHL will have an effect on the child's oral language and literacy, both reading and writing (Wauters et al., 2006).

The CRIDE (2019) data identified that 57% (28,857) had a mild or moderate HL. The level of support received by a ToD is often calculated using the NatSIP Eligibility Framework (2017). There appears to be a gap in attainment between those with ELH and those with HL as NDCS (2020) reported that over the last 5 years deaf children have not achieved the same GCSE grades as their hearing peers.

Language development and communication skills are important for all CYP. Such skills are a vehicle for learning in other areas such as social skills, academic subjects, emotional understanding and higher order language skills including EF. While it is considered that deaf children have trouble with EF skills (Botting et al., 2017; Jones et al., 2020), it was not specified whether this applied to all deaf CYP with HL from mild to profound. Delage and Tuller (2007) considered the hypothesis that the language levels of children with MMHL

match those of children with ELH as they mature, however their research did not support this hypothesis. This then supports the need for such CYP to receive specialist support of a ToD and differentiated learning, however many LAs in UK currently allocate ToD support using the Eligibility Framework (NatSIP, 2017), which considers the language levels of the CYP. This research will consider if this primarily is a robust way of assessing need especially for those with MMHL

There is inconsistency in research in relation to a clear and precise definition of what constitutes social and emotional skills. Heckman and Kautz (2013) identified them as character skills; such as self-esteem, confidence, being trustworthy and perseverance. Manfredi (1993) suggested that oral deaf CYP in mainstream education showed signs of a anxiety compared to those who attended specialist provision, a view not supported by other research (van Gorp, 2001; Keilmann et al., 2007; Meijstad et al., 2008). However, there was a hypothesis by Marsh and Parker (1984), that high achieving students have a more positive self-concept if educated with those with lower ability. It is reported that language skills do affect self-concept and earlier discussions highlighted that deaf CYP can experience difficulty in acquiring language competencies. It was further identified that having a peer group to relate to was also considered an important factor for developing one's self concept and self-esteem (Stinson and Whitmire, 1990; Stinson et al., 1996). The key aspect of comparing the needs of CYP with MMHL with their peers with ELH and SPHL is considered within this research.

The earlier discussion suggested that deaf CYP experience challenges acquiring language and can affect their ability to understand emotions and emotional language. Research suggested that due to potential language differences between deaf children and their parents or care providers then they do not acquire understanding through incidental learning and this means key principles relating to emotions and behaviours are not learnt by the child (Calderon and Greenberg, 2011).

Social skills were considered and McCrae and Costa (2003) highlighted characteristics related to temperamental qualities, (engagement and activity, enthusiasm and excitement-seeking and emotions) that are often developed through early childhood that then become interpersonal qualities (extraversion, such as being outgoing and gregarious, warm and assertive) required as we mature into adolescence and adulthood. Laugen et al. (2017) suggest that there is minimal research in the development of social and emotional skills of CYP with HL. Research by Yoshinaga-Itano (1999) and Moeller (2000) suggest that there would be a link due to the difficulties these children experience in acquiring language.

The final section considered definitions of the term resilience. In research and within everyday life it is confused, often referring to someone's ability to achieve in the face of adversity or to bounce back if presented with a trauma (Bland et al., 1994; (Herrman et al., 2011). However, the view that it is a more fluid set of qualities and attributes that a person draws upon when in different situations and environments, as presented by Pooley and Cohen (2010), is the concept the researcher aims to use within this study. The factors

presented below are elements that the researcher considers will affect a child or young person's development of resilience skills: identification of HL and a person's understanding of their hearing, school provision and differentiation of the curriculum, support from specialist teachers QToD, language skills, self-perception, motivation and aspirations for the future, understanding of emotions and social skills. An image that develops this concept for the researcher is presented by Fuller (2021)



Figure 3: Attributes considered to be needed for a person to be resilient Fuller (2021)

The reviews of literature relating to resilience and deaf CYP presented by Freitas et al. (2021) and Young et al., 2008 suggested that researchers should identify a definition of resilience prior to their study. The review of literature for this research discussed how the term resilience is used in many contexts supporting the view that a working definition is

important. In this review of literature the researcher focussed on a collection of skills a person needs to learn and have opportunity to master to present as a resilient person as well as approach situations in life confidently. The image presented by Fuller (2021) presents a clarity as to what resilience means to the researcher in this research and areas an individual should learn as well as practice specific skills in order to be a resilient person.

## **2.5 Research Question and the aim of the research**

The first two chapters of this thesis presented the phenomenon identified by the researcher, that is, that learners with MMHL do not receive structured support in developing skills that would lead to resilience. The Eligibility Framework (NatSIP, 2017) is used by many LAs to identify ToD caseload however as well as level of hearing loss the child's language levels are also identified as a criteria. This is based on research that identified that deaf children with SPHL experienced difficulties in language development (Moeller, 2000; Muse et al., 2013; Pimperton et al., 2016; Sahlén et al., 2018; Yoshinaga-Itano et al., 1998). The review of literature presented that there is limited research that considers the specific needs of CYP with MMHL, therefore their individual needs are not detailed. There is little research that gathers qualitative data from CYP with MMHL to consider if they experience challenges in acquiring resilience skills and if the criteria identified in the Eligibility Framework (NatSIP, 2017) is appropriate to identify the needs of MMHL and therefore benefit from ToD support. The research question for this project is therefore identified as: How resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?



Associated with this question, the different elements or sub-questions are:

- Do CYP with MMHL have different resilience skills compared to their hearing peers?
- Do CYP with MMHL have different resilience skills compared to CYP with SPHL?
- Do CYP with MMHL have resilience skills that will enable them to plan for adult life, such as approaching an employer, telephoning audiology for assistance with their HA or seeking help in a new location?

## **2.6 Model of resilience used within this study**

The research question in this study is associated with the definition of resilience identified by research and gaps in research associated with understanding resilience from the perspective of CYP with MMHL. The model of resilience used within this study is presented in Figure 4 and Appendix 21.

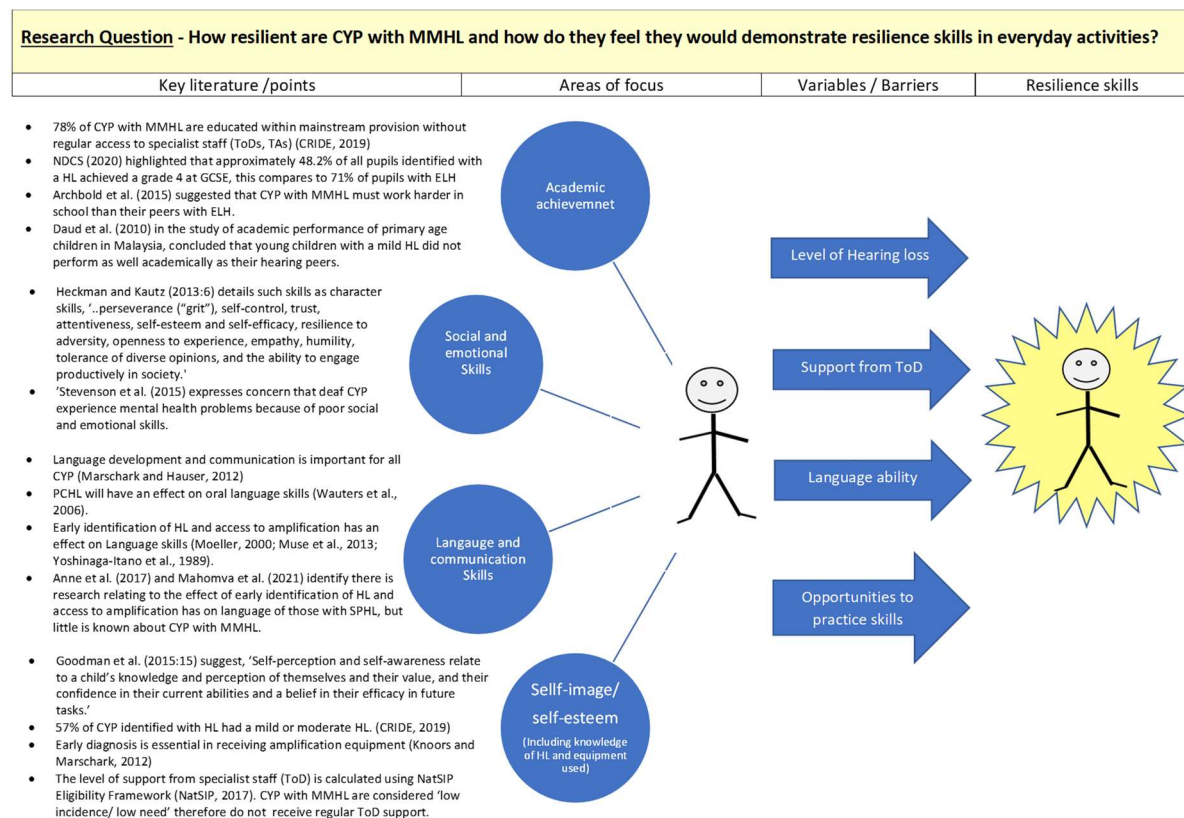


Figure 4:Model of resilience used within this study.

The four main areas associated with the definition of resilience are:

1. Academic achievement
2. Social and emotional skills
3. Language and communication skills
4. Self-image and self -esteem

The research within this review of literature identifies that all CYP need to learn specific skills and to have an opportunity to practise their ability to use their knowledge and skills in specific situations and structured tasks. A CYP able to apply and use skills independently in different situations and environments indicates that they are resilient. For CYP with HL there are barriers to them acquiring and practising these skills such as:

### **1. Academic achievement**

NDCS (2020) identified that approximately 48.2% of all pupils identified with a HL achieved a grade 4 at GCSE, this compares to 71% of pupils with ELH. Within this statistic it is unclear the number of those with HL were identified as having MMHL, however Archbold et al. (2015) suggested that CYP with MMHL must work harder in school than their peers with ELH. Daud et al. (2010) concurs with the view held by Archbold et al. (2015) as in their study of academic performance of primary age children in Malaysia, they concluded that young children with a mild HL did not perform as well academically as their hearing peers.

### **2. *Social and emotional skills***

Heckman and Kautz (2013:6) detail social and emotional skills as character skills, ‘..perseverance (“grit”), self-control, trust, attentiveness, self-esteem and self-efficacy, resilience to adversity, openness to experience, empathy, humility, tolerance of diverse opinions, and the ability to engage productively in society.’ Stevenson et al. (2015) expresses concern that deaf CYP experience mental health problems as a result of poor

social and emotional skills. The review of literature identified a gap in research as it was unclear if the CYP with MMHL experienced poor social and emotional skills and what their specific needs were.

### **3. Language and Communication Skills**

Marschark and Hauser (2012) present the importance for all CYP of developing good language and communication skills. Wauters et al. (2006) identify that CYP with PCHL does affect oral language skills and Anne et al. (2017) and Mahomya et al. (2021) discuss the effect of early identification of a HL and access to amplification such as HA has on a CYP language skills, but little is known about the needs of CYP with MMHL.

### **4. Self-esteem and self-image**

Goodman et al. (2015:15) suggest, 'Self-perception and self-awareness relate to a child's knowledge and perception of themselves and their value, and their confidence in their current abilities and a belief in their efficacy in future tasks.' CRIDE (2019) reported that 57% of CYP identified as having a HL had a mild or moderate HL, however access to specialist teaching from a ToD can be limited as the CYP can be considered 'low incidence, low need' following assessment using the Eligibility Framework (NatSIP, 2017).

### **2.6.1 Variables**

The review of literature discussed the research and literature associated with the definition of resilience used in this study, that is a fluid set of skills that a person can use in various everyday situations to allow them to complete tasks confidently and independently. It also considered the literature associated with CYP with HL, although there were gaps and limited research associated with CYP with MMHL. The research question is, how resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities? The variables that will affect this group of CYP with MMHL and allow the researcher to answer the research question are:

- Level of HL
- Language ability (receptive and expressive)

The researcher also considered barriers that could affect the ability of the CYP with MMHL from presenting as resilient as:

- Access to ToD
- Opportunities to practise the skills in supported and scaffolded activities.

## **Chapter 3: METHODOLOGY**

### **3.1 Introduction**

The focus of this study was the resilience skills of CYP with MMHL and whether they were able to demonstrate resilience skills when presented with everyday scenarios and situations. This study used an exploratory approach because of the limited knowledge and research to consider the issue of resilience and CYP with MMHL. Due to limited research in this area the research aim was to hear the voice of the young people therefore focus groups were designed. The researcher established three phases to the study. The first phase involved the use of a focus group to pilot the questionnaire devised for the research and to discuss the use of language and terminology that would be used within the study. Phase two involved completing language assessments with all participants to ensure each person met criteria and would be able to complete the tasks required within the study. The third phase entailed interviewing a sample of CYP with MMHL.

The chapter will begin by discussing the research methodology for this study and the philosophical background to the research methods selected. Next the data collection tools, and the sample identified for the study will be presented and this will link to ethical considerations that need to be considered. To conclude this chapter, the data analysis methods used will be discussed.

## **3.2 Research Approach**

When defining a researcher's approach to a study, the terms epistemology and ontology are used. This section will define these terms and will present philosophies related to different schools of thought. This information will demonstrate the researcher's rationale in defining this research study and the epistemological and ontological approaches adopted. Following a general presentation of an understanding of what is meant by a research approach the researcher will explain that the research design was informed by the ontological and epistemological position of the researcher and the three phases within this research, identified above (3.1) will be discussed.

### **3.2.1 Definition of terms**

#### **3.2.1.i Ontology**

Crotty (1998:10) interprets ontology as '...the study of being'. Being can be identified as anything that exists; however, this could be considered to be anything that is material or tangible or it could refer to something that is spiritual. Crotty (1998) referred to ontology as considering how a being (that is, a thing) exists and behaves within its environment. When used in relation to research, Crotty (1998) argues that when discussing ontology, a researcher is considering how a person functions and lives in the world. Hitchcock and Hughes (1995) considered that ontology and ontological questions relate to the social world and the participants in this social world. Hitchcock and Hughes (1995:19) identify that a

possible ontological question could be, ‘...how is the social world perceived and understood?’

### 3.2.1.ii Epistemology

Steup and Neta (2005) describe epistemology as ‘.... from the Greek words episteme and logos. Episteme can be translated as knowledge or understanding or acquaintance, while logos can be translated as account or argument or reason.’ This description of epistemology considers clarifying the information a researcher may have about something; that is, what does a researcher know about the world and why do they know it? Thomas (2017:123) links the concepts of ontology and epistemology: ‘Ontology is about what you are looking at – the kind of events that exist in the social world and epistemology is about how you look and find out about these.’

### **3.2.2 Ontological and epistemological considerations within this research**

The ontological considerations within this research project explored the resilience skills of CYP with MMHL to see whether they were different from the skills of CYP with ELH or those with SPHL. The resilience skills relating to language, communication, self-perception, social skills, and emotional management were considered and whether the CYP considered they had been taught and learnt skills within these themes. Understanding this could indicate how resilient the CYP felt they were or how resilient they felt they would be in different



situations. These ontological questions are related to whether the CYP with MMHL experience the environment differently from peers with ELH or SPHL.

Hitchcock and Hughes (1995) suggest that epistemological questions invite many theoretical discussions. Hitchcock and Hughes (1995:19) report that ‘...tests and criteria must be involved in order to establish knowledge. It follows, therefore, that epistemological questions will also involve discussion of what can be known.’ Reflecting upon this point, it was important to choose and design the research tools carefully to ensure the data gathered allowed the epistemological questions to be answered – how is X known? The researcher believed that to achieve this, it was essential to know and understand the group identified as the key focus of the research within various contexts: their peer group expectations and experiences, cultural background, as well as being a young person with MMHL.

### **3.2.3 Research design**

A researcher must consider and reflect upon the components that will define their research project: philosophy; the research design and the tools or techniques that will be used to gather the data. All elements link and intersect with each other as demonstrated visually by Saunders et al. (2019) in Figure 5.

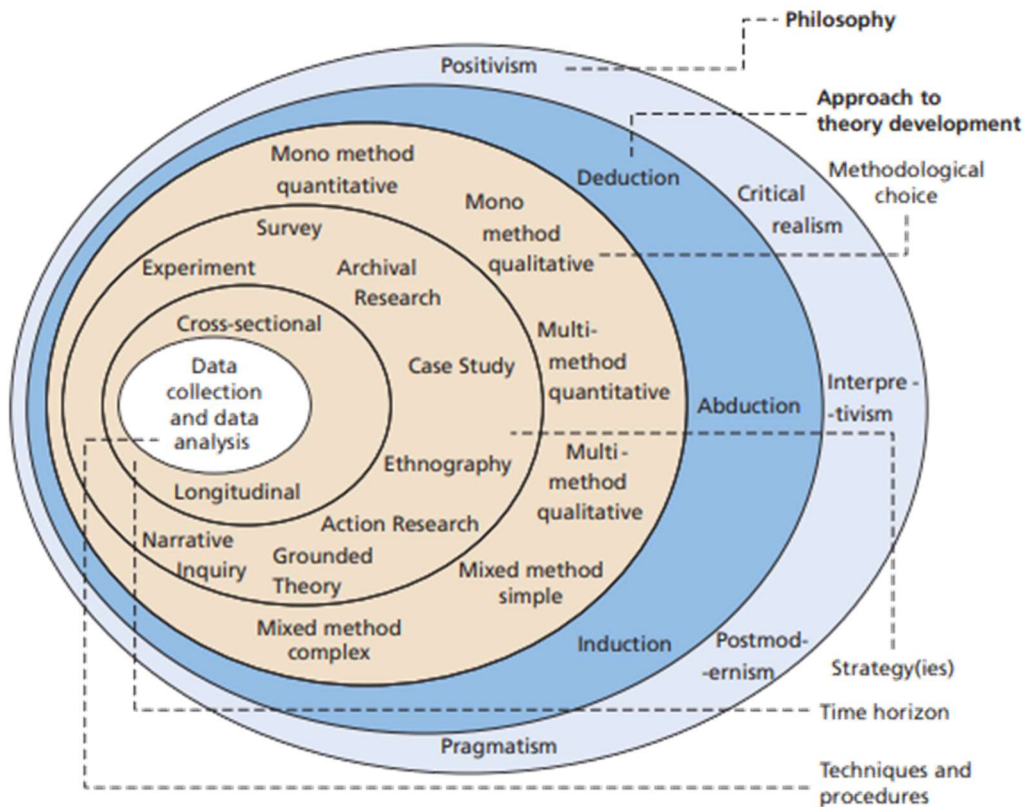


Figure 5: 'Research Onion' (Saunders, et al., 2019:130)

### 3.3 Philosophical approach

There are various philosophical approaches to examine the environment including positivism, critical realism, interpretivism, postmodernism and pragmatism (Cohen et al., 2018). The two main styles used in research are, positivism and interpretivism and these approaches will be considered in more detail in the sections below, 3.3.1 and 3.3.2.

Following a general presentation of the researcher's understanding of each philosophical approach they will discuss how each area informed the design of this research. The focus of the research is to gather views and opinions of CYP with MMHL in relation to resilience; do they feel they are developing resilience skills and have opportunities whilst in full time

education, to practise the skills within set activities. The research tools used to understand the views and opinions of the CYP are questionnaires used in Phase 2 and interviews (Phase 3)

### **3.3.1 Positivism**

*“For positivists, knowledge about the social world can be obtained objectively: what we see and hear is straightforwardly perceived and recordable without too many problems.”*  
(Thomas, 2017:108)

Positivists consider that their research should apply stringent assessment, testing and measurement processes similar to the approaches used by the natural sciences. The positivist approach to understanding a phenomenon could be seen as clinical, and some social researchers aim to consider what and how individual humans experience and interpret the world through their senses is different. This research does not adhere to the positivist approach as the research question aimed to consider the views of CYP with MMHL and how they viewed the world.

### **3.3.2 Interpretivism**

Interpretivism was considered as an alternative perspective for conducting social science research. Interpretivists considered that it was not possible to study the social world in such

a rigid way as viewed by the positivists, suggesting instead that the world was created by individuals and how they individually interact with it (Thomas, 2017). George Herbert Mead and Max Weber in the late nineteenth/early twentieth centuries were prominent supporters of interpretivist research. They challenged the view of social research, arguing that ‘... in the human sciences we are interested with verstehen (understanding).’ (Crotty, 1998:67).

For social researchers, whether they adhered to a positivist or an interpretivist model, a phenomenon had to have been identified. However, the chosen philosophical approach would affect how they gathered, analysed and reviewed the data. The interpretivist research adopted verstehen within their work, considering that understanding the social beings and the social world was of greater importance. This contrasted to the positivists who tried to explain (erklären) the phenomena by using tests and experiments (Crotty, 1998).

Immersion within the social situation is considered a prerequisite for an interpretivist study as this allows the researcher to understand the phenomena and gather the identified data. Such data is often qualitative: people’s opinions, views, beliefs and/or ideas relating to a situation. This style of data could be considered subjective as it is based on individual beliefs and views rather than concrete, testable facts. Data collected through a positivist study would be regarded as more objective as it focuses particularly on specific variables that are measurable, factual, detailed and clearly observable - quantitative.

Cohen et al. (2018) consider that social scientists suggest there is no longer a need to have a distinct association within research or need to have a paradigm war (Gage, 1989) between positivism (quantitative data) and hermeneutics or interpretivism (qualitative data). They suggest that both are valuable and can be used in a research study through mixed methods. It is now considered that specific data collection methods do not need to be assigned to particular epistemological approaches. The phenomenon is the key element and needs to be clearly identified as well as the methods of data collection and why they have been chosen. It is more important to identify if the research is addressing an understanding of the phenomena – verstehen, or erklären (explaining) (Gorard and Taylor, 2004; Gorard and Smith, 2006; and Teddlie and Tashakkori, 2011).

This research is a mixed method study; however, there are a variety of views relating to what is meant by mixed methods. Teddlie and Tashakkori (2011) discuss mixed methodology used by researchers and consider the differences between methods and methodology. They identify methodology as involving the full research process from the initial construction of the research question to the final evaluation and everything in-between. The methods refer to the information collected, its analysis and its subsequent interpretation. Johnson & Onwuegbuzie (2004:14) suggest that ‘...quantitative purists (Maxwell & Delaney, 2004; Schrag, 1992) believe that social observations should be treated as entities .... The observer is separate from the entities that are subject to observation.’ In their view, research and data gathered through this approach are objective. In comparison, Johnson and Onwuegbuzie (2004:14) suggest that qualitative data can be considered subjective and that

researchers should ‘... eliminate their biases, remain emotionally detached and uninvolved with the objects of study...writing style using the impersonal passive voice and technical terminology, in which establishing and describing social laws is the major focus.’ This view is also presented by Tashakkori and Teddlie (1998).

### **3.3.3 The philosophy of this research project**

The focus of this research project was to consider whether CYP who have MMHL have different resilience skills compared to their peers with ELH and those with SPHL. It also aimed to consider whether the CYP were prepared for an independent adult life based upon the resilience skills they had been taught and/or acquired during their time in education. This study considered the social model of disability in respect of resilience and of how we can support students by considering if there is a need to review the criteria used to gain access to a ToD. The advice and support of a ToD can help adapt the environment and the opportunities to practice skill that are important if a person is considered to be a resilient adult. This research focussed on the views of the CYP with MMHL to see if they felt they were learning and practising resilience skills.

The argument has been presented that social scientists no longer feel it is essential to clarify one specific ideology. However, the research within this project associated primarily with an interpretivist model. The researcher did not aim to test the cohort or a previous hypothesis, but rather to appreciate how the participants viewed the world and potentially develop a

new hypothesis. A mixed methods approach was used to gather the data, both quantitative and qualitative. Onwuegbuzie and Leech (2005:382) propose that not all quantitative methods are positivist or all qualitative methods hermeneutic (interpretivist). They suggest that instead of discussing research methods in this dogmatic way it is more beneficial to identify methods that are '...confirmatory and exploratory...' Cohen et al (2018:22) suggest that mixed methods research can be seen as '...integrating different approaches, ways of viewing a problem, and types of data in conducting both confirmatory and exploratory, induction and deduction, in answering research questions...' This view was also presented by Reams and Twale (2008:133) who viewed mixed methods research as '...necessary to uncover information and perspectives, increase corroboration of the data and render less biased and more accurate conclusions.'

The mixed method approach in this research aimed to present a more holistic picture of the CYP identified as the focus of the study. The different research methods allowed a more balanced view to be considered and provided the researcher with information that assisted with further data gathering; for example, completion of the questionnaires supported the researcher to consider participants for the interviews.

Although this study linked with the interpretivist approaches, it was important to identify whether it aimed to be inductive, deductive or abductive as defined by Saunders (2012: 665-672):

- Deductive: ‘...involving the testing of a theoretical proposition by the employment of a research strategy specifically designed for the purpose of its testing.’
- Inductive: ‘...the development of a theory as a result of the observation of empirical data.’
- Abductive: ‘...the collection of data to explore a phenomenon, identify themes and explain patterns, to generate a new – or modify an existing - theory which is subsequently tested.’

This research study linked with an abductive approach. Bryman and Bell (2015) suggest that an abductive approach has links with both inductive and deductive approaches in that it tries to build theories. The abductive research often begins with puzzles or surprising facts and the research then progresses to make sense or link these puzzles to a new, rather than a pre-existing theory. The Literature Review (Chapter 2) identified that there is little research already completed on resilience skills of CYP with MMHL. This meant this study started with a puzzle and so it was appropriate to use a mixed methods approach as different methods allowed the puzzle to be identified and investigated. Data were collected from the questionnaire in order to identify and explain how resilience was viewed by deaf adolescents. The interviews then enabled the researcher to drill down into the information collected and to evaluate/test the theory that developed based on the questionnaire.



### 3.4 Research Methods

Considering the philosophical approach discussed in the previous section (3.3) the research design of this study included three phases as present below in Figure 6.

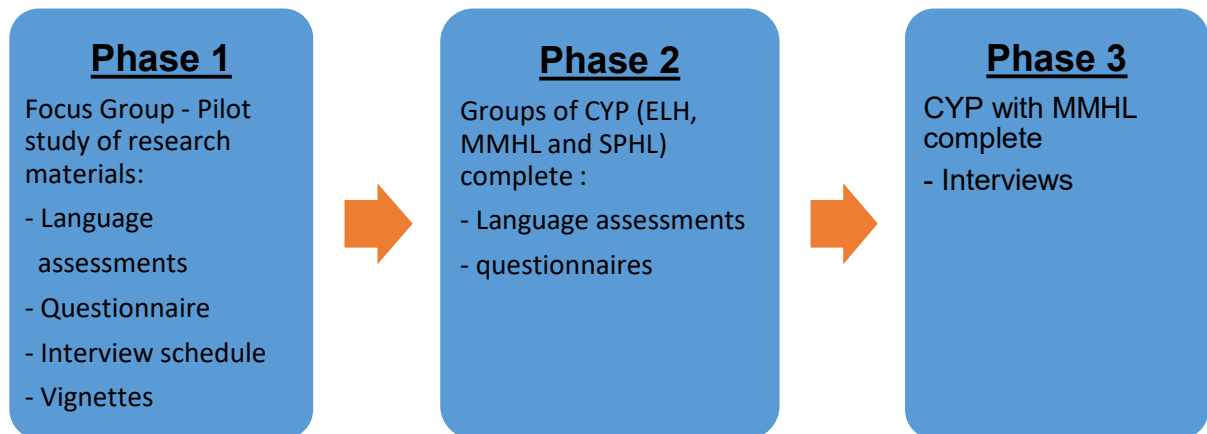


Figure 6 Diagram illustrating the three phases of the overall research design

The research used several methods of data collection:

#### Phase 1:

- Focus Group – 8 CYP (ELH, MMHL, and SPHL)

#### Phase 2:

- Language assessments establishing receptive and expressive and language levels of all 83 participants.
- Questionnaire presented to all 83 participants

#### Phase 3:

- Face to face interviews – 9 CYP with MMHL

The purpose of the focus group was to pilot the materials to be used in the formal research, and also to facilitate a group discussion on the themes highlighted through the researcher's reading and consider if it characterised the definition of resilience and resilience skills as understood by CYP of this age group.

The purpose of assessing the language levels (receptive and expressive) of the CYP who participated in the research, was to ensure they were able to access the research materials to be used. Language competency can influence a person's ability to understand and use specific skills associated with being resilient as highlighted in the Literature Review (Chapter 2 – 2.2.4). The data gathered from the language assessments would show the researcher if language was a factor for different levels of resilience skills. The second element of the quantitative data was a questionnaire that focussed on specific categories relating to resilience and resilience skills, which will be discussed later when the individual research tools are examined in detail. The general purpose of the questionnaire, however, was to gather, analyse and compare data from CYP in each of the three groups to consider whether the responses were different.

The interviews with the CYP with MMHL, allowed the researcher to delve into the answers the CYP presented on their questionnaires. They were planned using vignettes with the aim of providing a hypothetical scenario that would allow the participants to feel more

comfortable in discussing themes relating to resilience skills. They will be discussed later in more depth.

### **3.4.1 Triangulation**

The research question and subsidiary questions posed did not fit in to one frame, therefore the research tools chosen were cross-sectional study approaches using questionnaires and interviews. Through selecting this approach, the researcher wanted to consider the data from different perspectives and angles, known as triangulation (Thomas, 2017). Thomas (2017) suggested that the inherent vagueness of social science research leads the researcher to think critically or be conscious of critical awareness. Stauffer (1980:254), suggests that social researchers use critical thinking as ‘...a unique means of de-mystification and intellectual clarification.’ The reasons for selecting different research tools within this research project was to consider the research question from various perspectives and to use different methods to study the information achieved, which Denzin (2010) identifies as methodological triangulation.

Pluye et al., (2009:530) suggest that the purpose of mixed method research is for ‘...the broad purpose of gaining breadth and depth of understanding or corroboration...’ It is for this reason the researcher chose to use both quantitative and qualitative methods of data collection within this study. It was not possible to be detached from the CYP during the study as it was important to build a relationship with the participants, understanding them as individuals and their circumstances. At the same time, there was also a need to ensure the

research was objective and reduce the risk of researcher bias. For this purpose, two different data collection tools were identified as a combination of quantitative and qualitative research methods. Pluye et al. (2009) consider that qualitative data investigates, and can present, causal relationships, whereas the quantitative data can be statistics that present generalisations. By using both quantitative and qualitative research methods together can enhance the study.

### **3.5 Sample**

There are many elements to consider and questions to ask when a researcher contemplates the group required to address the phenomenon and research question, as Cohen et al.

(2018) identify:

- Size of the sample
- Statistical Power - the information the sample group adds to the research when data is compared to that from the other groups included within the project.
- Access - processes to reach the sample group
- Sampling strategy - how participants for the project will be recruited. It is important that the sample chosen is representative of the group identified.

DiGaetano and Waksberg (2002) argue that not only are there social factors affecting who is selected by a researcher within their sample, but external factors such as financial cost, time and transport – time and cost that can affect both the researcher and the sample.

Uprichard (2013) explains that within the space and time constraints in gathering data, a researcher needs to be clear about the ontology and epistemology of the project, as discussed earlier (see 3.2). It is important to identify what is known about the group/population before the participants are recruited and why it is known. This study investigated the resilience skills of CYP with MMHL and design of the research involved using the researcher's definition of resilience (See 2.4) then asking the CYP about their perceived resilience skills. In order to answer these questions, it was imperative that the researcher understood this cohort. Uprichard (2013) presents the linking elements in Figure 7 below:

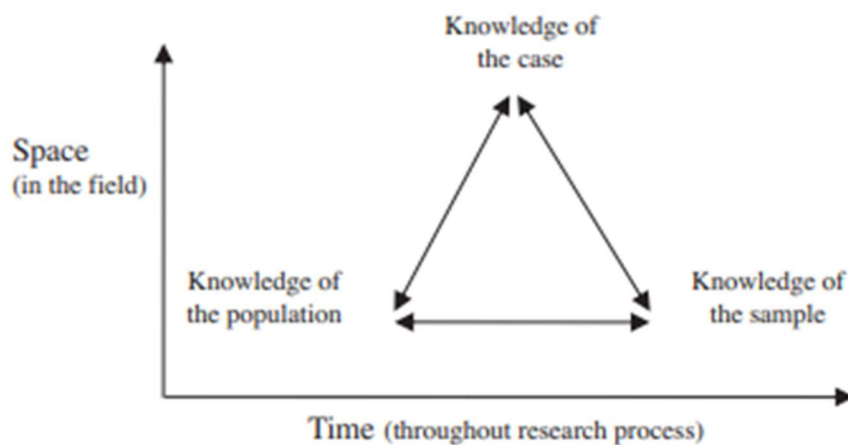


Figure 7: Necessary presumptions of sampling Uprichard (2013:4)

Uprichard (2013) explains that the researcher must know the research population in order to gather useful and important information. It is not possible to gather information from the whole population therefore a sample is identified. The method of probability sampling was selected for this study opposed to non-probability sampling such as, convenience sampling which would involve a researcher gathering participants by chance such as those who participate in a survey in the shopping centre (Gorard, 2001). Gorard (2001) suggests that non-probability sampling could be of value during a pilot study or if the aim of the study is not to understand a specific population, but to understand a process.

Within this research, both probability and non-probability sampling methods were considered. Non-probability sampling in principle involves a researcher identifying a collection of people with the knowledge that they do not characterise the full population (Cohen et al., 2018). This approach has several styles: convenience, purposive, snowball, quota and dimensional sampling. Each style gathers participants in a slightly different way however they are often used in small-scale studies that may include a single or a couple of schools or specific teachers (Cohen et al., 2018). As the researcher wanted to gather data from a wider population with the aim of presenting generalisations, probability sampling was the best fit (Cohen et al., 2018). Probability sampling would also allow the researcher to consider statistical analysis of the data being gathered and this reflected the mixed methods approach in this study. As with non-probability sampling, there are different methods: stratified, systematic, simple random sample, stage sample and multi-phase samples. A simple random sample means that each member of the identified population has the same

chance as another person to participate and can be completed by randomly selecting people from a table (Cohen et al., 2018). The systematic sampling approach would consider the population size, identify the sample size and from this use a simple formula to calculate the people to participate, for example the formula could identify using every fifth person (Cohen et al., 2018). When a population is split into homogenous clusters such as gender rather than geographically, then a researcher could consider a random stratified sample that represents the gender balance in the population in total (Cohen et al., 2018). A stratified sample would allow the researcher to gather a sample that reflects the total population. If research identifies a population that is large but is spread across a wide geographical area, they could use a cluster in one area that would represent the population, but this would need to be carefully considered as an urban population could present differently to a rural one based upon different socioeconomic challenges (Cohen et al., 2018). An extension of cluster sampling is stage sampling and involves the researcher considering a specific school population then breaking this down to several schools and identifying how many participants are required from each school (Cohen et al., 2018).

Cluster sampling was used in this research as the researcher selected six LAs and asked each to identify five participants in each of the categories of CYP: ELH, MMHL and SPHL. Initially three LAs were selected and asked if they could randomly select ten participants for each group, this was not possible therefore three more LAs were selected to ensure a random sample was identified. This approach was selected as opposed to multi-phase sampling as within this approach the criteria for selection of the participants during each phase could be

different, such as geographical location in phase one and school type in phase two, such as academies, grammar schools or non-maintained schools. The population in this research were CYP aged 11-15 years of age and the population was divided into subgroups of those with ELH, MMHL and SPHL.

The group needed to be carefully selected to ensure the CYP felt confident and empowered to share their stories and unique information with the researcher who could then gain knowledge of them individually, their life and factors that affected them.

*‘...for every sample design, underpinning why ‘those’ cases are sampled from ‘that’ population is the assumption that those cases (as opposed to any others) will potentially be able to be used to know more about the particular part of the world that is implied in the research question.’  
(Uprichard, 2013:5)*

Cohen et al. (2018) suggested that, once the population is acknowledged, the researcher needs to identify and recruit the sample to participate in the project; that is, a subset. They identified that it is important to ensure an appropriate sample size is selected to represent the population.

The selection criteria for the participants within this research project included age, hearing levels, cognitive abilities, language and communication skills.



### 3.5.1 Age

The age group chosen for this research study was 11-15 years because this is when CYP begin to have their futures considered by others: parents, subject teachers and careers teachers. In secondary education, sessions focussing on aspects of decision-making and life after education would be through careers sessions and, specifically, in Personal, Social, Health and Relationship Education (PSHRE) or Personal and Social Development (PSD). The following quote from a school website demonstrates the focus of PSD sessions:

*'PSD allows students to develop the knowledge, skills and attributes they need to keep themselves healthy and safe, and prepare for life and work in modern Britain. It helps students to develop the knowledge, skills and attributes they need to manage many of the critical opportunities, challenges and responsibilities they will face as they grow up and in adulthood.'*<sup>2</sup>

*(South Wigston High School, 2020)*

### 3.5.2 Hearing level

Three groups of participants were identified, those with:

1. ELH - within 0-20dB for all frequencies

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<sup>2</sup> The researcher does not have any affiliation with South Wigston High School, and it was not used as part of the research; the above quote is used solely to demonstrate the importance given to PSD during the secondary education.

2. MMHL – HL between 21dB and 70dB.
3. SPHL – HL from 71dB to in excess of a 95dB loss

For information on classification of hearing levels, see Introduction (1:4).

### **3.5.3 Deaf children without additional needs**

This research did not involve participants who had any additional needs or who had an identified cognitive delay. The study selected CYP, hearing and those with HL, whose mode of communication was spoken language. This was to enable the variable of language to remain the same for all participants. No specific assessments were completed or reports of learning needs presented prior to participating in the research, but was a criteria identified when discussing CYP with the identified gatekeepers. The focus of the study was CYP who used spoken language therefore all participants were to complete language assessments and interviews through the medium of spoken language rather than BSL.. The study wanted to consider the influence of spoken English language rather than BSL on the ability of CYP with MMHL to acquire resilience skills.

### **3.5.4 Language and communication skills**

As identified in the previous section (3.3.4) it was important to ensure the participants were able to access the research tools and understand the themes/concepts being discussed, so it was necessary for them to be able to communicate orally rather than using BSL as their primary mode of communication. BSL is a recognised language in the United Kingdom but its

syntax (word order) within sentences differs from spoken English, meaning there may not be a direct translation between the two.

### **3.5.5 Gender**

There were no criteria relating to gender applied, both male and female volunteers were encouraged to participate although it was not part of the intended analysis to specifically consider the role gender plays in resilience skills. The population in general, of CYP aged 11-15 with a MMHL, is small compared to those with ELH and too many variables would prevent some potential participants from being eligible to take part and make the sample group too small to provide useful data.

### **3.5.6 Sample size**

Cohen et al. (2018) discuss the challenges of identifying the ideal sample size as the population identified for the research project needs to be adequately represented. The type of data to be gathered, qualitative or quantitative, is a further consideration. For qualitative research, the larger the group identified by the researcher the better, as this increases the reliability of the analysed data and allows the statistics produced to be refined and adapted. Gorard (2003:63) advocates being ambitious with the sample size due to participants

withdrawing or challenges in recruiting the numbers desired, however. ‘...whatever size you choose is simply the maximum you could achieve.’

The sample size can be determined in several ways. Cohen et al. (2018) suggest that the researcher can use their own judgment and foresight by deploying their knowledge of the population to ensure that what they envisage investigating portrays the wider group.

It was crucial to consider the desirable and achievable group size that could be gathered from the number of CYP with HL, that also matched the research criteria. The group size was identified as thirty participants in each of the three categories with a total over the research study of ninety participants to allow for statistical analysis. The researcher had initially intended to recruit forty participants in each group, giving a total of one hundred and twenty, but this proved an optimistic target. The selection criteria and Gorard (2003) warning about participants withdrawing, were factored into the initial planned sample size.

The researcher reflected upon the various factors required to determine the size and selection of the sample, and the influencing factor was the relatively small number of CYP with a HL compared to the population in general. CRIDE (2019:1) identified that there were ‘...at least 53,954 deaf CYP across the UK.’ The Office of National Statistics (ONS) however identified that within the UK in 2019 there were approximately 12.7 million children aged 16 and under in the UK (ONS, 2021). The statistics demonstrate that the size of the population the researcher selected as part of their study was small in relation to the overall population

and, therefore, if too many sample selection criteria were used the sample size would be too small to determine any significant data.

*'If the population is heterogeneous then a large sample is preferable, if the population is homogeneous then a smaller sample is possible.'*

*(Cohen, Manion and Morrison, 2018:204)*

CYP with HL form a heterogeneous group due to diversity of age, ethnicity, culture, geographical location, audiological technology, HL diagnosis and mode of communication. A homogeneous group is defined as having similar levels of ability or characteristics. The researcher wanted to create a more homogeneous group for the study and endeavoured to reduce diversity by identifying selection criteria. It was equally important to ensure that the sample size was large enough to avoid sampling error, where the sample does not allow true representation of the population.

The researcher considered an appropriate group size for this research project of approximately thirty participants in each of the categories: with ELH, MMHL and SPHL.

### **3.5.7 Recruitment and selection process**

The CYP were recruited from six LAs across the North West of England (Cheshire, Wirral and Liverpool), Wales (Flintshire and Cardiff) and the Midlands (Birmingham). The locations were chosen as they were accessible to the researcher who completed all the data gathering. The

areas selected also provided a variety of cultural and socio-economic environments that enabled the data to be more representative of the targeted population.

A presentation was given to the ToDs and the Heads of Service in relevant LAs to discuss the research project. The ToDs in each LA had knowledge of the CYP who matched the selection criteria and were able to help identify schools/CYP who could be approached to participate.

The CYP with ELH were selected from the same schools as those with an identified HL. The Head Teacher and Gatekeeper (SENCo/ALNCo or Assistant Head Teacher) were invited to the presentation relating to the research to allow them to ensure students who matched the selection criteria volunteered and were identified.

The researcher discussed the project and the selection criteria with all involved in the identification of participants to prevent selection bias, which is seen as when participants are specifically selected to take part in a study. The group created came from different schools, localities and socio-economic and cultural backgrounds. The CYP and their parents/guardians were provided with research information and consent forms. This is discussed within the Ethics section (see 3.6). The participants were told that, although they signed to agree to participate in the research, this would not necessarily mean they would be selected to participate, allowing the important selection criteria to be met, but the final sample chosen to participate was selected randomly. The number of participants for the MMHL and SPHL groups did not meet the sample identified, thirty participants, therefore all

who met criteria participated in the study. For the group with ELH forty-two participants agreed to participate and thirty were chosen randomly although they, were from different schools rather than from a single establishment.

This research project is a mixed method study and the above sample selection considerations have primarily focussed on those that relate to statistical analysis, the quantitative element of the study. Quantitative research often uses equations to calculate the exact number required within a sample (Cohen, 1988). The qualitative elements of this study, interviews, presented different considerations to the researcher. Sandelowski (1995:183) elucidates that the priority purpose of the sample size for a qualitative researcher is that it should be a manageable size for the researcher to provide ‘...a new and richly textured understanding of experience’. The researcher needs to be able to work with and manage the data obtained and this therefore will determine the sample size. Baker and Edwards (2012) highlight that the mean sample size could be between 30 and 40 participants. Braun and Clarke (2013) suggested that when a researcher is considering thematic analysis (TA) the size of the study is a consideration as well as the data collection tools being used, a suggestion would be for a small-scale project the number of participants invited for an interview could range between 6-10, the focus group size would approximately be 2-4 participants and participants who completed statistical data would be 10-50. The researcher considered various principles as highlighted in the above discussion and their personal knowledge of the deaf population. The overall sample size for this study was thirty CYP from each of the categories being recruited: ELH, MMHL and SPHL. For the qualitative

data, interviews, a sample size of between 6-10 was chosen as suggested by Braun and Clarke (2013). The CYP participating in the interviews were from the MMHL group only and were not randomly selected. The CYP who participated in the interviews were selected by the researcher who completed the quantitative data.

### **3.5.8 Sensitive Research**

The focus of this research involved asking CYP aged 11-15 to reflect on their resilience skills: this falls into the category of sensitive research. Fahie (2014) suggested that educational research is intrinsically sensitive, due to the participants' ages, the information about them available through accessible documents and the questions they may be posed. A researcher therefore needs to carefully consider the impact their research may have (Lee and Renzetti, 1990). This was a significant issue for the researcher when creating and designing this research project. The participants, at 11-15 years of age, could be considered to be at a vulnerable stage in their development. The focus of the research involved interacting with the CYP and asking their views/opinions both individually and collectively around what could be considered personal and intimate views relating to their resilience skills development.

Researchers need to be particularly aware of their role within the research process both personally and how forging a relationship to gather the information can expose the researcher and participant. The impact of research on all participants is a crucial factor when developing a study, a point supported by Fahie (2014); Cohen et al. (2018); and Elliott



(2005). Fahie (2014) highlights the participants should not be negatively affected by the process in which they have been involved.

It was important to ensure that all of the above points and measures were taken to minimise the perceived risks to the participants in this study. The researcher completed the data gathering; however, the selection of the participants was made by the identified gatekeepers using the selection criteria identified earlier. The gatekeepers understood the research study and were able to contact the CYP and their families to discuss the project and would only consider participants who could complete the activities and avoid any who may be considered vulnerable. The researcher worked with the participants, but the relationship was focused solely on the study and the material associated with it, thus reducing the risk of researcher bias.

The researcher was also potentially at risk within the process as they had to give of themselves and present their personality to build a relationship with the participants. The CYP needed to trust the researcher during the data-gathering and language assessments and questionnaires, which involved asking probing questions. This could leave a researcher exposed and vulnerable and therefore the risks in conducting the research, the selection of the research tools and how they would be deployed needed to be considered. The ethical requirements and elements will be discussed in the next section when the individual research tools are described (See 3.6 and 3.8).

### 3.6 Ethical Considerations

*‘Ethics concerns that which is good and bad, right and wrong’*

*(Cohen, Manion and Morrison, 2018:111)*

In preparing and designing this study, the ethical rules were carefully considered in relation to the research question. Cohen et al. (2018) identify several areas a researcher needs to address within the ethical report: informed consent; confidentiality and anonymity; gaining access to participants; completing research with children: identifying data collectors, responsibilities of those involved - the researcher and participants; storing, accessing and archiving data. The full Ethical Approval form is in Appendix 1. The key points from the Ethical Review will be addressed in the following paragraph.

The participants for this research were CYP aged 11-15 years of age from three different groups: ELH, MMHL and SPHL. As stated in (see 3.5.7) the CYP were recruited from the North West of England (Cheshire, Merseyside, and Wirral), Wales (Cardiff and Flintshire) and the Midlands (Birmingham). The researcher met with the specialist support teams within each Local Authority to discuss the proposal and the ToDs assisted in the identification of schools and CYP who could be invited to participate. An information sheet summarising the project was provided (Appendix 3)

ToDs initially identified CYP with HL who matched the selection criteria. The researcher contacted the schools attended by the potential participants, held meetings with the Head

Teachers, identified gatekeepers and provided information leaflets (Appendix 2). The information sheet provided clear information about the purpose of the research, the researcher and what the CYP would be asked to do.

Posters (Appendix 5) were displayed around the identified schools advertising the research and inviting CYP to participate. The CYP were under 16 years of age therefore consent was gained from parents/guardians. The CYP were then invited to take part in a maximum of four tasks, which will be discussed in the following section (3.7).

All participants who agreed to take part were informed verbally at the beginning of the process that they may not be selected for the research group. The CYP with MMHL were also made aware that although they volunteered to take part in an interview they may not be selected as a participant in this element of the study.

Information sheets were provided in advance of all the tasks (Appendix 4, 6, 7 and 8). The tasks were written using language suitable for 11-15 year olds, with terminology clearly explained. As the participants were under 16 years of age, a precise information sheet for parents detailed the project and what was expected of their child, including an easily-completed consent form with a pre-addressed envelope (Kvale, 2008) for return to the school or ToD (Appendix; 9,10,11).

Both information sheets were issued in advance of the tasks being conducted: Focus Group, language assessments, questionnaires, and interviews. Participants were provided with two copies of the consent form (Appendix 11) and asked to sign and return one copy confirming that they were willing to participate in the research project; the second copy was retained by the participants for reference. The CYP were only accepted as a participant if they completed a consent form and their parents/guardians agreed and consented to them participating in the research.

If further information or clarification was required by the parents the researcher was contactable via various methods; telephone or email or the parents could request a meeting or attend an informal drop-in (Appendix 9 and 10). Parents gave written consent, allowing the researcher to approach their son/daughter to ask if they wanted to participate in the project. The parents and CYP themselves identified the specific elements of the project they were willing to participate in: focus group, language assessment, questionnaire and/or interview (Appendix 11).

Parents were informed that participation was voluntary and that their child could withdraw from the process at any time prior to a specified date, without providing a reason and that any data gathered would be destroyed and would not be used in the project.

The parents and CYP were informed that there would be no negative impact on their relationship with the school or Hearing Impaired Support Teams if they decided not to participate in the research.

### **3.6.1 Focus group and pilot study**

A focus group is used to gather a group of people together to discuss themes and ideas that relate to a specific topic, and could be viewed as a group interview (Cohen et al., 2018). It offers the benefit showing how individuals answer questions and provides a collective discussion and opinion on the themes.

A focus group can be a useful data collection tool, however the role the researcher plays is vital (Morgan, 1996). The researcher needs to create an atmosphere that enables the views to be shared and discussed (Denscombe, 2017). Hydén and Bülow (2003) consider that a focus group could be viewed negatively as the people assembled for such activities may be unknown to each other, despite sharing the key traits or criteria identified by the researcher that qualify them as an homogenous group. This was a consideration when identifying and gathering the focus group together for this research project. The group size and make-up were therefore a strategic objective; however, authors vary slightly regarding the size of the group due to factors such as travelling time and cost for the participants to meet at the identified venue. Denscombe (2017) suggests a group size ranging between six and nine people, whereas a group between four and twelve participants is put forward by Morgan (1996) and Morgan et al. (1998).

The focus group for this research project was designed to address two elements. Firstly, to discuss the research themes and key words and, secondly, to pilot the research tools, in particular the questionnaire and the interview vignettes. This element will be discussed further in relation to the interviews. The group consisted of eight students and its composition is shown below (Table 5);

Hearing Levels	Number of participants
Hearing – no identified HL	4
MMHL	3
SPHL	1

Table 5 – Participants within the focus group.

The CYP who took part in the focus group were recruited using the selection criteria identified earlier (see 3.5.2). All participants were provided with research information and a consent form (Appendix:4, 5, 6, 7, 8 and 11) and all phases including this initial phase were detailed. The group was identified by the SENCo as they met the researcher's selection criteria. The CYP all knew each other, as they were from Year 8 in the same school. The group was selected due to the mix of hearing levels, but also because they were all friends or had engaged in some activities together, which addressed the concern highlighted by Hydén and Bülow (2003) that the group would be unknown to each other and therefore would they feel comfortable to share and discuss the themes openly. Cohen et al. (2018)

support this view suggesting that participants will potentially only engage if they are known to each other.

The themes/key words identified for discussion within the research study were taken from the skills CYP need to learn and develop in order to be resilient as identified by Fuller (2021).

This skills associated with resilience as presented by Fuller (2021) were used by the researcher in their definition of resilience and resilience skills, they were:

- Social Skills
- Emotional Skills
- Friendship
- Independence
- Leadership Skills
- Resilience skills

The focus group piloted the research materials to be used; the language assessments and questionnaire devised for this study and reviewed the vignettes. The main purpose was to gather feedback from the group regarding the accessibility and appropriateness of the materials to be presented while also providing important feedback on the process of completing the tasks.

### **3.6.2 Language assessments**

Language assessments to ascertain levels of receptive language (understanding) and expressive language (spoken) of all the recruits were used as the first task within Phase 2 of the research project. As was discussed in the literature review chapter (See 2.2.5) there is a correlation between social skills and expressive language

The language assessments were completed at the beginning of data gathering and the aim was twofold. Firstly, to establish that the CYP could understand the language presented in the questionnaire and/or the interviews and, secondly, to consider the impact language plays in the development and application of social and emotional resilience skills.

The assessments used were Receptive One Word Picture Vocabulary Test (ROWPT) (Martin and Brownell, 2011) and Expressive One Word Picture Vocabulary Test (EOWPVT) (Martin and Brownell, 2010). Other assessments were considered including British Picture Vocabulary Scale (BPVS) and the Renfrew Word Finding Test. BPVS is a receptive vocabulary assessment used widely by ToD to assess progress of CYP on their caseload, so the researcher therefore chose not to use this assessment as it could affect ongoing monitoring of progress. The Renfrew Word Finding Test is another assessment used by ToD, however the age range and standardisation for this assessment is 3-8 years of age. The ROWPT and EOWPVT assessments were chosen as they were from the same publisher and the same data set was used in the standardisation of the assessments. This was an important aspect to be



considered by the researcher as validity of research and research data is imperative within the work being undertaken. Cohen et al. (2018:245) suggest, 'If a piece of research is invalid then it is worthless.' As a researcher it was important to gather data that was trustworthy, and ROWPT and EOWPVT have been used in previous research involving deaf CYP (Harris et al., 2017).

All assessments were completed by the researcher to ensure consistency. If individual teachers gathered the data it might affect the consistency of results as they may have interpreted them differently.

The tests selected would enable the researcher to gather the information required without affecting the work of schools or ToDs as they were not generally known or used by the schools, or the Sensory Support/Hearing Impaired Teams and would not affect the routine assessments used to measure progress.

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### **3.6.3 Questionnaire**

Cohen et al. (2018) identify that the area of questionnaire design and use within research is enormous, and a researcher should consider many questions before presenting what could be viewed a simple research tool. When contemplating a questionnaire, which can be a relatively straightforward method, time is required to design an appropriate survey, present a pilot of the questionnaire and time to address and rectify any issues that are presented

during the pilot. In addition to this, the researcher needs to carefully think what data is needed and may be presented as part of the study.

Cohen et al. (2018:471) suggest that a questionnaire will ‘...always be an intrusion into the life of the respondents...’ The intrusion can relate to the time to complete the questionnaire through to the intrusion into personal information relating to feelings or views on potentially sensitive and/or emotional issues. It is important, therefore, for the researcher to reflect on the research question, the study’s aims and which questions they really need to ask as a means of securing the information required.

The researcher considered a variety of questionnaires and surveys to investigate social skills, emotional skills and an individual’s self-esteem and resilience. The questionnaires identified in the literature would not enable the researcher to answer the research question. (Chapter 2 – 2.4 and 2.5). The themes that defined resilience based on the researcher’s definition of resilience adapted from Fuller (2021) were: were:

- Attitude to Life
- Optimism and self-perception
- Emotional Awareness – self-awareness and that of others
- Self-control/self-advocacy skills
- Social networks and support systems
- Sense of humour

- Self-belief and self esteem
- Communication skills
- Aspirations

A questionnaire was created for the purpose of this research and to answer the identified research question (Appendix 9.12). It was important to gather specific data that would allow the researcher to consider the resilience of CYP with MMHL. One single published questionnaire did not address this question, but several questionnaires were used to develop the research questionnaire:

1. Children's Anxiety Life Interference Scale (CALIS)
2. Children's Automatic Thoughts Scale (CATS)
3. Strengths and Difficulties Questionnaire (SDQ).
4. ASK (All Special Kids) Social Skills Pre-Assessment Questionnaire. (ASK)

#### 3.6.3.i Children's Anxiety Life Interference Scale (CALIS)

The underlying principle for considering elements of the CALIS questionnaire was that a lack of self-perception or self-esteem could create a fear or anxiety and a barrier for trying something new as discussed in the Literature Review (see 2.3.3). This questionnaire has not been used with deaf CYP in relation to resilience skills, but the areas addressed in the questionnaire associated with the researcher's interpretation of resilience (see 2.4). The CALIS (child version) Lyneham et al. (2013) (Appendix 12) was designed for CYP aged 6-17

years of age to consider the worries and anxieties they have in life and contains nine questions. The researcher used the questions from CALIS) to formulate questions 7, 8 and 9 (Attitude to life) that focused on activities outside of school, question 23 (Control of self) relating to the ability to organise oneself such as completing homework and questions 25 and 26 (Social Support) reflecting on the CYP's ability to engage in enjoyable activities with family and questions 27 and 28 that considered social activities with friends and peers.

### 3.6.3.ii Children's Automatic Thoughts Scale (CATS)

*"The CATS is a developmentally sensitive, general measure of negative self-statements across both internalizing and externalizing problems. Four separate subscales of cognitive content are assessed including physical threat, social threat, personal failure, and hostility. The CATS is designed for children and adolescents aged between 8 and 17 years of age."*

*( Macquarie Macquarie University, 2021)*

The researcher's experience of working with deaf CYP of this age group, comments such as, 'others do not need it (HA) or use it so why do I?' or ' I can cope without it (HA)' are common. The researcher wanted to delve into the area of assistive technology and self-perception and, therefore applied the section of the CATS addressing this area in the construction of the questionnaire. This questionnaire has not been used with deaf CYP in relation to resilience skills, however some questions reflected the researcher's

interpretation of resilience (see 2.4). The CATs questionnaire (Schniering and Rapee, 2002) is intended for use with CYP aged 8 to 17 years of age and aims to ask participants to reflect on negative self-review statements associated with personal disappointment and failure, social disagreements and breakdowns (Appendix 13). There are 40 questions in the CATs and they were used to shape the questionnaire used in this study. The researcher however altered the negative language to positive within their questionnaire and asked the CYP to judge how far they agreed with the statement. The CATs questionnaire was used to formulate 1-6 (Optimism) focussing on outlook to life and personal skills as well as qualities including attitudes to HL and their use of technology such as HA and RA. Questions 10-18 (Emotional Awareness) considered questions from the CATs questionnaire and focussed on 3 specific emotions, being happy, sad and worried. The researcher developed the concept of understanding specific emotions and asked the CYP to consider if they were able to talk to family and friends about the emotions and situations when they felt such emotions. Questions 19-22 (Control of self), questions 32 and 33 (Sense of Humour) and questions 34-47 (Self-esteem and self-belief) were again formulated using the concepts presented in the CATs questionnaire and again switched to a positive for example 'I can ...' and CYP graded how far they agreed with the statements.

### 3.6.3.iii Strengths and Difficulties Questionnaire (SDQ)

The SDQ (Goodman, 1997) presents 25 questions under five themes: emotional behaviour; personal conduct problems; hyperactivity or attention difficulties; relationships with peers,

and self-identification of social and emotional skills difficulties (Appendix 14). There was some overlap with the previous questionnaires therefore these questions were not used by the researcher when formulating the questionnaire for this research study. The final section of the SDQ however requests that the participant reflect on social and emotional difficulties by asking if they have experienced such emotions/behaviours and if answered yes, there is a measure of how long they have felt this way and the impact it has on different aspects of their lives (Appendix 14). This was a valuable element and was included in the research questionnaire as it would enable the researcher to use the knowledge gained in the interviews to triangulate the information. Additionally, it has extensively been used with deaf students for example Terlektsi et al. (2020a).

#### 3.6.3.iv All Special Kids (ASK) Social Skills Pre-Assessment Questionnaire.

All Special Kids (ASK) is a European non-profit organisation established in 2003 to support parents and CYP who find the development of social skills challenging as they transition from secondary school to independent adult life (ASK, 2019). ASK designed a support programme and created a questionnaire to tailor the intervention or advice to CYP (ASK, 2019). The categories of conversational skills, empathy, friendship management and self-regulation within the ASK survey were used by the researcher to assist in the development of the questionnaire used within this study (Appendix 16). The ASK section dedicated to conversational skills was used to develop questions 48- 57 (Conversational Skills), Friendship Management and Self-Regulation were useful in constructing questions 19-23 (Control of

self), 32-33 (Sense of Humour and questions 34-47 (Self-belief and Self-esteem). The ASK pre-assessment questionnaire (Appendix 15) has not been used within previous research with deaf CYP but the themes related to the researcher's definition of resilience (see 2.4).

The researcher designed a unique questionnaire for this research study, but a key element was the use of mixed methods, with the aim of triangulating the information. The questionnaire was intended to be a tool that would enable the responses from the CYP with MMHL and their peers to be compared. The information obtained would also help the researcher to drill down into some of the areas and answers as part of the interviews. A final section added to the questionnaire by the researcher related to aspirations for the future. This was a factor the researcher wanted to discuss during the interviews so providing the CYP with an opportunity to reflect was valuable.

The questionnaires were part of the quantitative data selected to address the two sub questions:

- Do CYP with MMHL have different resilience skills compared to their hearing peers?
- Do CYP with MMHL have different resilience skills compared to CYP with SPHL?

#### **3.6.4 Developing the questionnaire into a Likert Scale**

A questionnaire needs to address what it was designed to investigate in order for the results to be of value and believed (Cohen et al., 2018; Thomas, 2017). One process considered was the marking scale for the questionnaire as Thomas (2017) highlights that a questionnaire needs to be short, precise and clear in relation to the information being asked. All details have to be gathered via the questionnaire to avoid the need for repeat visits that could forge participant lethargy. He presents the area of 'prestige bias' when designing a questionnaire, that is the participants wanting to present themselves in the best way possible, therefore the researcher needs to consider if the questions allow the participant to honestly answer the question that ensures the data is of value.

The questionnaire used several closed questions initially to confirm gender and age, as these required a precise answer. The main section of the questionnaire used a Likert Scale. This scale presents a range of responses, and the participants identify the level or grade of the ranked response that corresponded to their view or thought for the individual question. Thomas (2017:213) suggests that the Likert Scale can be selected, '...where belief or attitude is to be measured.' In this research study, the thoughts and beliefs of the different groups of CYP were considered and their responses compared. The sub-questions relating to the research question considered whether the children and CYP with MMHL had different social and emotional needs when compared to those of their peers with ELH and those with SPHL. Measurable data was gathered by the following scale:



0 – No opinion

1 - Strongly Disagree

2 - Disagree

3 - Agree

4 – Strongly Agree

The researcher wanted the questionnaire to be easy to read and to complete. Cohen et al. (2018) highlight that a researcher should consider the data analysis process when planning and developing the questionnaire. The options on the questionnaire in this study were chosen and presented to encourage the participants to decide and express an opinion on the questions or statement. Thomas (2017) supports this view discussing that the opting out choice or the middle choice can be removed: that is, a choice such as 'unsure', 'a little bit' or 'sometimes'. This choice selection can be the easy option and can prevent a researcher from gathering the data required to address the research question. Within this questionnaire the option of 'no opinion' was presented at the front of the choice selection. This was important as the same questionnaire was presented to all participants and there were some questions that asked specifically about the young person's HL and use of assistive equipment. Therefore, it was important to allow the CYP with no identified HL to record no opinion rather than leave a section blank. The option 'not applicable' that is often used was not offered as the aim was for all questions to relate to the CYP and that if they preferred not to answer then 'no opinion' was a choice.

The researcher used the Likert Scale within the questionnaire as the questions presented under the identified themes required the CYP to present their views. The data analysis measured the CYP's judgement of their social and emotional skills and ability to use the skills in everyday situations. A score or judgement was required from all participants to enable a solid data set for analysis.

### **3.6.5 Piloting the questionnaire**

The questionnaire was created specifically for this research project; therefore, it was important to trial it with a pilot group prior to it being used formally. Van Teijlingen and Hundley (2002:1) define a pilot as '... mini versions of a full-scale study ... as well as the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule...' A pilot has several purposes such as to see how easy and accessible the questionnaire is to the participants, but predominately to enhance the reliability and validity of the resource (Oppenheim, 2000; Krosnick et al., 2015; Dillman et al., 2014). The researcher wanted to test and pilot the questionnaire prior to it being used in the full study as it had not been used before, therefore it had not been standardised. It was also important to consider if the approach and style of the questions were accessible to the CYP and allowed them to reflect on their resilience skills. The only change requested by the focus group was the addition of a card that could be placed on the table with the marking criteria (Likert Scale) as this was not on the top of each page, only the front page. The final version of the questionnaire used within this research can be found in Appendix 16.

### 3.6.6 Interviews

*‘The interview is a uniquely sensitive and powerful method for capturing the experience and lived meanings of the subject’s everyday world.’*  
(Kvale, 2008:11)

The researcher reflected on the challenges of interviewing CYP aged 11-15 years on what could be considered sensitive themes, namely resilience skills, and the possible Hawthorne effect. Hawthorne Effect, relates to research written up by Roethlisberger and Dickson (1939) in which they identified that participants can respond differently because they are of interest to the researcher or part of research rather than the variables being investigated (Roethlisberger and Dickson, 2004).

There are three forms of interview approaches: fully structured, semi-structured and unstructured (Robson and McCartan, 2016). Within a fully structured approach, the researcher would have a set of prepared and defined questions that would be asked of all interviewees, and these are usually presented in a formal and pre-set sequence. In contrast, the unstructured style of interview is considered informal, and the interviewer will cultivate the discussion based upon a specific theme. The third style that was chosen for this research associates a set of themes and proposed questions or specific wording that guides the interviewer, who can then respond to information provided by the participant. (Bell et al.,

2018; Robson and McCartan, 2016). (see Interview themes and subthemes, 6.3). The researcher chose to use a semi-structured interview approach that allowed the flexibility to question a participant a little further to obtain more details relating to the answer they had provided. The semi structured interview schedule was designed and constructed following the discussion with the focus group, using themes they associated with resilience and skills identified by Fuller (2021). The focus group participated in constructing some questions asked as part of the interview, therefore the interview schedule was not piloted with the focus group. Based upon feedback from the focus group, it was identified that some participants may find the subject of the questions sensitive and difficult to answer from a personal perspective therefore they should have access to vignettes to allow them to share their views.

Vignettes are short descriptive stories about a theme that an interviewer can present to the interviewee and ask questions. They can be beneficial when interviewing children as it is a projection technique that can avoid asking direct questions that the CYP may find difficult answering about themselves (Cohen et al., 2018.) Answering in the third person can be more comfortable and less challenging.

The researcher developed vignettes on the same themes as those identified within the questionnaire (Appendix 16) and these were used to initiate the discussion. The use of a projection technique such as a vignette can also address the concern of the Hawthorne Effect. The use of the vignettes was a beneficial strategy for the researcher in this study as

they appreciated that questions relating to resilience skills and the understanding, and acceptance, of their HL may have been difficult for some CYP. The use of vignettes or stories relating to a third person would provide a starting point to the discussion and a more comfortable environment for the CYP than initially talking about themselves, especially if this had previously been something of a challenge for them. The information relating to the difficulties and challenges was desired, but it was important for the researcher to develop a comfortable and safe environment for the CYP to share their views.

### **3.6.7 Reliability and inter-rate reliability**

Reliability assesses whether a research tool such as a questionnaire, would give the same result if used with different groups of people or with the same group on different occasions. Cohen et al. (2018:268) suggest that it refers more specifically to 'Can we believe the results?' and give the example that if there is a standardised tool for measuring the height of participants this determines that the test is accurate and can be used to compare the height of different participants.

In this study, the nature of the research question is not as clearly defined as extracting or measuring the height of participants. The research study adheres to an interpretivist approach relating to people's views and opinions, therefore by nature these are subjective and can fluctuate. Thomas (2017) suggests that researchers can often become distracted by the need to prove reliability by testing their research tools. There are mathematical

formulae that could be used to establish if a test is reliable, but Cohen et al. (2018) consider that this would relate to research conducted through a positivist approach.

In this study the focus group piloted the research tools to consider reliability, as the researcher wanted to see if the three groups of CYP were able to answer the questions and complete the tasks in the same way. A further consideration was to see if the research tools were measuring what the researcher had intended and did it answer the research question (Thomas, 2017).

A further check of reliability was the use of inter-rater reliability (IRR) also known as inter-observer reliability (Robson and McCartan, 2016). IRR relates to two or more people who review a set of data independently and present two sets of groupings or labelling. How the two sets of data relate to each other present IRR. The themes highlighted during the analysis of the qualitative data, the interviews, need to be presented by the participants rather than themes emphasised by the researcher. There are various formulae to consider the IRR (Langenbucher et al., 1996); however, the most well-known and widely used are percentage agreement, which can be of occurrence or non-occurrence of statements within data, and Kappa / Kappa Coefficient of Agreement (Watkins and Pacheco, 2000).

Percentage agreement relates to the number of agreements identified by raters in descriptive sets, occurrences or situations, divided by the total number of agreements and disagreements multiplied by a 100 to provide a percentage:

$$\frac{\text{Agreement}}{\text{Agreement} + \text{Disagreement}} \times 100$$

Kappa coefficient of agreement is considered a more rigorous measure than the percentage agreement. Although the percentage agreement provides a calculation of agreement and disagreement there is still an element identified as chance. The element of chance is removed in the Kappa coefficient of agreement and in fact it presents the total amount of agreement not highlighted by probability (Langenbucher et al., 1996). Kappa's coefficient presents a statistic of between -1.00 and +1.00. The interpretation of the kappa score is as highlighted by Landis and Koch (1977):

<0 This is considered poor / no agreement

0 — 0.20 Slight

0.21 — 0.40 Fair

0.41 — 0.60 Moderate

0.61 — 0.80 Substantial

0.81– 1.0 almost / perfect agreement

The researcher used a computer-assisted qualitative data analysis software (CAQDAS) NVivo 12 to analyse the qualitative data, the interviews. Within NVIVO there is an opportunity for

two or more raters to code the data and for the Kappa percentage agreement to be presented. It could be argued that by calculating IRR the researcher is using a quantitative measure derived from a positivist approach, rather than the interpretivist style (McDonald et al., 2019). This study used mixed methods so the quantitative data gathered was analysed statistically using SPSS and the qualitative data used IRR methods as detailed. McDonald et al. (2019) suggest that, although there is information presented to guide researchers how to use the different methods of IRR, there are few recommendations of when it should be used or why. The researcher considered it would support reliability to have an additional person to code the interviews and the percentage agreement method would be appropriate for this study.

Hitchcock and Hughes (1995) discuss that, due to the nature of interviews being about a relationship between the researcher and the interviewee, the researcher can have some influence on the information gathered. It was important for the researcher to carefully consider the coding of the information and to identify a second rater. The researcher was identified as the initial rater and a teaching colleague who has a Masters degree in education, was the second rater. The second rater coded 3/8 transcripts and the results are presented in Appendix 19. Reichow and Volkmar (2009) suggest that approximately 20% is a good sample to be completed by the second rater, producing an IRR agreement between 84% - 100% (Reichow et al., 2008). The percentage agreement for the themes ranged between 75%-95% and the CYP between 84% and 91% presenting a good agreement between the raters.



### **3.6.8 Validity**

Validity is closely linked to reliability, but its definition can be presented as, ‘....the quality of being based on truth or reason, or of being able to be accepted.’ (Cambridge Dictionary, 2020). In qualitative or ethnographic research Eisenhart and Howe (1992) discuss that validity relates to the research tools used and if they allow the researcher to answer the question(s) they posed. Thomas (2017:145) supports this concept suggesting ‘...validity is the degree to which the instrument measures what it is supposed to be measuring.’

The researcher used the information gained from the pilot study to consider whether the questionnaires would provide the data desired to address the research question and the two specific sub questions.

The researcher conducted the study and gathered the data with all participants. They considered the need for consistency in the reliability of the data gathered in relation to a possible Hawthorne Effect: that is, whether the participants would react to the researcher and the project rather than being accurate in their views relating to their own social and emotional skills and competencies.

### 3.6.9 Reliability of the scale

A further consideration is that of the reliability of the scale used within the questionnaires. The researcher assigned a number to each rank such as 1 - Strongly Disagree, and 2 – Disagree, however the difference between the numbers is not measurable from a statistical perspective, so they are therefore identified as non-parametric statistics. The researcher would not be able to say that point 1 is twice as much disagreement as that of point 2 (Cohen et al., 2018). It is, however, important that the reliability of the scale used within the questionnaire is considered in relation to the level of random error (Pallant, 2011). There are random errors in all data sets because no measurement procedure is totally accurate. The amount and level of errors will depend on the scale used and, although all errors cannot be eradicated, the researcher should use systems and tests to calculate any errors (Bovbjerg and Johnson, 2020). It was important for the researcher to consider the reliability of the scale but, as described by Bovbjerg and Johnson, (2020:59,) '...random error is not bias. Bias is systematic error...'

The use of nonparametric ordinal data means it can be difficult for a researcher to measure reliability. However, the use of Spearman rho (non-parametric) was used in this research to consider how two items correlate, meaning that they associate or not associate with each other (Pallant, 2011). Spearman rho were used to consider each question and to look at the correlation of the questions identified in the themes of the questionnaire: Optimism,

Attitude to life, Emotional Awareness, Self-Control i.e. in specific circumstances, Support Networks, Sense of Humour, Self-Belief, Self-Esteem, and Communication Skills.

### **3.7 Data analysis**

The data gathered from the questionnaire and the language assessments were analysed using a computer software programme, Statistical Package for Social Sciences (SPSS).

The chi-square test for independence was selected to compare the observed frequency of cases (three groups of children) that occur in each of the 4 categories (rating scale). This test was selected to explore the relationship between two categorical variables which have two or more categories (Pallant, 2011). The analysis is based on cross-tabulation tables. This test presents the difference between what is an expected result and that what was observed or was achieved and is identified as a 'goodness of fit' measure. The chi-square test requires two categorical variables which have two or more categories (Cohen et al., 2018; Pallant, 2011): the variable of HL had three categories and the statement or question had a five scale rating.

The analysis used crosstabulation tables, allowing the researcher to consider relationships between the sub-groups in the variables such as how each group with a different level of hearing responded to the questions in the survey (Cohen et al., 2018). The tests are

discussed in more detail prior to the presentation of the data in the Quantitative Findings Chapter 5 (5.1).

To establish whether there was a statistical difference in chronological age between the three groups of participants, a one-way ANOVA analysis was completed. The analysis of this data would allow the researcher to consider if the age of the participants affected the responses they gave to the questions. A one-way ANOVA presents statistically any difference between two or more unrelated sets of data so long as they meet set criteria. To perform this test, there needs to be a one-way independent variable (which, in this analysis is categories of HL) and a dependent continuous variable (identified as the age of participants). The independent variable should have 3 or more levels within it, which it does: MMHL, SPHL loss and ELH. The same test was used to establish whether there was a statistical difference in the language scores between the three groups of participants.

The qualitative data (interviews) were transcribed by the researcher and inputted in to the NVIVO 12 computer programme. The analysis approach used for the interviews was Thematic Analysis (TA). TA is a system of analysing and identifying patterns or themes in data. Although it has become widely used, there is little information that consistently agrees how a researcher should go about this process (Braun and Clarke, 2006; Attride-Stirling, 2001). TA is not linked to a particular theoretical framework, unlike grounded theory or interpretative phenomenological analysis (IPA). Therefore, TA can be considered a flexible approach able to be used with different methods (Braun and Clarke, 2006). Braun and Clarke

(2006) highlight the six phases associated with TA. Within the first phase the researcher may be involved in transcribing the data in order to familiarise themselves with the information. Following this phase, the researcher then identifies the initial themes codes in phase two and phase three requires the researcher to collate the codes into themes. Phase 4 requires a review of the themes and a thematic map is produced before phase five where the themes are named. The sixth and final element of TA involves the production of a report of the data analysis.

Grounded Theory was not considered to be an appropriate strategy for this research as it suggests that the theory is substantiated (grounded) by the data, in that prior information about the area of study can be held back to ensure this does not affect the findings (Chapman et al., 2015) There was little published evidence relating to CYP with MMHL and resilience skills, therefore the research used related to children and CYP where the level of HL or deafness was not defined.

IPA is another approach used within qualitative research and aims to produce a portrayal of a person's life or lived experiences rather than one suggested due to theoretical notions. It is predominantly an in-depth study of people as cases (Smith and Osborn, 2015). This study interviewed individual CYP but an in-depth study of each person was not completed.

TA was an appropriate method of analysis although, the researcher also needed to consider whether the analysis of the data was inductive or deductive. An inductive approach suggests

that the researcher feels the data will govern the themes to be used within the analysis. Conversely, deductive relates to the researcher identifying themes prior to analysis and using these to identify further patterns (Terry et al., 2017). However, there is also a combined analysis approach inductive-deductive, which relates to this study. Cohen et al. (2018:5) present inductive-deductive as; ‘...a back-and-forth process of induction (from observation to hypothesis, from the specific to the general) and deduction (from hypothesis to implications).’ This strategy related to the process employed by the researcher in the analysis of the interviews in this study.

## **Chapter 4: Phase 1- Piloting of data collection tools**

There were 8 members of the focus group: ELH (4), MMHL (3) and SPHL (1). The focus group was arranged to consider two points:

1. Language and key words to be used as part of the data collection.
  - a) Social Skills
  - b) Emotional Skills
  - c) Friendship
  - d) Independence
  - e) Leadership Skills
  - f) Resilience skills
2. Pilot the research tools
  - a) Language assessments
  - b) Questionnaire
  - c) Vignettes to be used as part of the interview process

The analysis of the information gathered during the focus group was recorded and used to inform changes that would be needed to the data collection tools. The information gathered from the focus group is detailed in Appendix 20 and key comments are presented in this

chapter as well as the recommendations made by the focus group. The information presented will identify the themes, the most important points presented by the focus group including specific quotes, if they felt the key word / phrase associates with their view of resilience and any changes recommended by the focus group. The changes that were made to the data collection tools as a result of the focus group feedback is presented.

#### **4.1 Language and key words to be used as part of the data collection.**

The focus group were asked to discuss each term / key phrase to consider why they should learn skills within each category. They were asked if in their opinion the term related to the concept of resilience.

##### **4.1.1 Social Skills**

The focus group all agreed that social skills were required if someone was thought to be resilient. The comments presented in relation to what are social skills?:

‘Polite, kind, caring’

‘You need them when you need help on the bus or in a shop because you have to talk to people.’

‘You have to have them to get a job because you have to work with people.’



#### **4.1.2 Emotional skills**

Emotional skills were needed if a person was to be considered resilient. All eight members of the focus group agreed. Feedback comments after being asked what are emotional skills, were:

‘You can’t get angry in the middle of class because your pen broke, you have to learn how to be calm’

‘I used to get really angry when I was in Primary, this boy would push me over in the playground. My Nan was really good and taught me things so I could keep calm.’

‘Yes, my Mum and Auntie go to yoga, I have as well, and it really does make you feel calm.’

#### **4.1.3 Friendship**

The focus group discussed friendship in relation to resilience and all agreed that making a friendship group was important because friends can help when a person tries a new activity, however they felt that some people may find it difficult to discuss friends and friendship groups because they find it difficult to make and develop friends /friendships. All members

of the focus group felt it associated with resilience. Feedback comments from the focus group were:

‘I think friends are really important, they look after you when you are sad or need a bit of help.’ (all 8 agreed)

‘It can be hard when you ‘fall out’ with someone in the group though can’t it? I use to be friends with this girl in my street and we fell out, but we had known each other since we were in Nursery!’

#### **4.1.4 Independence**

The focus group discussed various aspects of independence and how this related to them personally, they agreed that independence and learning to be independent was very important and a skill that associated to the theme of resilience. The group discussed that they are encouraged to do things independently, but often felt they were not prepared for the activity. A couple of members of the group discussed a shopping trip they had been on together and that two of the group got the wrong bus. The members of the group remained calm, contacted the necessary people and corrected the mistake quickly, however it was interesting that this discussion caused anxiety for other CYP as they felt if it had been them in the situation, they would not have known what to do. The focus group felt exploring this scenario with the research participants during the interviews would be beneficial (see 6.7.5).

Key feedback comments were:

‘Doing things by yourself, without your Mum or Dad.’

‘Planning things like days out, trips, holidays.’

‘Owning your own house or car. Having a job to get money to pay for them.’

#### 4.1.4.i Unexpected discussion – Leadership

During the discussion associated with independence and resilience the focus group considered the theme of leadership. The previous discussion considered independence and the members of the group discussed an event that a few of them had been on that had not gone according to plan, but did end positively and the mistakes rectified. The significant factor for the group was the skills of one person who demonstrated leadership qualities organising others and planning what to do.

The focus group considered the area of leadership and the opportunity to practice leadership skills. Key comments were:

‘Team Captain, House Captain.’

‘You have to be bossy and shout so people listen to you otherwise they will ignore you.’

The focus group consider leadership associated with resilience. Within school they felt there were limited opportunities to be a team captain or to lead a team and as a group they felt that this would be a beneficial area to discuss with the CYP with MMHL during the interviews. A statement associated with opportunities to be a team leader was on the questionnaire (Appendix 16).

#### **4.1.5 Resilience skills**

The focus group all agreed that it was important to discuss resilience and learning skills to be a resilient people, but they did not feel they know what resilience was or how a resilient person behaved. The focus group identified that they heard the word used a lot in school but were unsure how they would know if they were successful in achieving the skills to be considered resilient. Key comments were:

‘Not sure, teachers keep saying we will learn resilience skills.’

‘I think it is being confident and being able to do what you want.’

‘Is it like when you are learning to ride a bike when you are little, and you fall off, but you get back on and learn to ride the bike.’

## **4.2 Language Assessments**

The language assessments used with this study were; Receptive One Word Picture Vocabulary Test (ROWPT) and Expressive One Word Picture Vocabulary Test (EOWPT). Both assessments are standardised and published assessments therefore no changes could or would be made from the presentation of the assessments to the focus group. The focus group was asked to look at the language assessments to consider accessibility of the assessments for all participants who would participate in the research study, those with; ELH, MMHL and SPHL. There were members of the focus group from each of the groups and all agreed that the assessments were easy to complete, and they liked the picture format. The assessments were new to the CYP, but feedback comments were:

‘Never completed tests like this before, but they were ok.’

‘I thought they were fun really. I don’t think people in your research will have problems with them,’

Members of the focus group were intrigued by the assessments and one asked to know the results and another asked about the assessment design – ‘If you have 4 pictures how do you know people aren’t guessing?’

### **4.3 Questionnaire**

The researcher devised the questionnaire for this research study using information from the review of literature associated with CYP with HL and resilience. The definition of resilience used associated with a fluid set of skills a person needs to learn and practices in various situations and environments (Pooley and Cohen, 2010). The ability to use an appropriate skill independently in different situations and with various people is an indication the person is resilient.

The questionnaire contains 57 statements and the CYP would be asked to judge how strongly they agreed or disagreed with the statement. The focus group were asked to complete the questionnaire to consider how accessible it was, was it easy to complete and if there were any changes that they felt should be made.

#### **4.3.1 How easy was the questionnaire to complete?**

The focus group agreed that there were a lot of questions and initially discussed which questions they would look to omit. The focus group eventually agreed that all questions should remain as they were placed into sections that meant it helped them remain focussed, one person stated 'I quite liked the questions they were interesting'. The answer options (Likert Scale) also enabled the CYP to respond quickly. Five members of the focus group identified that they liked the questionnaire being anonymous, presenting that they were possibly more likely to be very truthful with personal questions because they would not have to then explain or justify the answer to a member of staff. Three members of the group felt that by adding a name could allow the YP to access support if necessary. Key feedback comments were:

'Very easy to complete.'

'There are a lot of questions, but you have put them in sections, so it wasn't too bad to fill in.'

'I understood all the questions, but some people may want you to explain some of the questions.'

The words are easy to understand, and I like that you have different options to choose from.

#### **4.3.2 Recommended changes to the questionnaire**

Following discussion about the questionnaire and its length the focus group agreed that there would not be any questions that should be removed or changed. The focus group understood that the researcher would present the questionnaire to each participant, therefore they felt that having the researcher present to clarify information was adequate.

The single change requested by the focus group related to the Likert marking scale. The scale was only present on page 1 of the questionnaire; therefore it was difficult to remember the marking scale. The group requested that instead of adding the scale to the top of each page making the questionnaire longer, they requested that the marking scale was placed on a separate card. This card could then be used as a marker as the participants completed each question. This requested change by the focus group was implemented.

#### **4.4 Interview vignettes**

The Interview schedule was not piloted with the focus group (Appendix 17); however the vignettes (Appendix 18) were discussed with the focus group. The focus group discussed key themes and vocabulary, and as part of the discussion presented a situation that they had



experienced involving two friends from the group who got on the wrong bus when they had arranged to meet up for a shopping trip. The two friends were able to correct the mistake, and all eventually met up at the agreed meeting point. The group felt vignette 6 (Ability to problem solve) was a key scenario to present to the interview participants and elements of their scenario could be added (Appendix 17 and 18)

The discussion of key themes also identified leadership opportunities, as an area the focus group suggested should be explored during the interviews with the CYP with MMHL.

Vignette 4 (Control of self – your response to circumstances and organisational ability) explored being part of a team as well as leading a team. This was identified as an area to explore with the CYP during Phase 3 (Interviews).

The focus group all agreed that the use of vignettes was a useful strategy as some CYP may not want to discuss personal situations, however being presented with a scenario would enable them to share their views and strategies to deal with or approach the situation.

#### **4.5 Conclusion and agreed changes**

The feedback from the focus group was insightful and the agreed changes following the input of the focus group was:

1. Language assessments to be completed as set out in the assessment instructions.

## 2. Questionnaires

- a) No statement changes / terminology changes requested.
- b) No statements requested to be added
- c) No statements requested to be removed
- d) A separate support card containing the marking scale (Likert scale) to be available for all participants to refer to when answering each question. The participants can use the card as a guide as they complete the questionnaire.

## 3. Interview vignettes

- a) Vignette 4 – Control of self – response to circumstances and organisational ability to be a key scenario presented to the participants.
- b) Vignette 6 – Ability to problem solve – willing to adapt / be flexible to be a key scenario presented to the participants.

# Chapter 5: Phase 2 Questionnaire data

## 5.1 Introduction

This chapter will present the findings from the quantitative data, that is the questionnaire, used as part of this study.

The focus of this study has been to consider the research question, 'How resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?'

The questionnaires were devised to address two subsidiary questions related to the main research question:

- Do CYP with MMHL have different resilience skills compared to their hearing peers?
- Do CYP with MMHL have different resilience skills compared to CYP with SPHL?

Questions were created to address the themes identified in the Literature Review and relate to the researcher's definition of resilience, which comprised: Optimism, Attitude to life, Emotional Awareness, Self-Control, Support Networks, Sense of Humour, Self-Belief, Self-Esteem and Communication Skills. The second section of the questionnaire looked specifically at social and emotional difficulties and asked the CYP to record if they had

experienced any difficulties, how long they had experienced them and whether or how they had an impact on their day-to-day life.

The hypothesis, (the ideas relating to the research and research question), proposed in this project is that CYP with MMHL have different social and emotional needs compared to those of both their peers with ELH and SPHL.

The null hypothesis is used by a researcher to identify whether a statement they are making is supported by the data gathered and analysed. The null hypothesis aims to consider whether the findings happened coincidentally when questions were posed to a random sample (Cohen et al., 2018). Gorard (2016) suggests that it is difficult for a researcher to achieve a random sample; however, in this study, the sample can be considered to be random as participants were not selected by them directly. The participants met the sample criteria, as identified in the Methodology Chapter (3.5), and were identified by gatekeepers.

When a researcher accepts a null hypothesis, it suggests that there is no statistical significance between the observable variables and the phenomena posed. The researcher is looking at an independent variable; in this research it applies to the level of HL: no identified HL, MMHL or SPHL. The dependent variable is the variable that changes, in this study this

will relate to each question on the questionnaire and the language scores, both receptive and expressive. The null hypothesis in this research presents that as the independent variable, HL, changes then there is no statistical significance obtained between that and the dependent variable. This then presents that the level of HL does not affect the dependent variable. Within statistics there is no requirement to prove the null hypothesis ( $H_0$ ), it is assumed correct as presented. A researcher will analyse the data gathered and the information will indicate if the null hypothesis ( $H_0$ ) stands, if there is a significant difference between the variables, a researcher should present the alternative hypothesis ( $H_a$ ).

In analysing this data, the researcher wanted to make sure that there was a level of confidence of at least 95% ( $C=0.95$ ). This indicates that the Level of significance is 0.05 as  $\text{Level of significance} = 1 - C$ . The Level of Significance is  $\alpha = 1 - C$  and is known as the p-value. If p value of the statistic is greater than 0.05, there is no relationship between level of hearing and the question relating to social and emotional skills analysed and the researcher should accept the null hypothesis ( $H_0$ ).

## **5.2 Participants**

The sample selected comprised CYP aged between 11 and 15 years of age, categorised according to the variable of hearing: ELH, MMHL and SPHL. The clarification for these measurements was presented within the methodology.

<b>Level of Hearing</b>	<b>Total</b>
ELH	30(36%)
MMHL	29 (35%)
SPHL	24 (29%)
N (participants)	83 (100%)

Table 6: Number of participants within each category of hearing.

Table 6 shows the participants within each category and the percentage they add to the overall sample group. CYP with SPHL were the smallest group as the selection criteria required all CYP to have spoken English as their primary communication mode. The gate keepers who initially identified CYP found several with SPHL who attended mainstream education, but if BSL was their preferred mode of communication they were not eligible to participate.

### 5.2.1 Sample - gender

The sample identified for the research is detailed in Table 7.

	<b>Male</b>	<b>Female</b>	<b>Total</b> N (Participants) = 83
EHL	11 (37%)	19 (63%)	30(100%)
MMHL	11 (38%)	18 (62%)	29 (100%)
SPHL	9 (37%)	15 (63%)	24 (100%)
TOTAL	31 (37%)	52 (63%)	83(100%)

Table 7: Number of participants and percentages according to gender

Within each group there were more female participants than male, but the individual group sizes were similar, with a maximum difference of 3 or 4 participants within each category. Within the total sample there were 31 male participants (37.3%) and 52 female participants (62.7%).

### 5.2.2 Sample – age

Hearing Status	N (Participants) = 83	Mean age in months (SD)	Minimum	Maximum
ELH	30	146.63 (10.95)	136	172
MMHL	29	160.41 (14.43)	133	190
SPHL	24	164.58 (17.21)	132	189

Table 8: Mean age (in months) of participants.

Table 8 highlights that, although the sample groups were similar in size, the age of the participants within the group varied. The average in months for those with ELH was 146.63 which is approximately 12 years 2 months, the participants with a MMHL was 160.41 months (approximately 13 years 3 months) and those with a SPHL was 164.58 (approximately 13 years 7 months). The average ages of the participants with a HL were similar with only 4 months difference. However, the CYP with ELH were between 13 and 17

months younger than those with MMHL and SPHL. The standard deviation (SD) for the CYP with ELH was within a year on either side of the mean, that is 12 months (SD= 10.94). However, the CYP with MMHL had a slightly larger standard deviation: SD = 14.43, which is over a year, and for those with SPHL the SD was 17.21, which is nearly 18 months. This means that there was greater variability in chronological age within the group of CYP with SPHL.

There was a statistically significant difference between groups as determined by one-way ANOVA  $F(2,80) = 12.23$ ,  $p < 0.05$ . Post-hoc comparisons using the Tukey HSD test indicated that the mean chronological age of the hearing participants ( $M=146.63$ ,  $SD = 10.95$ ) was significantly different from the participants with MMHL ( $M= 160.41$ ,  $SD= 14.43$ ) and from the participants with SPHL ( $M= 164.58$ ,  $SD= 17.21$ ). The chronological age of participants with MMHL did not differ from the participants with SPHL.



### 5.2.3 Educational Provision

Hearing Status	N (Participants) = 83	Mainstream	HIRB
ELH	30	30	0
MMHL	29	29	0
SPHL	24	11	13

Table 9: School provision of participants

In the sample, 40/53 (75%) of deaf participants attended mainstream school and 13/53 (25%) attended a Hearing Impaired Resource Base (HIRB). It is common to have a proportion of CYP with SPHL attending a HIRB as these are students needing more intense and specialist support because of their higher degree of HL. This is commensurate with the population of deaf CYP with this degree of HL. The CRIDE report in 2019 detailed that 78% of all school-aged deaf CYP attended mainstream schools.

#### 5.2.4 Summary data of participants.

Hearing Status	Total N (Participants) = 83	Male	Female	Mean age in months (SD)	Educational provision	
					Mainstream	HIRB
EHL	30(36%)	11 (37%)	19 (63%)	146.63 (10.95)	30	0
MMHL	29 (35%)	11 (38%)	18 (62%)	160.41 (14.43)	29	0
SPHL	24 (29%)	9 (37%)	15 (63%)	164.58 (17.21)	11	13

Table 10: Summary data of participants

The summary information of the three groups; ELH, MMHL and those with SPHL present that the groups EHL and MMHL were similar in size with the SPHL a slightly smaller cohort. The distribution of gender was similar across all three cohorts. The mean age in months demonstrated that the MMHL and SPHL were similar in age, however those with ELH were on average 16-20 months younger.

#### 5.3 Presentation of findings

This section presents the findings from the analysis of the questionnaires. They are presented below under the different themes of Optimism, Attitude to life, Emotional Awareness, Self-Control, Support Networks, Sense of Humour, Self-Belief, Self-Esteem, and

Communication Skills. The relationship between two categorical variables is explored: that is, the level of HL and participants' views of their social and emotional skills. The social and emotional needs are measured using a 4-point ordinal scale (1= strongly disagree, 2= disagree, 3= agree, 4= strongly agree) to rate the degree to which the participants identify with a statement. In an ordinal scale, responses can be rated but the distance between responses is not measurable, thus non-parametric statistics (chi-square) are used.

Given the vast number of items included in the questionnaire (N=57), the items were grouped into subscales/themes to enable meaningful conclusions to be drawn. The items placed under each division were tested for correlation using Spearman rho (non-parametric) which is designed for use with ordinal data. When two items correlate, it means they are associated (Pallant, 2011). Spearman rho correlation can range from -1 to +1, providing a positive or a negative correlation. The number gives information on the strength of the relationship of the variables. A correlation of +1 or -1 shows that there is perfect correlation which means that the value of one variable can be determined by knowing the value of the other variable. However, a correlation of 0 shows no relationship between the two variables (Pallant, 2011).

The results of each theme/subscale are presented first to demonstrate how the questions link with each other. Then individual questions using the wording as it was presented in the questionnaire within the subtheme were analysed to consider how the three groups of CYP

had responded. The researcher sought to identify any correlation between the variables, that was whether the CYP agreed more with the questions as the level of HL increased. The questions were written and presented as affirmative statements. Each is presented here using cross-tabulation tables, meaning that the nominal data (independent variable) was presented in the row and the ordinal data (4-point scale from 1-strongly disagree through to 4 -strongly agree) was presented within the columns.

The variable significant within this research was the level of HL, this was the independent variable, and the dependent variable was the statement presented in the questionnaire. The null hypothesis ( $H_0$ ) was, as the level of HL increased there was no statistical difference between that and the dependent variable. The analysis of the data needed to present a level of confidence of at least 95%, with the level of significance, known as the p-level of 0.05. If the p-level was greater than 0.05 this would indicate there was no statistical difference between the independent and dependent variables, therefore the null hypothesis ( $H_0$ ) was accepted. If the p-level was less than 0.05 the alternative hypothesis ( $H_a$ ) was accepted, in this research this would present that was a relationship between level of hearing (independent variable) and the statement relating to social and emotional skills (dependent variable).

### 5.3.1 Theme 1 – Optimism

The statements listed under the sub-theme of Optimism are presented below to consider whether, as a category, the questions and answers correlate.

Optimism	1	2	3	4	5	6
1. I can introduce myself to new people	-	.43**	.26*	.24*	.26*	-.20
2. I can identify skills I have or things I can do well.	.44**	-	.27*	.40**	.52**	.12
3. I can identify things I can't do and will practise them to improve my ability / skill.	.26*	.27*	-	.25*	.15	-.15
4. I can listen and take advice from people	.24*	.40**	.25*	-	.34**	.05
5. I can talk about myself positively	.27*	.52**	.15	.34**	-	.16
6. I can tell people about my hearing loss	-.19	.11	-.15	.05	.16	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 11: Theme 1 Optimism. Spearman rho correlation of all participants

Question 1 presents a significant correlation with question 2. This suggests that, within this questionnaire, the ability to introduce oneself to another person does relate to the ability to identify skills and personal attributes when compared to the level of HL. The Spearman rho correlation demonstrates that question 1 again correlates to questions 3, 4 and 5, but at a lesser degree. Questions 3 and 5 did not appear to present a correlation with each other. This may be because the questions were specific and associated with

self-perception, question 3 related to identifying skills the CYP didn't have but asked if they would then work to develop the skill and question 5 asked about their ability to talk about themselves positively. In questions 3 and 5 different concepts are being considered.

Question 6 asked if they were able to tell people about their HL and the analysis shows that this did not connect with any of the other questions at all. As it was specifically about HL, the CYP with ELH did not answer question 6 at all, therefore correlation between the three groups would not be possible. A further table correlating only the answers provided by the two groups of CYP with a HL is presented below.

<b>Optimism</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1. I can introduce myself to new people	-	.41**	.11	.12	.27	.26
2. I can identify skills I have or things I can do well.	.41**	-	.14	.37**	.60**	.57**
3. I can identify things I can't do and will practice them to improve my ability / skill.	.11	.14	-	.21	.02	-.18
4. I can listen and take advice from people	.12	.37**	.21	-	.31*	.37**
5. I can talk about myself positively	.27	.59**	.03	.31*	-	.60**
6. I can tell people about my hearing loss	.26	.57**	-.18	.37**	.60**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 12: Theme 1 Optimism. Spearman rho correlation participants with HL

The analysis was specifically looking at the correlation of question 6 as this had only been answered by those CYP with a HL. In this instance the question did present a strong relationship with questions 2, 4 and 5.

#### 5.3.1.i Question 1 – I can introduce myself to new people.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
EHL	0 0.0%	0 0.0%	0 0.0%	17 56.7%	13 43.3%	30 100.0%
MMHL	0 0.0%	2 6.9%	4 13.8%	16 55.2%	7 24.1%	29 100.0%
SPHL	1 4.2%	2 8.3%	6 25.0%	12 50.0%	3 12.5%	24 100.0%
Total	1 1.2%	4 4.8%	10 12.0%	45 54.2%	23 27.7%	83 100.0%

Table 13: Level of HL and introducing themselves to new people.

The ability of the participants to introduce themselves to new people demonstrated that 100% of those with EHL agreed/strongly agreed with this statement. The majority of those with MMHL 79.3%, (23 out of 29) agreed/strongly agreed, compared with 62.5% (15 / 24) of those with SPHL. The null hypothesis was rejected,  $\chi^2 (8, N = 83) = 16.705$ ,  $p = .03$ . Thus, there was a correlation between level of hearing and the ability of CYP to introduce themselves to new people.

5.3.1.ii Question 2 – I can identify skills I have or things I can do well.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	22 73.3%	8 26.7%	30 100.0%
MMHL	0 0.0%	2 6.9%	4 13.8%	17 58.6%	6 20.7%	29 100.0%
SPHL	0 0.0%	0 0.0%	1 4.2%	18 75.0%	5 20.8%	24 100.0%
Total	0 0.0%	2 2.4%	5 6.0%	57 68.7%	19 22.9%	83 100.0%

Table 14: Level of HL and identifying positive skills.

In Table 14, all CYP with EHL, 30/30 (100%) agreed or strongly agreed that they were able to identify skills they had. The group with MMHL produced a total score of 79.3% (23/29) and the SPHL group also had 23/24 (95.8%) that responded in this way. The null hypothesis in this situation is accepted as there is no evidence of a relationship between HL and the ability to identify personal skills/attributes,  $\chi^2 (6, N= 83) = 9.529$ ,  $p = .15$ .



5.3.1.iii Question 3 – I can identify things I can't do and will practise them to improve my ability/skill.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
EHL	0 0.0%	0 0.0%	1 3.3%	20 66.7%	9 30.0%	30 100.0%
MMHL	0 0.0%	1 3.4%	1 3.4%	19 65.5%	8 27.6%	29 100.0%
SPHL	0 0.0%	1 4.2%	3 12.5%	13 54.2%	7 29.2%	24 100.0%
Total	0 0.0%	2 2.4%	5 6.0%	52 62.7%	24 28.9%	83 100.0%

Table 15: Level of HL and identifying things they are not good at but can practise to improve skill level.

Within this analysis, 29/30 (96%) of CYP with ELH stated they felt confident to identify tasks that they couldn't do or skills they didn't have but could work on them to improve their ability. This is compared to 27/29 (93.1%) of the CYP with MMHL and the SPHL group presented data of 20/24 (83.4%). The chi-square test again indicates that the null hypothesis is accepted and there is no correlation between level of HL and the ability to identify skills not possessed but needing practice in order to improve  $\chi^2 (6, N= 83) = 3.932$ ,  $p = .69$ .

#### 5.3.1.iv Question 4 – I can listen and take advice from people

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
EHL	0 0.0%	0 0.0%	2 6.7%	15 50.0%	13 43.3%	30 100.0%
MMHL	2 6.9%	0 0.0%	2 6.9%	15 51.7%	10 34.5%	29 100.0%
SPHL	0 0.0%	1 4.2%	0 0.0%	18 75.0%	5 20.8%	24 100.0%
Total	2 2.4%	1 1.2%	4 4.8%	48 57.8%	28 33.7%	83 100.0%

Table 16: Level of HL and listening to and taking advice

The findings from this question found 28/30 (93.3%) of CYP with ELH felt they were able to listen to and accept advice. The data for CYP with MMHL was 25/29 (86.2%) and those with SPHL was 23 /24 (95.8%). In general, a high proportion of CYP felt that they were able to accept advice given. The null hypothesis is again accepted as the level of HL did not affect the results,  $\chi^2 (8, N=83)= 11.548, p= .17$ . There is therefore considered no relation between HL and the acceptance of advice.

5.3.1.v Question 5 – I can talk about myself positively even things I find challenging due to HL, Dyslexia etc

As discussed in the Literature Review (Chapter 2), the concept of ‘who am I?’, the development of an individual personality, often develops during adolescence. The study aimed to explore whether there was a correlation between the level of hearing and talking positively about things they find challenging; that is, did one group appear to have more confidence to discuss who they were, their strengths and areas of challenge?

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	4 13.3%	0 0.0%	4 13.3%	13 43.3%	9 30.0%	30 100.0%
MMHL	0 0.0%	4 13.3%	10 34.5%	9 31.0%	6 20.7%	29 100.0%
SPHL	0 0.0%	0 0.0%	6 25.0%	13 54.2%	5 20.8%	24 100.0%
Total	4 4.8%	4 4.8%	20 24.1%	35 42.2%	20 24.1%	83 100.0%

Table 17: Level of HL and talking about themselves positively, both personal achievements and challenges.

Table 17 shows that 47.8% of CYP with MMHL either disagreed or strongly disagreed that they were confident to talk about themselves positively. This is in comparison to 13.3% of CYP with ELH and 25.0% of CYP with SPHL  $\chi^2 (8, N = 83) = 19.625, p = .12$ . The chi-square test

shows the value of  $P$  is above 0.05 meaning the null hypothesis is rejected. There is no relation between HL and the ability to talk positively about themselves.

5.3.1.vi Question 6 – I can tell people about my hearing loss and my HA or other equipment I use.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 53
MMHL	1 3.4%	7 24.1%	9 31.0%	8 27.6%	4 13.8%	29 100.0%
SPHL	1 4.2%	1 4.2%	5 20.8%	12 50.0%	5 20.8%	24 100.0%
Total	2 3.7%	8 15.1%	14 26.4%	20 37.7%	9 16.9%	53 100.0%

Table 18: level of HL and telling people about their HL, HA or other equipment

Table 18 addressed the question of the CYP being able to confidently talk about their HL, HA and other assistive technology. Of the CYP with MMHL, 55.1% disagreed or strongly disagreed with the statement, compared with 25.0% of the CYP with SPHL. Chi-squared test  $\chi^2(8, N = 83) = 84.46$ ,  $p = .01$  indicates that the null hypothesis is accepted therefore there is a relationship between level of HL and the ability to tell people about their HL and the equipment they use, with CYP with SPHL feeling more able to do so compared to the group with MMHL.

### 5.3.2 Theme 2 - Attitude to life

The questions within this section related to the CYP's ability to plan activities, identify things that interested them or that they wanted to do, and that they were able to organise using their initiative.

Attitude to Life	7	8	9
7. I can plan things to do at weekends or during school holidays	-	.39**	-.17
8. I think of new things to do such as learn a new skill eg a language or join a club.	.39**	-	-.13
9. When I get home from school / school holidays I am bored and can't find anything to do.	-.17	-.13	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 19: Theme 2 Attitude to Life. Spearman rho correlation of all participants

The Spearman rho correlation of the three questions within the theme of attitude to life suggests that questions 7 and 8 do present a significant relationship with each other, however question 9 presents a negative correlation with both question 7 and 8. This could relate to the question having a negative, rather than a positive focus, therefore the questions and answers the participants gave did not tally. Question 9 is phrased differently to questions 7 and 8 and this may also have been a factor.

To investigate the findings individually, each question was analysed to consider the responses made by the three groups of CYP.

#### 5.3.2.i Question 7 – I can plan things to do at weekends or during school holidays.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	13 43.3%	16 53.3%	30 100.0%
MMHL	0 0.0%	2 6.9%	3 10.3%	11 37.9%	13 44.8%	29 100.0%
SPHL	1 4.2%	1 4.2%	1 4.2%	12 50.0%	9 37.5%	24 100.0%
Total	1 1.2%	3 3.6%	5 6.0%	36 43.4%	38 45.8%	83 100.0%

Table 20: Level of HL and planning activities to do weekends/holidays

The focus of this question was to consider the CYP 's ability to independently plan and organise activities that interested them. The percentage of CYP with MMHL who disagreed/strongly disagreed with the statement was 17.2% and was higher than the other two groups, with 3.3% of those with ELH and 8.4% of those with SPHL. The null hypothesis is rejected: there is no correlation between HL and the ability to plan activities away from school during spare time,  $\chi^2 (8, N = 83) = 7.00, p = .55$ . However, it is important to state that the CYP with MMHL were not as confident as their peers.

5.3.2.ii Question 8 – I think of new things to do eg learning a new skill such as a language or by joining a club etc.

This question aimed to investigate whether the CYP thought about improving their skills and identified skills to learn or clubs to join. The statistics presented that 51.7% of the CYP with MMHL disagreed/strongly disagreed with this statement, showing that they do not independently think of new skills to learn. The corresponding percentage for hearing CYP is 6.6 % and for CYP with SPHL 25%.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	1 3.3%	1 3.3%	17 56.7%	11 36.7%	30 100.0%
MMHL	0 0.0%	2 6.9%	13 44.8%	9 31.0%	5 17.2%	29 100.0%
SPHL	0 0.0%	2 8.3%	4 16.7%	12 50.0%	6 25.0%	24 100.0%
Total	0 0.0)	5 6.0%	18 21.7%	38 45.8%	22 26.5%	83 100.0%

Table 21: Level of HL and identifying new things to do or skills to learn

There is a correlation between level of HL and the ability to independently identify skills to learn,  $\chi^2 (6, N = 83) = 17.08$ ,  $p = .01$ , the null hypothesis is rejected. The p-value for question 8 is lower than the .05 which suggest there is a statistical relationship between HL and the ability to identify activities to do and skills to learn. The CYP with MMHL 51.7% were not able to do this compared to 6.6% of those with ELH and 25% of CYP with SPHL.

5.3.2.iii Question 9 -when I get home from school, I am bored and can't find things to do.

The results are presented below in Table 20

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	2 6.7%	9 30.0%	10 33.3%	9 30.0%	0 0.0%	30 100.0%
MMHL	1 3.4%	3 10.3%	11 37.9%	10 34.5%	4 13.8%	29 100.0%
SPHL	0 0.0%	7 29.2%	11 45.8%	6 25.0%	0 0.0%	24 100.0%
Total	3 3.6%	19 22.9%	32 38.6%	25 30.1%	4 4.8%	83 100.0%

Table 22: Level of HL and indicating if they were bored when not in school.

The data gathered indicates that 9/30 (30.0%) of CYP with ELH agreed/strongly agreed with this statement compared to 14/29 (48.3%) those with MMHL and 6/24 (25.0%) with SPHL.

The chi square test indicated that there was no relationship between HL and the feeling of boredom or having nothing to do, the null hypothesis was accepted. The  $\chi^2$  (8, N=83)= 13.10,  $p=.11$ .

As a summary to the subsection of Attitude to Life, the data presents that a higher percentage (70%) of CYP with ELH are able to fill their time outside of school hours and do not consider that they are bored compared to those with HL. CYP in this study with HL found it harder than those without an identified HL to self-reflect and identify self-improvement



skills such as joining a club or learning a new skill. This was particularly true of those with MMHL.

### **5.3.3 Theme 3 - Emotional Awareness**

It was important to consider how the CYP felt they dealt with emotions: whether they were able to identify when a particular emotion was experienced; the events that led them to experiencing the emotion, and whether they were able to talk to family or friends to seek help in dealing with the cause of the emotion.

The questions were grouped together to be considered as a theme: Emotional Awareness

<b>Emotional Awareness</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
10. I know things that make me happy	-	.69**	.35**	.38**	.44**	.39**	.36**	.47**	.59**
11. I can tell family and friends things that make me happy	.69**	-	.41**	.48**	.43**	.47**	.32**	.38**	.38**
12. I know things that worry me.	.35**	.41**	-	.37**	.63**	.43**	.29**	.24*	.22*
13. I can tell family and friends things that worry me	.38**	.48**	.36**	-	.36**	.77**	.03	.32**	.25*
14. I know things that make me sad	.44**	.42**	.62**	.36**	-	.53**	.33**	.42**	.45**
15. I can tell family and friends things that make me sad.	.38**	.47**	.43**	.77**	.53**	-	.17	.31**	.31**
16. I can recognise when someone is upset or sad and I know how to comfort them.	.36**	.32**	.29**	.03	.33**	.17	-	.31**	.41**
17. If I get something wrong, I can cope with this and can deal with people talking to me about this.	.47**	.38**	.24*	.32**	.42**	.31**	.31**	-	.53**
18. I can cope and deal with a person who has a different view to mine.	.59**	.38**	.2*	.25*	.45**	.31**	.41**	.53**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 23: Theme 3 Emotional awareness. Spearman rho correlation of all participants

The Spearman rho correlation demonstrated that most questions within the category of Emotional Awareness had a mutual relationship. It is only question 16 that did not show a correlation with questions 13 and 15. Question 16 asked whether the CYP were able to recognise when someone was upset or sad and if they were able to comfort them, and questions 13 and 15 related to the ability to tell family and friends about things that worry them or make them sad. The skill of acknowledging the emotion and being able to discuss it with other people was causing a challenge, and the review of the individual questions will be presented in view of the different groups of CYP.

#### 5.3.3.i Question 10 – I know the things that make me happy

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	11 37.9%	18 62.1%	30 100.0%
MMHL	1 3.4%	1 3.4%	3 10.3%	12 41.4%	12 41.4%	29 100.0%
SPHL	0 0.0%	0 0.0%	0 0.0%	17 70.8%	7 29.2%	24 100.0%
Total	1 1.2%	1 1.2%	3 3.7%	40 48.8%	37 45.1%	83 100.0%

Table 24: Level of HL and Identifying things that made them happy.

The table above shows that all the CYP with ELH and those with SPHL felt that they agreed or strongly agreed with this statement; however, a combined percentage of CYP with MMHL of 17.1%, said that they either had ‘no opinion’, or that they disagreed/strongly disagreed with

this statement. Although this is a small percentage, no CYP highlighted that they were unable to identify something that what made them happy in the other two groups.

The chi- square test suggests that there is a relationship between HL and the ability to identify things that make the CYP happy. The  $\chi^2 (8, N= 83)= 15.85, p= .04$ . The figure represented is close to the 0.05 which suggests that the researcher could reject the null hypothesis.

A factor related to this is the ability to discuss emotions and identify things or situations where the emotion was felt with close friends or family. This is a healthy state and a principle required for positive mental health.

#### 5.3.3.ii Question 11 - I can tell family and friends things that make me happy.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participant s = 83
ELH	0 0.0%	0 0.0%	1 3.3%	13 43.3%	16 53.3%	30 100.0%
MMHL	1 3.4%	1 3.4%	4 13.8%	13 44.8%	10 34.5%	29 100.0%
SPHL	0 0.0%	1 4.2%	2 8.3%	14 58.3%	7 29.2%	24 100.0%
Total	1 1.2%	2 2.4%	7 8.4%	40 48.2%	33 39.8%	83 100.0%

Table 25: Level of HL and telling family and friends things that made them happy.

Within these data, some CYP with MMHL indicated that they find it hard to share happy and positive events with family and friends: 20.6% (5/29) compared to 3.3% (1/30) for those with ELH and 12.5% (3/24) of CYP with SPHL,  $\chi^2(8, N= 83)= 7.93$ ,  $p= .44$ . Although more CYP with MMHL indicated this was an issue, chi squared statistic indicates that there is no relationship between level of hearing and ability to share positive/happy situations, the null hypothesis was accepted.

### 5.3.3.iii Question 12 - I can identify things that worry me

The data relating to identifying things that worry the CYP produced similar scores. The data show that a high proportion, 92.8% of the total sample, indicated that they agreed or strongly agreed with this statement, suggesting that they could identify things that worried them, Table 26

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	20 66.7%	10 33.3%	30 100.0%
MMHL	1 3.4%	2 6.9%	0 0.0%	20 69.0%	6 20.7%	29 100.0%
SPHL	1 4.2%	0 0.0%	2 8.3%	16 66.7%	5 20.8%	24 100.0%
Total	2 2.4%	2 2.4%	2 2.4%	56 67.5%	21 25.3%	83 100.0%

Table 26: Level of HL and identifying things that worried them

A few CYP with MMHL (2/29) and SPHL (2/24) felt they were unable to identify the things that worried them,  $\chi^2(8, N= 83)= 11.01, p= .20$ . The p-value does not suggest that there is a reason to reject the null hypothesis and there is no relation between level of hearing and the ability to identify things that worry a young person. The key element for the researcher was using this data in relation to the next question about the CYP 's ability to discuss their worries with family or friends. In order to find solutions to worries or concerns, it is important to be able to identify and pinpoint them, allowing the person to problem solve and find solutions to the issue.

#### 5.3.3.iv Question 13 - I can tell family and friends things that worry me

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	0 0.0%	4 13.3%	15 50.0%	10 33.3%	30 100.0%
MMHL	1 3.4%	4 13.8%	12 41.4%	7 24.1%	5 17.2%	29 100.0%
SPHL	1 4.2%	1 4.2%	6 25.0%	13 54.2%	3 12.5%	24 100.0%
Total	3 3.6%	5 6.0%	22 26.5%	35 42.2%	18 21.7%	83 100.0%

Table 27: level of HL and telling family and friends about things that worry them.

The data show 55.2% (16/29) of CYP with MMHL disagreed or strongly disagreed with this statement, compared to 13.3% (4/30) of those with ELH and 29.2% (7/24) of CYP with SPHL,  $\chi^2(8, N=83)= 15.85, p= .04$ , the null hypothesis is rejected. Thus, there is a relationship

between the level of HL and the ability of CYP to tell their worries to their families, with more than half of the CYP with MMHL not feeling able to do this.

#### 5.3.3.v Question 14 – I can identify things that make me sad.

The third issue discussed within the questionnaire was identifying things that made a person sad. The CYP with ELH all (30/30, 100%) agreed or strongly agreed that they could do this.

The majority, 89.6% (26/29), of CYP with MMHL agreed or strongly agreed with this statement, as did 91.7% (22/24) of those with SPHL,  $\chi^2(8, N=83)= 15.29, p= .05$ . The p-value suggests that the null hypothesis can be accepted: there is no relationship between level of hearing and the ability to identify things that make a person sad.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	2 6.7%	0 0.0%	0 0.0%	17 56.7%	11 36.7%	30 100.0%
MMHL	0 0.0%	3 10.3%	0 0.0%	19 65.5%	7 24.1%	29 100.0%
SPHL	0 0.0%	0 0.0%	2 8.3%	16 66.7%	6 25.0%	24 100.0%
Total	2 2.4%	3 3.6%	2 2.4%	52 62.7%	24 28.9%	83 100.0%

Table 28: level of HL and identifying things that made them sad.

The researcher was concerned about the 10.3% (3/29) of CYP with MMHL and 8.3% (2/24) of those with SPHL who indicated they would be unable to identify the things that make them sad: Although not significant statistically, it is important to identify that compared to CYP with ELH, who all indicated that they could identify things that make them sad, some of those with HL said they were unable to do this.

#### 5.3.3.vi Question 15 – I can tell family and friends about things that make me sad.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	2 6.7%	1 3.3%	4 13.3%	14 46.7%	9 30.0%	30 100.0%
MMHL	0 0.0%	5 17.2%	8 27.6%	12 41.4%	4 13.8%	29 100.0%
SPHL	2 8.3%	1 4.2%	4 16.7%	11 45.8%	6 25.0%	24 100.0%
Total	4 4.8%	7 8.4%	16 19.3%	37 44.6%	19 22.9%	83 100.0%

Table 29: level of HL and telling family and friends things that upset them or make them sad.

The majority of participants were able to identify things that made them sad. The statistics indicate those who were unable to share such events and feelings (Table 29) were: CYP with ELH, 5/30 (16.6%); 13/29 (44.8%) of those with MMHL, and 5/24 (20.9%) of CYP with SPHL,  $\chi^2(8, N=83)=9.87$ ,  $p=.27$ , the null hypothesis is accepted. The p-value suggests there is no relationship between level of hearing and the ability of CYP to discuss concerns with family



and friends; however, again, the data from this group show some CYP with HL find this challenging.

5.3.3.vii Question 16 – I can recognise when someone is upset or sad and I know how to comfort them.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
EHL	0 0.0%	0 0.0%	2 6.7%	17 56.7%	11 36.7%	30 100.0%
MMHL	0 0.0%	1 3.4%	3 10.3%	14 48.3%	11 37.9%	29 100.0%
SPHL	0 0.0%	0 0.0%	3 12.5%	14 58.3%	7 29.2%	24 100.0%
Total	0 0.0%	1 1.2%	8 9.6%	45 54.2%	29 34.9%	83 100.0%

Table 30: Level of HL and being able to recognise when someone is upset or sad and knowing how to comfort them.

As presented in Table 30, the majority of CYP across the three groups of hearing levels stated that they could recognise other people's emotions and knew how to support them,  $\chi^2(6, N=83) = 2.98$ ,  $p = .81$ . The null hypothesis was accepted, this indicates that there is no relationship between the level of hearing and the ability to recognise emotions in other people.

5.3.3.viii Question 17 – If I get something wrong, I can cope with this and can deal with people talking to me about this.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	20 66.7%	9 30.0%	30 100.0%
MMHL	0 0.0%	3 10.3%	9 31.0%	13 44.8%	4 13.8%	29 100.0%
SPHL	0 0.0%	1 4.2%	6 25.0%	13 54.2%	4 16.7%	24 100.0%
Total	0 0.0%	4 4.8%	16 19.3%	46 55.4%	17 20.5%	83 100.0%

Table 31: Level of HL and the ability to cope when they got something wrong and deal with people talking to them about this.

To develop and improve one's own skills, it is important to be able to take advice and guidance; we often get this from people we consider to be more experienced or knowledgeable (Harvey and Fischer, 1997). Table 31 presents the data relating to this from the three groups. Of the CYP with ELH, 96.7% (29/30) agreed/strongly agreed with this statement, compared to 58.6% (17/29) of those with MMHL and 70.9% (17/24) of CYP with SPHL,  $\chi^2(6, N= 83) = 13.15$ ,  $p = .04$ . This identifies that the p-value is below .05 and the null hypothesis is rejected as there is a statistical difference between the two variables.

5.3.3.ix Question 18 – I can deal and cope with a person who has a different view to mine.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	20 66.7%	10 33.3%	30 100.0%
MMHL	0 0.0%	2 6.9%	4 13.8%	16 55.2%	7 24.1%	29 100.0%
SPHL	1 4.2%	0 0.0%	0 0.0%	17 70.8%	6 25.0%	24 100.0%
Total	1 1.2%	2 2.4%	4 4.8%	53 63.9%	23 27.7%	83 100.0%

Table 32: Level of HL and ability to cope and deal with another person's point of view

The ability to understand one's own personal view or perspective is developed through adolescence, then evolves to the important skill of appreciating that another person holds a differing view (Berndt, 1999; Verkuyten and Killen, 2021). Both CYP with ELH (30/30, 100%) and SPHL (23/24, 95.8%) stated they agreed or strongly agreed that they could accept another person's opinion. The group with MMHL presented a lower figure (23/29, 79%),  $\chi^2(8, N=83)=14.73, p=.06$ . Thus, the null hypothesis can be accepted as there is no relationship between the two variables.

### 5.3.4 Theme Four – Self-control and organisation

Theme four asked the CYP to consider self-control, organisation skills and reaction to specific situations.

Self-control and organisation	19	20	21	22	23
19. I can cope well with change.	-	.32**	.20	.22*	.22*
20. I can lead a team to complete a task	.32**	-	.13	.41**	.39**
21. I can work as part of a team taking directions.	.20	.13	-	.31**	.33**
22. I can cope with loosing eg a game.	.22*	.41**	.31**	-	.39**
23. I usually complete homework on time.	.22*	.39**	.33**	.39**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 33: Theme 4 Self-control and organisation. Spearman rho correlation of all participants

The correlation data show that questions 22 and 23 correlate with all questions, however, question 21 does not correlate with questions 19 and 20. Questions 20 and 21 relate to being part of, or leading, a team and question 19 focusses on a change of event or activity.

The correlation between questions 19,20 and 21 is not particularly close to 0, demonstrating that the relationship between the two sets of variables is not as strong, but there is a still a correlation.

The analysis of the individual questions is considered below.

5.3.4.i Question 19 – I cope well with change -lessons change or family can't do a certain activity

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	2 6.7%	0 0.0%	0 0.0%	19 63.3%	9 30.0%	30 100.0%
MMHL	0 0.0%	1 3.4%	7 24.1%	17 58.6%	4 13.8%	29 100.0%
SPHL	1 4.2%	2 8.3%	5 20.8%	12 50.0%	4 16.7%	24 100.0%
Total	3 3.6%	3 3.6%	12 14.5%	48 57.8%	17 20.5%	83 100.0%

Table 34: Level of HL and ability to cope with change eg lessons or activities.

Young people with MMHL recorded 8/29 (27.5%) who disagreed and, of the SPHL group, 7/24 disagreed (29.1%). This is in comparison to 100% (30/30) of CYP with ELH who all agreed with the statement,  $\chi^2(8, N=83) = 13.84, p = .09$ . According to the p value the null hypothesis can be accepted as it does not show a statistically significant relationship between level of HL and CYP's ability to cope with challenges. However, the observed instances of CYP with any degree of HL who answered yes to this question suggest that they are likely to face some challenges in coping with some unexpected day-to-day changes.

5.3.4.ii Question 20 – I can lead a team or group of friends to complete a task.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	3 10.0%	21 70.0%	6 20.0%	30 100.0%
MMHL	0 0.0%	4 13.8%	10 34.5%	8 27.6%	7 24.1%	29 100.0%
SPHL	2 8.3%	1 4.2%	4 16.7%	12 50.0%	5 20.8%	24 100.0%
Total	2 2.4%	5 6.0%	17 20.5%	41 49.4%	18 21.7%	83 100.0%

Table 35: Level of HL and ability to lead a team

About half (14/29, 48.3%) of CYP with MMHL disagreed with this statement compared to 3/30 (10%) of those with ELH and 5/24 (20.9%) of CYP with SPHL,  $\chi^2(8, N=83)= 19.82, p= .01$ .

For this statement, the null hypothesis is rejected as there is a link between HL and the ability to lead a team. This was an interesting finding which the researcher focussed on as part of the interviews to gain an understanding of why CYP with MMHL felt they could not lead a team.

### 5.3.4.iii Question 21 – I can work as part of a team, taking directions from someone else

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	18 60.0%	11 36.7%	30 100.0%
MMHL	1 3.4%	2 6.9%	2 6.9%	15 51.7%	9 31.0%	29 100.0%
SPHL	2 8.3%	0 0.0%	1 4.2%	13 54.2%	8 33.3%	24 100.0%
Total	3 3.6%	2 2.4%	4 4.8%	46 55.4%	28 33.7%	83 100.0%

Table 36: Level of HL and being a positive member of a team ie taking directions from another person.

Question 20 suggests that there is a relationship between HL and the ability to lead a team or group of people. In this question (21) there were CYP in all 3 groups who felt that they found it hard being directed by another person,  $\chi^2(8, N=83) = 7.04$ ,  $p = .53$ . The null hypothesis is not rejected as the p value is above 0.05. There were CYP who disagreed with this statement relating to being able to take directions from a team leader, only one student from both those with ELH and SPHL, however 4 CYP from the MMHL group felt they did not take well to being directed in this way.

5.3.4.iv Question 22 – I can cope with losing a game.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	3 10.0%	13 43.3%	14 46.7%	30 100.0%
MMHL	0 0.0%	2 6.9%	4 13.8%	18 62.1%	5 17.2%	29 100.0%
SPHL	2 8.3%	1 4.2%	4 16.7%	14 58.3%	3 12.5%	24 100.0%
Total	2 2.4%	3 3.6%	11 13.3%	45 54.2%	22 26.5%	83 100.0%

Table 37: Level of HL and being able to cope if they lost a game or competition.

In response to this question the null hypothesis was rejected,  $\chi^2(8, N= 83)=17.72$ ,  $p= .05$  as there was a relationship between HL and the ability to cope with losing a game or a competition. CYP from the three groups indicated that this was a challenge, however a slightly larger number of CYP with a HL highlighted a problem with this. There were 3/30 (10%) of the CYP who had ELH compared to 5/24 (20.9%) of those with SPHL and 6/29 (20.7%) with MMHL.



5.3.4.v Question 23 – I usually complete homework tasks on time.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
Young People - Hearing	0 0.0%	2 6.7%	2 6.7%	9 30.0%	17 56.7%	30 100.0%
Young People - Mild / Moderate	2 6.9%	8 27.6%	8 27.6%	6 20.7%	5 17.2%	29 100.0%
Young People - Severe/Profound	0 0.0%	4 16.7%	5 20.8%	9 37.5%	6 25.0%	24 100.0%
Total	2 2.4%	14 16.9%	15 18.1%	24 28.9%	28 33.7%	83 100.0%

Table 38: Level of HL and ability to complete homework on time.

A higher number of students from the MMHL group stated they found it difficult to hand in homework or complete tasks on time: 16 / 29 (55.2%) compared to 4/30 (13.4%) of those with ELH and 9/24 (37.5%) with SPHL,  $\chi^2(8, N= 83)= 20.12$ ,  $p= .01$ . The null hypothesis is rejected as there is a relationship between HL and the CYP stating if they complete tasks on time, such as homework. The data shows that there was a greater number of CYP with MMHL who said that they didn't complete tasks on time.

### 5.3.5 Theme Five – Social Support (families and friends)

In exploring Theme Three - Emotional Awareness – the CYP were asked to consider how they coped and dealt with emotions and whether they discussed their concerns with family and friends. This section considered the support network that the CYP had to draw upon if required.

The Spearman rho correlation for the category of social support is detailed below.

Social Support	24	25	26	27	28	29	30	31
24. I talk to family about things that happen in my life.	-	.41**	.45**	-.12	.16	.02	.52**	.44**
25. I enjoy holidays and activities with my family.	.41**	-	.68**	-.05	.27*	.05	.27*	.56**
26. I enjoy holidays and weekend activities with friends.	.45**	.68**	-	.05	.21	.21	.35**	.52**
27. I only have 1 or 2 close friends.	-.115	-.047	.055	-	-	-	-.05	.03
28. I have a large group of friends.	.160	.272*	.208	-	.363**	.005	.195	.232*
29. I prefer to make friends on Social Media.	.024	.053	.213	-.005	.195	-	.076	.084
30. I can think of things to help family and friends.	.522**	.277*	.353**	-.053	.195	.076	-	.380**
31. I am happy for family / friends to help me.	.442**	.560**	.520**	.034	.232*	.084	.380**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 39: Theme 5 Social Support. Spearman rho correlation of all participants

Questions 27, 28 and 29 do not present a relationship with other questions within this category of social support networks, including family and friends. The possible reason for this result is that some of the CYP chose to answer either Question 27 - I have one or two close friends or Question 28, a large group of friends. Question 29 considered friendships on social media and the CYP said they used social media but didn't consider it a platform for making friends.

The data considering how the individual groups responded to each question is detailed below.

#### 5.3.5.i Question 24 – I talk to family; parents/guardians, brothers, sisters, auntie, uncle about things that happen in my life

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	17 56.7%	12 40.0%	30 100.0%
MMHL	3 10.3%	4 13.8%	5 17.2%	11 37.9%	6 20.7%	29 100.0%
SPHL	0 0.0%	1 4.2%	3 12.5%	14 58.3%	6 25.0%	24 100.0%
Total	3 3.6%	5 6.0%	9 10.8%	42 50.6%	24 28.9%	83 100.0%

Table 40: Level of HL and ability to talk to family about life experiences.

This question focused on understanding the relationship the CYP had with their extended family. The CYP with MMHL who felt that they did not do this were, 9/29 (31%) and 3

(10.3%) did not want to submit an answer. These figures were higher than those recorded by the other two groups of CYP. In response to previous questions the data within the 'No Opinion' choice have not been considered, although the researcher considered it to be of interest as it accounted for 10.3% of the replies from the MMHL group. The figures for CYP with ELH who did not feel they were able to talk to family about life experiences, were 1/30 (3.3%) and for SPHL (4 /24 (16.7%),  $\chi^2(8, N=83)=16.65, p=.03$ . The null hypothesis is rejected as there is a relation between level of HL and the ability to talk to family members about their life experiences.

This question was not considering the ability to discuss worries and concerns, just to have a conversation about day-to-day life and this was explained to the as the previous questions had considered being able to discuss worries, or things that made them happy and sad with family and friends.

### 5.3.5.ii Question 25 – I enjoy holidays and activities with my family

The youngsters were aged 11-15 years of age, a period in life when CYP want to identify and seek opportunities to be more independent. It is important to state that the data were gathered prior to the social restrictions of 2020/21 due to COVID-19 pandemic.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	7 23.3%	23 76.7%	30 100.0%	0 0.0%
MMHL	1 3.4%	0 0.0%	15 51.7%	13 44.8%	29 100.0%	1 3.4%
SPHL	0 0.0%	2 8.3%	12 50.0%	10 41.7%	24 100.0%	0 0.0%
Total	1 1.2%	2 2.4%	34 41.0%	46 55.4%	83 100.0%	1 1.2%

Table 41: Level of HL and enjoying holidays and activities with family

15/29 (51.7%) CYP with MMHL and 14 /24 (58.3%) of those with SPHL presented an answer saying they disagreed with this statement. In the group with ELH, 7/30 (23.3%) disagreed,  $\chi^2 (6, N=83)=14.20, p= .03$ , the null hypothesis was rejected. This suggests that there is a relationship between HL and the ability to enjoy activities with their family. Although the statistics suggested that some CYP with any degree of HL do not enjoy time with their family, some indicated that they did. It is also important to note the age of the students as this may have an impact on their perception, as the average age of the SPHL group were older than

the CYP with ELH. This is important to consider as the older students may have a desire for more independence and prefer an alternative to holidays with family.

#### 5.3.5.iii Question 26 – I enjoy holidays and activities at weekends with friends.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	8 26.7%	22 73.3%	30 100.0%
MMHL	1 3.4%	0 0.0%	2 6.9%	14 48.3%	12 41.4%	29 100.0%
SPHL	2 8.3%	0 0.0%	2 8.3%	10 41.7%	10 41.7%	24 100.0%
Total	3 3.6%	0 0.0%	4 4.8%	32 38.6%	44 53.0%	83 100.0%

Table 42: Level of HL and enjoying holidays and activities with friends

Young people in all three groups agreed/strongly agreed with this statement; ELH: 30/30 (100%), MMHL 26/29 (89.7%) and those with SPHL, 20/24 (83.4%),  $\chi^2(6, N=83)=10.42, p=.11$ . There is no relationship between level of HL and enjoying time with friends, therefore the null hypothesis is accepted.

Questions 27 and 28 asked the CYP to think about their friends and whether they had one or two close friends (Question 27) or a large group of friends (Question 28).

5.3.5.iv Question 27 – I only have one or two close friends.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	12 40.0%	9 30.0%	6 20.0%	3 10.0%	30 100.0%
MMHL	1 3.4%	4 13.8%	10 34.5%	7 24.1%	7 24.1%	29 100.0%
SPHL	3 12.5%	8 33.3%	5 20.8%	4 16.7%	4 16.7%	24 100.0%
Total	4 4.8%	24 28.9%	24 28.9%	17 20.5%	14 16.9%	83 100.0%

Table 43: Level of HL and having one or two close friends

The analysis of the data gathered suggests that there is no relation between level of HL and having only one or two close friends,  $\chi^2 (8, N = 83) = 11.20$ ,  $p = .19$ , the null hypothesis is accepted.

5.3.5.v Question 28 – I have a large group of friends

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	4 13.3%	9 30.0%	17 56.7%	30 100.0%
MMHL	0 0.0%	5 17.2%	5 17.2%	8 27.6%	11 37.9%	29 100.0%
SPHL	2 8.3%	1 4.2%	1 4.2%	13 54.2%	7 29.2%	24 100.0%
Total	2 2.4%	6 7.2%	10 12.0%	30 36.1%	35 42.2%	83 100.0%

Table 44: Level of HL and a young person having a large group of friends

From the group of CYP with MMHL, 10/29 (34.4%) felt they did not have a large group of friends, compared to 2/24 (8.4%) of those with SPHL and 4/30 (13.3%) of those with ELH,  $\chi^2(8, N=83)=18.98, p=.01$ . Thus, there is a relationship between HL and CYP considering whether they have a large group of friends, the null hypothesis is rejected. This is something discussed during the interviews as the CYP with MMHL considered their friendship group small, but not confined to just one or two close friends.

5.3.5.vi Question 29 – I prefer to make friends on social media – Facebook, Twitter, WhatsApp.

To consider and understand how CYP like to make and develop friendships, they were asked about friendships made online and via social media as the previous 2 questions (27 and 28) related to friendships made face-to-face.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	2 6.7%	15 50.0%	9 30.0%	4 13.3%	0 0.0%	30 100.0%
MMHL	2 6.9%	14 48.3%	12 41.4%	1 3.4%	0 0.0%	29 100.0%
SPHL	6 25.0%	6 25.0%	10 41.7%	2 8.3%	0 0.0%	24 100.0%
Total	10 12.0%	35 42.2%	31 37.3%	7 8.4%	0 0.0%	83 100.0%

Table 45: Level of HL and a young person making friendships online.



The data suggest that a high proportion of CYP in all three groups disagreed with the statement, suggesting that this group of CYP did not prefer to make friends via social media. Youngsters with ELH 24/30 (80.0%) disagreed with the statement that they did not prefer to make friends using social media, compared to those with MMHL 26/29 (89.7%) and with SPHL, 16 /24 (66.7%),  $\chi^2(6, N= 83)= 9.46, p= .15$ . Thus, the null hypothesis is accepted as there is no relationship between HL and preferring to make friendships online. There were a lower number and percentage of CYP in the SPHL group who disagreed with this statement compared to the other two groups. This may relate to the mean age of this group being older and having more access to social media than the CYP in the other groups who were statistically younger.

#### 5.3.5.vii Question 30 – I can think of things myself to help a friend or my family

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	17 56.7%	12 40.0%	30 100.0%
MMHL	0 0.0%	2 6.9%	8 27.6%	16 55.2%	3 10.3%	29 100.0%
SPHL	1 4.2%	0 0.0%	3 12.5%	14 58.3%	6 25.0%	24 100.0%
Total	1 1.2%	2 2.4%	12 14.5%	47 56.6%	21 25.3%	83 100.0%

Table 46: Level of HL and a young person identifying things that would help a friend /family.

The data showed that 10/29 (34.5%) CYP with MMHL disagreed/strongly disagreed with this statement, compared with 1/30 (3.3%) of CYP with ELH and 3/24 (12.5%) of CYP who had SPHL,  $\chi^2(8, N=83)= 17.42, p= .03$ . The chi-square test suggested that there is a relationship between HL and the ability to identify things that would help family and friends with higher percentage of CYP with MMHL feeling they were unable to think how to help friends or family. The null hypothesis is rejected.

#### 5.3.5.viii Question 31 – I am happy for my friends and family to help me.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	15 50.0%	15 50.0%	30 100.0%
MMHL	1 3.4%	0 0.0%	4 13.8%	19 65.5%	5 17.2%	29 100.0%
SPHL	1 4.2%	0 0.0%	3 12.5%	12 50.0%	8 33.3%	24 100.0%
Total	2 2.4%	0 0.0%	7 8.4%	46 55.4%	28 33.7%	83 100.0%

Table 47: Level of HL and for a young person to allow a friend or member of the family to help them

This question considered whether the CYP were able to accept support and advice from family and friends. The CYP with ELH all (30/30 100%) agreed with the statement. However 4/29 (13.8%) of the CYP with MMHL disagreed and the SPHL group, 3/24 (12.5%) disagreed,

$\chi^2(6, N=83) = 13,81, p = .03$ , the null hypothesis is rejected. Thus, there is a relationship between HL and the ability to allow a member of the family or friend to help them.

### 5.3.6 Theme Six – Sense of humour

Sense of humour	32	33
32. If I make a mistake, I can laugh at it and find ways of putting it right.	-	.68**
33. I don't mind when friends and family laugh at me or have a joke at my expense.	.68**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Theme 6 Sense of humour. Spearman rho correlation of all participants

Spearman rho correlation shows that both questions within this category present a significant correlation.

5.3.6.i Question 32 – If I make a mistake, I can laugh at it and can find a way of putting it right.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	14 46.7%	15 50.0%	30 100.0%
MMHL	0 0.0%	3 10.3%	7 24.1%	12 41.4%	7 24.1%	29 100.0%
SPHL	1 4.2%	1 4.2%	9 37.5%	9 37.5%	4 16.7%	24 100.0%
Total	1 1.2%	4 4.8%	17 20.5%	35 42.2%	26 31.3%	83 100.0%

Table 48: Level of HL and responding to or laughing at their own mistakes

Question 32 is presented under Theme Six - Sense of Humour. However, the results are interesting when compared to the previous question, Question 31. Only 1/ 30 (3.3%) of the CYP with ELH disagreed with Question 32, whereas 10/29 (34.4%) of CYP with MMHL and 10/24 (41.4%) of the SPHL group disagreed. There was no significant difference between the two groups of CYP with different degrees of HL, but over a third in each group suggested that they found it challenging to laugh at their own mistakes and know how to correct them,  $\chi^2 (8, N=83) = 19.39, p = .01$ . The null hypothesis is rejected, therefore there is a relationship between HL and the ability of the young person to laugh at their own mistake and know how to correct it. At the same time, Question 31 presented responses indicating that some CYP found it difficult to accept help from family and friends. From this research sample, some CYP with a HL found it difficult when they made mistakes and not only were they unable to

correct the situation themselves, but they also found it difficult to ask family or friends for help. It is important to identify that ‘some’ CYP not ‘all’ responded that they disagreed with both sentences and therefore it cannot be said that all CYP with MMHL couldn’t self-correct or ask for help.

5.3.6.ii Question 33 – I don’t mind if family/friends laugh at me or have a joke at my expense.

This may have been considered a provocative question to ask because it is difficult to laugh at oneself, let alone allow someone else to laugh at one’s mistakes, especially when CYP are developing a sense of personality and identifying skills and challenges they experience.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	1 3.3%	2 6.7%	16 53.3%	11 36.7%	30 100.0%
MMHL	1 3.4%	3 10.3%	10 34.5%	11 37.9%	4 13.8%	29 100.0%
SPHL	0 0.0%	0 0.0%	11 45.8%	8 33.3%	5 20.8%	24 100.0%
Total	1 1.2%	4 4.8%	23 27.7%	35 42.2%	20 24.1%	83 100.0%

Table 49: Level of HL and tolerating family and friends having a laugh at their expense.

A few CYP with ELH, 3/30 (10%) disagreed with the statement, but 13/29 (44.8%) of those with MMHL and 11 / 24 (45.8%) of those with SPHL disagreed,  $\chi^2(8, N=83) = 17.92, p = .02$ . The null hypothesis is rejected, as there is a relationship between HL and the ability to accept a joke about a mistake or at their expense.

### 5.3.7 Theme Seven – self-belief and self esteem

Self-belief and self- esteem	34	35	36	37	38	39	40	41	42	43	44	45	46	47
34. I know I am good at certain things and have skills.	-	.62**	.54**	.60**	.55**	.70**	.68**	.32**	.30**	.40**	.34**	.21	.12	.34**
35. I can identify my good points and qualities.	.62**	-	.47**	.64**	.47**	.57**	.55**	.34**	.26*	.38**	.28**	.11	.25*	.36**
36. I can identify areas that I need to work on and improve.	.54**	.47**	-	.49**	.34**	.46**	.56**	.19	.38**	.51**	.49**	.21	.25*	.30**
37. I believe I am a special person with unique skills.	.60**	.64**	.49**	-	.62**	.52**	.65**	.39**	.31**	.40**	.35**	.18	.17	.40**
38. I am proud of myself of the things I can do / skills.	.55**	.47**	.34**	.61**	-	.47**	.59**	.44**	.39**	.25*	.16	.20	.10	.25*
39. I am confident to give my opinion on things	.69**	.57**	.46**	.52**	.47**	-	.66**	.38**	.49**	.34**	.42**	.32**	.19	.45**
40. I am confident about my appearance	.68**	.55**	.56**	.65**	.60**	.66**	-	.44**	.29**	.39**	.41**	.37**	.15	.35**
41. I don't compare myself to other people.	.32**	.34**	.19	.39**	.44**	.38**	.44**	-	.49**	.37**	.36**	.40**	.30**	.42**
42. If I make a mistake, I am	.31**	.26*	.38**	.31**	.39**	.49**	.29**	.49**	-	.30**	.33**	.27*	.43**	.44**

Correlation is significant at the 0.01 level (2-tailed).\*\*  
Correlation is significant at the 0.01 level (2-tailed).\*\*

	confident to admit it.														
43.	I am not concerned about what other people think of me.	.40**	.38**	.51**	.40**	.25*	.34**	.39**	.37**	.30**	-	.68**	.21	.44**	.35**
44.	I am not hurt by the opinions and comments of others.	.34**	.28**	.49**	.35**	.16	.42**	.41**	.36**	.33**	.68**	-	.31**	.39**	.32**
45.	I do not believe that other people are better than me.	.21	.11	.21	.18	.20	.33**	.37**	.40**	.27*	.21	.310**	-	.29**	.46**
46.	I am not embarrassed by the actions of others.	.13	.25*	.25*	.17	.10	.19	.5	.30**	.43**	.44**	.39**	.29**	-	.41**
47.	I don't let people persuade me to do things I don't want to do.	.34**	.36**	.30**	.40**	.24*	.45**	.35**	.42**	.44**	.35**	.32**	.46**	.41**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.01 level (2-tailed).\*\*

Table 50: Theme 7 Self-belief and self-esteem. Spearman rho correlation of all participants

The correlation of the questions within the category of self-belief and self-esteem, highlight that there is correlation between the majority of the questions. Question 45 does not present as a strong correlation and this could be due to the question being posed negatively, that is, I do not believe that other people are better than me. Question 46 does not correlate with some of the other questions in this theme. This question asks whether the CYP are

embarrassed by the actions of others and this does not correlate with responses to questions that ask the CYP if they are self-confident.

The responses to the individual questions are presented below.

#### 5.3.7.i Question 34 – I know I am good at certain things and have skills

This question is similar to Question 2 in Theme One – Optimism.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	18 60.0%	12 40.0%	30 100.0%
MMHL	0 0.0%	1 3.4%	5 17.2%	17 58.6%	6 20.7%	29 100.0%
SPHL	1 4.2%	0 0.0%	5 20.8%	10 41.7%	8 33.3%	24 100.0%
Total	1 1.2%	1 1.2%	10 12.0%	45 54.2%	26 31.3%	83 100.0%

Table 51: Level of HL and the ability to identify personal skills

The data analysis showed no relationship between HL and the ability to identify skills,  $\chi^2 (8, N= 83)=12.91$ ,  $p= .12$ , the null hypothesis was accepted. Although there is no statistical significance, a few CYP with HL said they found it hard to identify skills, those with SPHL, 5 /24 (20.8%) and with MMHL 6/29 (20.6%).



### 5.3.7.ii Question 35 - I can identify my good points and qualities

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	3 10.0%	18 60.0%	9 30.0%	30 100.0%
MMHL	0 0.0%	2 6.9%	4 13.8%	17 58.6%	6 20.7%	29 100.0%
SPHL	1 4.2%	1 4.2%	4 16.7%	12 50.0%	6 25.0%	24 100.0%
Total	1 1.2%	3 3.6%	11 13.3%	47 56.6%	21 25.3%	83 100.0%

Table 52: Level of HL and the ability to identify good points and qualities.

A small number, 3 /30 (10%), of CYP with ELH disagreed with this statement, compared with 6/29 (20.7%) of those with MMHL and 5/24 (20.9%) of those with SPHL,  $\chi^2(8, N=83)=5.66$ ,  $p=.69$ . The chi- square test again suggests that there is no relationship between HL and the ability to identify positive personal qualities, the null hypothesis was accepted.

5.3.7.iii Question 36 – I can identify the areas I need to work on and improve my skills.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	0 0.0%	1 3.3%	19 63.3%	9 30.0%	30 100.0%
MMHL	0 0.0%	2 6.9%	3 10.3%	17 58.6%	7 24.1%	29 100.0%
SPHL	0 0.0%	0 0.0%	3 12.5%	15 62.5%	6 25.0%	24 100.0%
Total	1 1.2%	2 2.4%	7 8.4%	51 61.4%	22 26.5%	83 100.0%

Table 53: Level of HL and the ability to identify skills to improve.

The chi-square test  $\chi^2(8, N=83)=7.29$ ,  $p= .50$  suggests that there is no relationship between HL and the ability to identify the skills needing to be worked on. The null hypothesis was accepted.

#### 5.3.7.iv Question 37 – I believe I am a special person with unique skills

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	0 0.0%	1 3.3%	22 73.3%	6 20.0%	30 100.0%
MMHL	2 6.9%	3 10.3%	9 31.0%	9 31.0%	6 20.7%	29 100.0%
SPHL	1 4.2%	1 4.2%	7 29.2%	11 45.8%	4 16.7%	24 100.0%
Total	4 4.8%	4 4.8%	17 20.5%	42 50.6%	16 19.3%	83 100.0%

Table 54: Level of HL and young person's belief that they are a unique person.

From the group of CYP with MMHL, 12/29 (41.3%) disagreed with this statement compared to CYP with ELH, 1/30 (3.3%), and those with a SPHL, 8 /24 (33.4%),  $\chi^2(6, N= 83)= 15.98$ ,  $p=.04$ . There was a relationship between HL and the ability of the CYP to consider themselves as unique individuals with special talents. The researcher asked the CYP to reflect on personal skills and attributes during the interviews.

5.3.7.v Question 38 – I am proud of myself of the skills I have and things I have learnt.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	0 0.0%	0 0.0%	16 53.3%	13 43.3%	30 100.0%
MMHL	3 10.3%	0 0.0%	5 17.2%	14 48.3%	7 24.1%	29 100.0%
SPHL	1 4.2%	1 4.2%	3 12.5%	12 50.0%	7 29.2%	24 100.0%
Total	5 6.0%	1 1.2%	8 9.6%	42 50.6%	27 32.5%	83 100.0%

Table 55: Level of HL and a person's sense of pride in the skills they have learnt.

Some of the CYP with MMHL 5/29 (17.2%) and those with SPHL, 4/24 (16.5%) disagreed with the statement,  $\chi^2(8, N= 83)= 10.55$ ,  $p= .23$ , the null hypothesis was accepted. There is no relationship between HL and the CYP in the research group being proud of their own personal achievements. The data presented from Question 38 was interesting as, although there was no statistical relationship, some CYP disagreed with this statement, which was an area to consider during the interviews.

### 5.3.7.vi Question 39 – I am confident to give my opinion on things

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	2 6.7%	16 53.3%	12 40.0%	30 100.0%
MMHL	0 0.0%	1 3.4%	9 31.0%	11 37.9%	8 27.6%	29 100.0%
SPHL	0 0.0%	2 8.3%	5 20.8%	11 45.8%	6 25.0%	24 100.0%
Total	0 0.0%	3 3.6%	16 19.3%	38 45.8%	26 31.3%	83 100.0%

Table 56: Level of HL and a person's ability to express their opinion.

There were CYP in both the MMHL group 10/29 (34.4%) and SPHL, 7/24 (29.1%) who disagreed with the statement and felt that they were not confident to express an opinion,  $\chi^2(6, N=83)=9.07, p=.17$ . The P-value suggests that there is no relationship between HL and the statement, 'I am confident to give my opinion on things'. The null hypothesis was accepted.

### 5.3.7.vii Question 40 – I am confident about my appearance

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	0 0.0%	1 3.3%	19 63.3%	9 30.0%	30 100.0%
MMHL	0 0.0%	4 13.8%	11 37.9%	10 34.5%	4 13.8%	29 100.0%
SPHL	1 4.2%	1 4.2%	6 25.0%	10 41.7%	6 25.0%	24 100.0%
Total	2 2.4%	5 6.0%	18 21.7%	39 47.0%	19 22.9%	83 100.0%

Table 57: Level of HL and the CYP feeling confident about their appearance.

Almost all the CYP with ELH, (28/30, 93.3 %) stated that they were confident with their appearance. 7/24 (29.2%), Of the CYP with SPHL disagreed with the statement, but there were higher numbers from those with MMHL 15 /29 (51.7%),  $\chi^2 (8, N= 83)=18.85, p= .01$ .

The results show that the null hypothesis is rejected and that there is a relationship between level of HL and the personal feelings related to their appearance, with half of CYP with MMHL stating they felt less confident about their appearance. The findings of this question, that is the perceptions of the CYP with HL had towards their HL as well as their HA and RA was discussed during the interviews.

### 5.3.7.viii Question 41 – I don't compare myself to other people

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	3 10.0%	0 0.0%	17 56.7%	9 30.0%	30 100.0%
MMHL	2 6.9%	2 6.9%	11 37.9%	8 27.6%	6 20.7%	29 100.0%
SPHL	1 4.2%	2 8.3%	8 33.3%	10 41.7%	3 12.5%	24 100.0%
Total	4 4.8%	7 8.4%	19 22.9%	35 42.2%	18 21.7%	83 100.0%

Table 58: Level of HL and not comparing themselves to other people.

The number of CYP with ELH who disagreed with this statement, was 3/30 (10.0%), compared with those with a HL; MMHL 13/29 (44.8%) and those with SPHL 10/24 (41.6%),  $\chi^2(8, N=83)=16.32, p=.05$ . Thus, there was a relationship between levels of hearing and comparing themselves with more CYP with HL, MMHL or SPHL, compare themselves to CYP with ELH. The null hypothesis is rejected.

5.3.7.ix Question 42 – If I make a mistake or do something wrong I am confident to admit to it and own up.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	3 10.0%	20 66.7%	7 23.3%	30 100.0%
MMHL	1 3.4%	1 3.4%	4 13.8%	14 48.3%	9 31.0%	29 100.0%
SPHL	1 4.2%	1 4.2%	4 16.7%	15 62.5%	3 12.5%	24 100.0%
Total	2 2.4%	2 2.4%	11 13.3%	49 59.0%	19 22.9%	83 100.0%

Table 59: Level of HL and the ability to admit if they have made a mistake.

There were students in all three groups who felt they would find it hard to admit to making a mistake; those with ELH 3/30, MMHL 5/29 and those with a SPHL 5/24,  $\chi^2(68, N= 83)=5.66$ ,  $p= .68$ . There is no relationship between HL and the concept of admitting when they had made a mistake, the null hypothesis is accepted.



### 5.3.7.x Question 43 – I am not concerned of what others think of me

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	1 3.3%	4 13.3%	15 50.0%	10 33.3%	30 100.0%
MMHL	2 6.9%	7 24.1%	6 20.7%	9 31.0%	5 17.2%	29 100.0%
SPHL	1 4.2%	3 12.5%	8 33.3%	8 33.3%	4 16.7%	24 100.0%
Total	3 3.6%	11 13.3%	18 21.7%	32 38.6%	19 22.9%	83 100.0%

Table 60: Level of HL and not being concerned about what other people think of them.

The group of CYP with MMHL, 13/29 (44.8%), disagreed with the statement presented indicating that they were bothered by what people thought about them. Of those with SPHL, 11/24 (45.8%) disagreed and among the CYP with ELH, 5/30 (16.6%) disagreed,  $\chi^2(8, N=83)=13.13, p=.11$ . The data shows that there is no relationship between HL and the CYP considering if they were bothered about what other people thought of them, the null hypothesis was accepted.

5.3.7.xi Question 44 – I am not hurt by the opinions and comments of others

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	2 6.7%	1 3.3%	3 10.0%	18 60.0%	6 20.0%	30 100.0%
MMHL	1 3.4%	7 24.1%	9 31.0%	8 27.6%	4 13.8%	29 100.0%
SPHL	0 0.0%	3 12.5%	5 20.8%	11 45.8%	5 20.8%	24 100.0%
Total	3 3.6%	11 13.3%	17 20.5%	37 44.6%	15 18.1%	83 100.0%

Table 61: Level of HL and feeling hurt by another person's views.

Some of the CYP with MMHL 16/29 (55.1%) indicated they were concerned by the views and opinions of others. Some of the CYP with SPHL and ELH also held this view; however, their scores were lower i.e. 8/24 (33.8%) and 4/30 (13.3%)  $\chi^2(8, N= 83) = 13.60, p= .09$ . The data suggest that there is no relationship between HL and feeling hurt by another person's opinion, the null hypothesis was accepted.

5.3.7.xii Question 45 – I do not believe other people are better than me.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	4 13.3%	1 3.3%	2 6.7%	18 60.0%	5 16.7%	30 100.0%
MMHL	4 13.8%	4 13.8%	8 27.6%	9 31.0%	4 13.8%	29 100.0%
SPHL	4 16.7%	1 4.2%	7 29.2%	8 33.3%	4 16.7%	24 100.0%
Total	12 14.5%	6 7.2%	17 20.5%	35 42.2%	13 15.7%	83 100.0%

Table 62: Level of HL and the CYP believing that others are better than them.

There was no relationship between HL and the statement that CYP did not believe that other people were better than them,  $\chi^2(8, N=83) = 10.83$ ,  $p = .21$ , the null hypothesis was accepted. However, the CYP with MMHL 12/29 (41.4%) indicated that they felt that other people were better than them. A proportion of the CYP with SPHL, 8/24 (33.4%) and ELH 3/30 (10.0%), also held this view however their scores were lower than those with MMHL.

5.3.7.xiii Question 46 – I am not embarrassed by the actions of others such as my family, friends, brothers/sisters.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	4 13.3%	9 30.0%	17 56.7%	30 100.0%
MMHL	0 0.0%	5 17.2%	5 17.2%	8 27.6%	11 37.9%	29 100.0%
SPHL	2 8.3%	1 4.2%	1 4.2%	13 54.2%	7 29.2%	24 100.0%
Total	2 2.4%	6 7.2%	10 12.0%	30 36.1%	35 42.2%	83 100.0%

Table 63: Level of HL and not feeling embarrassed by actions of others (family/ friends)

The chi-square test  $\chi^2(8, N=83) = 10.64$ ,  $p = .22$  presents that there is no relationship between HL and feeling embarrassed by the actions of others and the null hypothesis was accepted. However, of those with MMHL 10/29 (34.4%) disagreed with the statement compared to those with SPHL, 2/24 (8.4%) and ELH 4 /30 (13.3%).

5.3.7.xiv Question 47 – I don't let people persuade me to do things I don't want to do.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	1 3.3%	0 0.0%	13 43.3%	16 53.3%	30 100.0%
MMHL	0 0.0%	3 10.3%	1 3.4%	17 58.6%	8 27.6%	29 100.0%
SPHL	2 8.3%	1 4.2%	2 8.3%	14 58.3%	5 20.8%	24 100.0%
Total	2 2.4%	5 6.0%	3 3.6%	44 53.0%	29 34.9%	83 100.0%

Table 64: Level of HL and CYP not allowing other people to persuade them to do things they don't want to do.

The majority of CYP in all three groups agreed with the statement and generally felt they did not allow someone to persuade them to do something that they did not want to do,  $\chi^2(8, N=83)=14.43, p=.07$ . Therefore, there is no relationship between HL and the CYP feeling that they do not allow other people to persuade them to do things they do not want to do. The null hypothesis was accepted.

### 5.3.8 Theme Eight – Communication skills

This set of questions considered the CYP's views of their communication skills and how confident they felt to speak in front of, or with different audiences. The Spearman rho correlation is presented below.

Communication Skills	48	49	50	51	52	53	54	55	56	57
48. I listen to other people's views and opinions.	-	.49**	.20	.24*	.57**	.35**	.16	.39**	.39**	.23*
49. I can start a new conversation	.49**	-	.57**	.28*	.38**	.64**	.38**	.46**	.51**	.43**
50. I can start a conversation with people I don't know	.20	.57**	-	.36**	.07	.40**	.31**	.25*	.40**	.33**
51. I am not shy when I am with other people	.24*	.28*	.36**	-	.03	.17	.04	.19	.76*	.49**
52. I use appropriate greetings with different people.	.57**	.37**	.07	.03	-	.43**	.26*	.24*	.29**	.23*
53. I can maintain a conversation with people.	.35**	.64**	.40**	.17	.43**	-	.54**	.59**	.34**	.36**
54. I can end a conversation appropriately without appearing rude.	.16	.38**	.31**	.04	.26*	.54**	-	.50**	.26*	.38**
55. I can ask for help when I don't know something or didn't hear an instruction.	.39**	.46**	.26*	.193=	.24*	.59**	.50**	-	.49**	.39**
56. I am friendly and comfortable with new people	.39**	.51**	.40**	.27*	.29**	.34**	.26*	.49**	-	.51**
57. It doesn't bother me to talk in front of a group of people.	.23*	.43**	.33**	.50**	.23*	.36**	.38**	.39**	.51**	-

Correlation is significant at the 0.01 level (2-tailed).\*\*

Correlation is significant at the 0.05 level (2-tailed).\*

Table 65: Theme 8 Communication Skills. Spearman rho correlation of all participants

The Spearman rho correlation shows that the first 3 questions demonstrate strong

correlations; however, question 51 did not present a relationship with several other questions. This may have been due to it being presented in the negative. The subsequent questions 52, 53, 54 and 55 did not present strong correlation with question 51 and these questions relate to conversation etiquette such as maintaining conversations, ending them appropriately without appearing rude and confidence to ask for help when required. The final questions, 56 and 57, do present with strong correlations.

The analysis of the individual questions is presented below.

#### 5.3.8.i Question 48 – I listen to other people’s points of view

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	2 6.7%	11 36.7%	17 56.7%	30 100.0%
MMHL	1 3.4%	0 0.0%	1 3.4%	18 62.1%	9 31.0%	29 100.0%
SPHL	1 4.2%	0 0.0%	1 4.2%	12 50.0%	10 41.7%	24 100.0%
Total	2 2.4%	0 0.0%	4 4.8%	41 49.4%	36 43.4%	83 100.0%

Table 66: Level of HL and being able to listen to another person’s views.

The majority of CYP in all three groups agreed with this statement, with only one or two participants feeling that they were unable to listen to the views of others,  $\chi^2 (6, N= 83) = 5.62, p= .46$ . There is no relationship between HL and listening to another person’s point of view, the null hypothesis is accepted.

### 5.3.8.ii Question 49 – I can start a new conversation

This question considered if the CYP felt they had this aptitude of being able to start a conversation with another person.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	0 0.0%	18 60.0%	12 40.0%	30 100.0%
MMHL	0 0.0%	2 6.9%	6 20.7%	15 51.7%	6 20.7%	29 100.0%
SPHL	0 0.0%	2 8.3%	2 8.3%	15 62.5%	5 20.8%	24 100.0%
Total	0 0.0%	4 4.8%	8 9.6%	48 57.8%	23 27.7%	83 100.0%

Table 67: Level of HL and having the necessary communication skills to start a conversation.

All participants from those with ELH agreed with this statement, while 8/29 (27.6%) of CYP with MMHL and 4/24 (16.6%) of those with SPHL who disagreed and felt that this was a skill they didn't have or found challenging,  $\chi^2(6, N=83)=11.79$ ,  $p=.07$ . The null hypothesis is accepted as there is no relationship between the two variables.



### 5.3.8.iii Question 50 – I can start a conversation with people I don't know

This question considered if the CYP felt they could start a conversation with an unknown person.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	3 10.0%	3 10.0%	18 60.0%	6 20.0%	30 100.0%
MMHL	0 0.0%	3 10.3%	9 31.0%	12 41.4%	5 17.2%	29 100.0%
SPHL	2 8.3%	1 4.2%	7 29.2%	12 50.0%	2 8.3%	24 100.0%
Total	2 2.4%	7 8.4%	19 22.9%	42 50.6%	13 15.7%	83 100.0%

Table 68: Level of HL and ability to start a conversation with a new person

There were CYP in all three groups who disagreed with the statement, saying that they found this social skill difficult,  $\chi^2(6, N=83)=11.32, p=.18$ . This indicates that there is no relationship between HL and the ability to start a conversation with new people, the null hypothesis is accepted. Although no relationship was identified, the numbers within the group of CYP with MMHL 12/29 (41.3%), were slightly higher than those with ELH 6/30 (20.0%) and SPHL 8/24 (33.4%).

#### 5.3.8.iv Question 51 – I am not shy when I am with other people

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	1 3.3%	4 13.3%	21 70.0%	3 10.0%	30 100.0%
MMHL	2 6.9%	5 17.2%	10 34.5%	11 37.9%	1 3.4%	29 100.0%
SPHL	2 8.3%	6 25.0%	5 20.8%	8 33.3%	3 12.5%	24 100.0%
Total	5 6.0%	12 14.5%	19 22.9%	40 48.2%	7 8.4%	83 100.0%

Table 69: Level of HL and being confident and not shy when with people.

The data show that there is a group of CYP that feel shy when they meet people. Of the participants with ELH, 5/30 (16.6%) disagreed with the statement; in the SPHL group, 11/24 (45.8%) provided the same response and from the MMHL group, 15 /29 (51.7%) disagreed with the statement,  $\chi^2(8, N= 83)=14.29$ ,  $p= .08$ . The null hypothesis is accepted, indicating that there is no relationship between the variables, despite over half of those with MMHL who participated indicating that this was a difficulty.

5.3.8.v Question 52 – I use appropriate greetings with different people – friends, family, teachers etc.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	3 10.0%	0 0.0%	16 53.3%	14 46.7%	30 100.0%
MMHL	0 0.0%	3 10.3%	3 10.3%	16 55.2%	10 34.5%	29 100.0%
SPHL	2 8.3%	1 4.2%	1 4.2%	18 75.0%	5 20.8%	24 100.0%
Total	2 2.4%	7 8.4%	4 4.8%	50 60.2%	29 34.9%	83 100.0%

Table 70: Level of HL and the ability to appropriately greet people eg friends, family, teachers.

The chi-square  $\chi^2(8, N=83)=7.083$ ,  $p=.13$  shows no relationship between HL and the ability to appropriately greet people, the null hypothesis is accepted. The data gathered from the three groups presented: 3/30 (10%) of the CYP with ELH strongly disagreeing with this statement and 2/24 (8.4%) of the group with SPHL and 6/29 (20.6%) of those with MMHL also disagreeing. Although numbers are small, the data identify some CYP believe they find this task challenging.

### 5.3.8.vi Question 53 – I can maintain a conversation with people.

The researcher investigated whether, once the conversation had been instigated, the CYP were able to maintain it using receptive and expressive language skills.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	0 0.0%	0 0.0%	18 60.0%	11 36.7%	30 100.0%
MMHL	0 0.0%	2 6.9%	10 34.5%	10 34.5%	7 24.1%	29 100.0%
SPHL	1 4.2%	1 4.2%	2 8.3%	15 62.5%	5 20.8%	24 100.0%
Total	2 2.4%	3 3.6%	12 14.5%	43 51.8%	23 27.7%	83 100.0%

Table 71: Level of HL and ability to maintain a conversation

12/29 (41.4%) of the CYP with MMHL disagreed with the statement and felt maintaining a conversation was not a skill they possessed, compared with 3/24 (12.5%) of those with SPHL. Almost all the CYP with ELH 29/30 (96.7%) agreed with the statement and considered it was a skill they had. The chi-square was  $\chi^2(8, N = 83) = 20.09$ ,  $p = .01$ , therefore the null hypothesis is rejected as there is a relationship between HL and the ability to maintain a conversation with a higher number of CYP with MMHL finding it difficult to maintain a conversation.

5.3.8.vii Question 54 – I can end a conversation without appearing rude.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	3 10.0%	18 60.0%	9 30.0%	30 100.0%
MMHL	2 6.9%	1 3.4%	8 27.6%	12 41.4%	6 20.7%	29 100.0%
SPHL	2 8.3%	0 0.0%	3 12.5%	13 54.2%	6 25.0%	24 100.0%
Total	4 4.8%	1 1.2%	14 16.9%	43 51.8%	21 25.3%	83 100.0%

Table 72: Level of HL and ability to end a conversation without appearing rude

The CYP with MMHL presented a result of 9/29 (31%) who felt they could not end a conversation without appearing rude. There were participants in the other two groups who also considered this was not a skill they possessed: 3/30 (10%) of those with ELH and 3/24 (12.5%), of those with SPHL,  $\chi^2(8, N=83)=8.79$ ,  $p=.36$ . The null hypothesis is accepted as there is no relationship between hearing levels and the ability to politely end a conversation, although the percentage of CYP in the MMHL group who found this challenging was slightly higher than the other two groups.

5.3.8.viii Question 55 – I can ask for help when I don't know something or if I didn't hear something and need help.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	1 3.3%	15 50.0%	14 46.7%	30 100.0%
MMHL	1 3.4%	3 10.3%	9 31.0%	9 31.0%	7 24.1%	29 100.0%
SPHL	0 0.0%	1 4.2%	5 20.8%	13 54.2%	5 20.8%	24 100.0%
Total	1 1.2%	4 4.8%	15 18.1%	37 44.6%	26 31.3%	83 100.0%

Table 73: Level of HL and ability to ask for help if you do not know something.

The number of CYP with MMHL who disagreed with this statement was higher (12/29, 41.3%) compared to those with ELH 1/30 (3.3%) and SPHL, 6/24 (25%),  $\chi^2(8, N=83)=17.03$ ,  $p=.03$ . The null hypothesis for this question is rejected and the alternative hypothesis accepted: there is a relationship between HL and the ability to ask for help. In this study, more CYP with MMHL found this challenging when compared to their peers.

### 5.3.8.ix Question 56 – I am friendly and comfortable with new people

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	1 3.3%	1 3.3%	0 0.0%	16 53.3%	12 40.0%	30 100.0%
MMHL	0 0.0%	4 13.8%	6 20.7%	14 48.3%	5 17.2%	29 100.0%
Young People - Severe/Profound	2 8.3%	0 0.0%	5 20.8%	12 50.0%	5 20.8%	24 100.0%
Total	3 3.6%	5 6.0%	11 13.3%	42 50.6%	22 26.5%	83 100.0%

Table 74: Level of HL and being comfortable and friendly with people you don't know.

In the group of CYP with ELH, 1/30 (3.3%) disagreed compared to those with a SPHL 5/24 (20.8%) and MMHL 10/29 (34.5%),  $\chi^2 (8, N = 83) = 16.84, p = .03$ . There were over a third of the CYP with MMHL in this study who did not feel confident and comfortable with unfamiliar people. There is a relationship between HL and feeling comfortable as well as being friendly with unfamiliar people, the null hypothesis was rejected and the alternative hypothesis accepted.

5.3.8.x Question 57 – It doesn't bother me to talk in front of a group of people.

Hearing Status	No Opinion	Strongly Disagree	Disagree	Agree	Strongly Agree	N Participants = 83
ELH	0 0.0%	0 0.0%	6 20.0%	18 60.0%	6 20.0%	30 100.0%
MMHL	2 6.9%	8 27.6%	10 34.5%	6 20.7%	3 10.3%	29 100.0%
SPHL	2 8.3%	3 12.5%	9 37.5%	6 25.0%	4 16.7%	24 100.0%
Total	4 4.8%	11 13.3%	25 30.1%	30 36.1%	13 15.7%	83 100.0%

Table 75: Level of HL and ability to talk in front of a group of people.

The gathered data indicated that there were more participants with MMHL who disagreed and felt that they could not talk in front of a group of people: 18 /29 (62.1%). This is compared to those with ELH 6/30 (20.0%) who also disagreed with the statement and 12/24 (50%) who had SPHL,  $\chi^2(8, N=83)=10.80, p> .01$ . The null hypothesis is rejected as there is a relationship between the two variables. HL in this research had an impact on the CYP's view of being able to talk in front of a group of people, and a larger percentage of CYP with MMHL felt it did bother them if they spoke in front of people.



## 5.4 Section 2 – Social and emotional problems

### 5.4.1 Question 1 - Have you ever experienced difficulties with emotions, concentration, behaviour or being able to get on with other people?

The CYP were asked to answer yes or no to this question and, if yes, to indicate the degree of impact using a rating scale: minor, definite, or severe difficulties. *N=82 as one person did not provide an answer.*

Hearing Status	No	Yes minor difficulties	Yes definite difficulties	Yes severe difficulties	N Participants = 82
ELH	21 70.0%	8 26.7%	1 3.3%	0 0.0%	30 100.0%
MMHL	8 28.6%	11 39.3%	5 17.9%	4 14.3%	28 100.0%
SPHL	9 37.5%	9 37.5%	4 16.7%	2 8.3%	24 100.0%
Total	38 46.3%	28 34.1%	10 12.2%	6 7.3%	82 100.0%

Table 76: Level of HL and experience of social and emotional difficulties

In this group, a higher proportion of CYP with MMHL experienced social and emotional difficulties as highlighted in Table 76. Of the CYP with ELH, 9/30 (30%) said they experienced a difficulty, 20/28 (71.5%), of those with MMHL experienced such problems and the CYP with SPHL 15/24 (62.5%). In all three groups there were CYP who said they experienced minor difficulties, and this was a majority of the positive replies. The CYP with ELH who answered definite difficulties or severe difficulties were 1/30 (3.3%), while 6/24 (25%) of

those with SPHL and CYP with a MMHL, 9/28 (32.2%),  $\chi^2(6, N= 82)=13.86$ ,  $p= .03$ . The null hypothesis is rejected as there is a relationship between HL and the experience of social and emotional difficulties.

#### 5.4.2 Questions 2, 3, 4 and 5

The number of CYP who replied yes to question 1 was  $N=44$ . They were asked how long they had experienced the difficulties and how the difficulties had affected them at home or in school. The replies required a response using a rating scale: in question 2, less than a month, 1-5 months, 6-12 months or over a year, and questions 3 to 5 used not at all, only a little, quite a lot, a great deal. The analysis of questions 3 to 5 showed that there was no relationship between the level of HL and the question asked, the tables are presented below with the chi-square.

##### 5.4.2.i Question 2 – How long have these difficulties been present?

Hearing Status	Less than a month	1-5 months	6-12 months	Over a year	N Participants = 44
ELH	4 44.4%	3 33.3%	0 0.0%	2 22.2%	9 100.0%
MMHL	3 15.0%	3 15.0%	4 20.0%	10 50.0%	20 100.0%
SPHL	6 40.0%	4 26.7%	1 6.7%	4 26.7%	15 100.0%
Total	13 29.5%	10 22.7%	5 11.4%	16 36.4%	44 100.0%

Table 77: Level of HL and length of time the young person had experienced the social and emotional problems.

Chi-square is  $X^2(6, N = 44) = 8.27, p = .22$ : the data suggest no significant relationship between level of HL and the length of time the CYP had experienced the difficulties, therefore the null hypothesis is accepted.

#### 5.4.2.ii Question 3 – do the difficulties upset or distress you?

Hearing Status	Not at all	Yes only a little	Quite a lot	A great deal	N Participants = 44
ELH	3 33.3%	4 44.4%	1 11.1%	1 11.1%	9 100.0%
MMHL	4 20.0%	7 35.0%	5 25.0%	4 20.0%	20 100.0%
SPHL	4 26.7%	10 66.7%	1 6.7%	0 0.0%	15 100.0%
Total	11 25.0%	21 47.7%	7 15.9%	5 11.4%	44 100.0%

Table 78: Did the difficulty experienced upset or distress them.

The chi-square is;  $\chi^2(6, N=44)=7.28, p= .29$ , therefore the null hypothesis is accepted. There is no statistical relationship between HL and the distress or upset experienced by the CYP. However, when linked with the analysis of question 2, that the CYP indicated the length of time they had experienced this difficulty or situation, 50% of the MMHL group said it had been for over a year. This raises further questions for the researcher and others looking at these results around the impact on their lives.

In the section titled 'Emotional Awareness', 82.4% of CYP with MMHL were able to identify things that made them happy and 79.3% then said they could discuss these things with family and friends. However, when things worried them, 89.7% of this cohort said they could identify the situation, but only 41.3% felt able to discuss the circumstance surrounding the emotion or feeling. With the emotion of sadness and things that made them sad, 55.2% were able to identify situations when they felt sad and all of them were able to discuss this with family or friends. This suggests that just under half of the CYP in this study were unable to identify things or situations that made them feel sad or were able to discuss the feelings and emotions with people close to them. This is of interest in relation to the analysis that 50% of the CYP with MMHL felt that their social/emotional concern or situation had lasted over 12 months.

#### 5.4.2.iii Question 4 – do the difficulties interfere with everyday life?

The previous analysis associated with the identification of emotions and situations where they experienced the emotion and the ability to seek assistance by discussing it with others, suggested that those with MMHL found it harder than their hearing peers and those with SPHL to identify the emotion and seek support. A higher percentage of this group stated their concerns lasted over 12 months. The researcher was therefore interested to identify how this impacted on their everyday life.

There are four sub-sections for this question, and these have been analysed separately and listed as question 4 a-d. The sections asked for the effect of the young person's difficulties

on homelife, friendship, classroom learning and friendship. The CYP were asked to grade their responses not at all, only a little, quite a lot and a great deal.

*5.4.2.iii.a Question 4a - Impact on homelife.*

Hearing Status	Not at all	Yes only a little	Quite a lot	A great deal	N Participants = 44
ELH	5 55.6%	4 44.4%	0 0.0%	0 0.0%	9 100.0%
MMHL	10 50.0%	4 20.0%	3 15.0%	3 15.0%	20 100.0%
SPHL	7 46.7%	4 26.7%	3 20.0%	1 6.7%	15 100.0%
Total	22 50.0%	12 27.3%	6 13.6%	4 9.1%	44 100.0%

Table 79: Did the social/emotional difficulties affect homelife?

There is no relationship between level of hearing and the effect of social and emotional difficulties on homelife,  $\chi^2(6, N = 44) = 4.83$ ,  $p = .56$ , the null hypothesis is accepted..

5.4.2.iii.b Question 4b - Impact on friendships.

Hearing Status	Not at all	Yes only a little	Quite a lot	A great deal	N Participants = 44
ELH	3 33.3%	5 55.6%	1 11.1%	0 0.0%	9 100.0%
MMHL	7 35.0%	10 50.0%	1 5.0%	2 10.0%	20 100.0%
SPHL	6 40.0%	6 40.0%	1 6.7%	2 13.3%	15 100.0%
Total	16 36.4%	21 47.7%	3 6.8%	4 9.1%	44 100.0%

Table 80: Did the social/emotional difficulties affect friendships?

Chi-square is  $\chi^2(6, N=44) = 1.88$ ,  $p = .93$ , indicating no significant relationship between level of HL and how the CYP felt their emotional or social difficulties affected their friendships. The null hypothesis is accepted.

5.4.2.iii.c Question 4c - Impact on classroom learning

Hearing Status	Not at all	Yes only a little	Quite a lot	A great deal	N Participants = 44
ELH	5 55.6%	2 22.2%	2 22.2%	0 0.0%	9 100.0%
MMHL	2 10.0%	12 60.0%	2 10.0%	4 20.0%	20 100.0%
SPHL	3 20.0%	6 40.0%	5 33.3%	1 6.7%	15 100.0%
Total	10 22.7%	20 45.5%	9 20.5%	5 11.4%	44 100.0%

Table 81: Did the social / emotional difficulties affect classroom learning?

The data analysis suggests only 2/9 (22.2%) of the CYP with ELH considered that social and emotional difficulties had a significant effect on them in the classroom, whereas the figures for CYP with MMHL and SPHL respectively were; 6/20 (30%) and 6/15 (40%),  $\chi^2(6, N=44)=2.98$ ,  $p=0.4$ . The chi-square does suggest that there is a relationship between level of HL and emotional difficulties affecting classroom work. The null hypothesis is rejected, and the alternative hypothesis accepted.

5.4.2.iii.d Question 4d - Impact on leisure activities

Hearing Status	Not at all	Yes, only a little	Quite a lot	A great deal	N Participants = 44
ELH	8 88.9%	0 0.0%	0 0.0%	1 11.1%	9 100.0%
MMHL	13 65.0%	5 25.0%	0 0.0%	2 10.0%	20 100.0%
SPHL	9 60.0%	5 33.3%	1 6.7%	0 0.0%	15 100.0%
Total	30 68.2%	10 22.7%	1 2.3%	3 6.8%	44 100.0%

Table 82: Did the social / emotional difficulties affect leisure time / activities outside of school.

Again, the data suggest that there is no significant relationship between level of HL and social and emotional difficulties affecting the CYP in activities completed outside of school,  $\chi^2 (6, N = 44) = 7.7, p = .31$ . The null hypothesis is accepted.



### 5.4.3 Language levels

Given the association identified in the literature between social skills and language, the receptive and expressive language assessments were used to explore whether any differences related to social skills and ability to be resilient identified within the three groups, could be interpreted based on language levels.

Hearing Status	Standardised Scores	Participants N= 83	Minimum	Maximum	Mean	Std. Deviation
ELH	Receptive	30	92	135	111.70	12.543
	Expressive	30	90	128	108.77	10.487
MMHL	Receptive	29	74	129	99.66	15.251
	Expressive	29	64	120	98.03	12.537
SPHL	Receptive	24	68	123	86.33	14.315
	Expressive	24	67	116	85.46	11.993

Table 83: Mean results of receptive and expressive language assessments.

The mean scores for the assessments of receptive and expressive language are presented in Table 79, which also shows the range of the maximum and minimum standardised scores. The data present that the mean for both assessments is higher for the CYP with ELH than that calculated for those with MMHL and SPHL. What is important to note here is that the standard scores of CYP with MMHL are approximately commensurate with their age and comparable to the CYP with ELH, indicating that any differences identified within the

questionnaire and/or the interviews regarding their social emotional skills and their ability to be resilient cannot be attributed to language difficulties.

In order to explore whether performance on expressive and receptive vocabulary is related to degree of hearing loss, Analysis of Variance (ANOVA) was used to allow a comparison between the three groups of participants (ELH, MMHL and SPHL) to determine whether a relationship existed between them. The ANOVA tests if there is a level of significant statistical difference between the mean of two or more groups, in this study those with ELH, MMHL and SPHL. There was a statistically significant difference regarding receptive language standard scores between groups as determined by one-way ANOVA ( $F(2,80) = 21.77, p < .001$ ). A Tukey post hoc test revealed that the mean standard score for receptive language skills of hearing adolescents ( $M = 11.70, SD = 2.29$ ) was significantly different than the adolescents with MMHL ( $M = 99.66, SD = 15.25$ ) and the adolescents with SPHL ( $M = 86.33, SDE = 14.31$ ).

There was also a statistically significant difference regarding expressive language standard scores between groups as determined by one-way ANOVA ( $F(2,80) = 26.59, p < .001$ ). A Tukey post hoc test revealed that the mean standard score for expressive language skills of hearing adolescents ( $M = 108.77, SD = 10.49$ ) was significantly different from the adolescents with MMHL ( $M = 98.03, SD = 12.53$ ) and those with SPHL ( $M = 85.46, SD = 11.99$ ).

## **5.5 Summary and Conclusion**

The questions devised for this study have been considered individually to look for statistical relationships between level of HL and the statement being presented to the CYP. Each question or statement presented has been discussed previously; however, the researcher has collated the key questions in two tables. The first (Table 80) will consider questions that demonstrated a statistical relationship between the two variables using chi-square, confirming there was a relationship between HL and the statement. The second table will present the questions where the CYP with MMHL specifically identified that they found the focus of the question challenging. In this table, the questions may have shown no statistical relationship between the variables, but the group, MMHL, indicated that the focus was a perceived area of difficulty.

Table 84, demonstrates the questions/statements that CYP with any degree of HL faced difficulties compared to those with ELH.

Question / statement number	Question / statement
<b>Social Support</b>	
<b>24</b>	I talk to family; parents/guardians, brothers, sisters, auntie, uncle about things that happen in my life
<b>25</b>	I enjoy holidays and activities with my family
<b>31</b>	I am happy for my friends and family to help me
<b>Sense of humour</b>	
<b>33</b>	I don't mind if family / friends laugh at me or have a joke at my expense
<b>Self-belief and self-esteem</b>	
<b>37</b>	I believe I am a special person with unique skills
<b>38</b>	I am proud of myself of the skills I have and things I have learnt.
<b>40</b>	I am confident about my appearance
<b>41</b>	I don't compare myself to other people
<b>43</b>	I am not concerned of what others think of me
<b>45</b>	I do not believe other people are better than me
<b>Communication Skills</b>	
<b>53</b>	I can maintain a conversation with people
<b>56</b>	I am friendly and comfortable with new people
<b>57</b>	It doesn't bother me to talk in front of a group of people.

Table 84: Questions/statements from the questionnaire that CYP with any degree of HL faced difficulties with compared to those with ELH.

To summarise, the questions and statements the CYP with any degree of HL found difficult to agree with involved engaging with family and friends when help was required and laughing

at their own mistakes. The CYP with HL found the statements in the section relating to self-belief and self-esteem challenging, including understanding that everyone is special, with individual skills and attributes. It appeared from the responses that CYP with HL judged themselves against other people and did not think that they were as good as them. The section relating to communication skills highlighted that this group of CYP found maintaining conversations difficult as well as communicating with unfamiliar people and in front of groups.

Table 85, presents the questions/statements that the CYP with MMHL specifically found challenging. Some of the questions are similar to the previous table: within this group, CYP with MMHL experienced greater difficulty compared to those with ELH and those with SPHL.

Question / statement number	Question / statement
<b>Optimism</b>	
<b>1</b>	Introduce myself to new people,
<b>6</b>	I can tell people about my hearing loss and my HA or other equipment I use.
<b>Attitude to Life</b>	
<b>8</b>	I think of new things to do eg learning a new skill such as a language or by joining a club
<b>Emotional Awareness</b>	
<b>10</b>	I know the things that make me happy
<b>13</b>	I can tell family and friends things that worry me
<b>Control of self</b>	
<b>20</b>	I can lead a team or group of friends to complete a task.
<b>23</b>	I usually compete homework tasks on time.

<b>Social Support</b>	
<b>28</b>	I have a large group of friends
<b>30</b>	I can think of things myself to help a friend or my family
<b>Self-belief and self-esteem</b>	
<b>37</b>	I believe I am a special person with unique skills
<b>40</b>	I am confident about my appearance
<b>44</b>	I am not hurt by the opinions and comments of others
<b>46</b>	I am not embarrassed by the actions of others such as my family, friends, brothers/sisters.
<b>Communication Skills</b>	
<b>49</b>	I can start a new conversation
<b>53</b>	I can maintain a conversation with people
<b>54</b>	I can end a conversation without appearing rude
<b>55</b>	I can ask for help when I don't know something or if I didn't hear something and need help
<b>56</b>	I am friendly and comfortable with new people
<b>57</b>	It doesn't bother me to talk in front of a group of people.

Table 85: Questions / statements from the questionnaire that the CYP with MMHL specifically found challenging.

Table 85, demonstrates that question 6 and question 40 show the CYP with MMHL were not comfortable with their appearance or talking about their HL. The concept of self-belief and understanding that everyone has a unique set of skills, was difficult for this group, as they compared themselves to other people and were hurt by comments others made. The section relating to language skills was also highlighted as an area of challenge for some within the MMHL group, from initiating the conversation to maintaining it and knowing how to end it politely.

## **Chapter 6: Phase 3 – Interview data**

### **6.1 Introduction**

In the previous chapter the quantitative data were analysed and the findings presented. The results were presented in Chapter 5 and the key themes that emerged as areas of concern for the CYP with MMHL were:

- Explaining their HL and audiological equipment used.
- Organisational skills such as planning homework tasks, completing work on time, leading a team.
- Communication skills, such as starting and maintaining conversations.

As discussed in the Methodology Chapter (Chapter 3, see 3.7), the researcher interviewed CYP with MMHL to drill down into the answers given to understand why they presented such replies.

## **6.2 Participants**

The CYP invited to participate in the interviews were selected through purposive sampling as detailed in the Methodology Chapter (Chapter3). Nine CYP with MMHL and 11-15 years of age were selected to take part in the interviews.

There were specific characteristics and features that made each participant different such as gender, level of HL and amplification equipment used as well as ALD. To protect the identity of the participants, pseudonyms were used. Table 86 presents a summary of the CYP who participated in the interviews and demonstrates the heterogeneous nature of the CYP who participated in the interviews.



<b>Name</b>	<b>Age In years</b>	<b>Male</b>	<b>Female</b>	<b>Mild Hearing loss</b>	<b>Moderate Hearing loss</b>	<b>Mild / Moderate</b>	<b>Bilateral HL</b>	<b>Unilateral HL</b>	<b>Hearing Aid (HA)</b>	<b>Bone Anchored Hearing Aid (BAHA)</b>	<b>Radio Aid (RA)</b>
<b>Thomas</b>	11								(2)		<b>Not used</b>
<b>Andrew</b>	12								(2)		
<b>Robert</b>	15								(2 – 1 <i>worn</i> )		
<b>Matthew</b>	13										
<b>William</b>	13										<b>Not used</b>
<b>John</b>	15								(2 – 1 <i>worn</i> )		
<b>Mary</b>	13									(1)	
<b>Daisy</b>	15								(2)		
<b>Anna</b>	14								(2)		

Table 86: Interview participants HL and audiological equipment used.

### 6.3 Interview themes and subthemes

The data from the four themes will be discussed and the subthemes will be presented with illustrative quotes from individual participants (Table 87). The interviews aimed to investigate the views of the CYP and how or why they express their opinions. In the next section, their comments have been recorded as presented during the interviews, therefore any language or grammatical errors have not been corrected.

Identified Themes	Subthemes
1. HL / deafness	<ul style="list-style-type: none"><li>• Aspirations for the future</li><li>• Personal support and encouragement</li><li>• Sharing their HL with prospective employers</li><li>• Understanding their HL</li><li>• Hearing and Assistive Technology</li><li>• Teacher of the Deaf support</li><li>• School and class teacher support</li></ul>
2. Language and Communication	<ul style="list-style-type: none"><li>• Initiating and maintaining conversations</li></ul>
3. Emotional Understanding and discussing concerns	<ul style="list-style-type: none"><li>• Emotions and Emotional Literacy</li><li>• Discussing emotions</li><li>• Support for CYP with MMHL</li></ul>

4. Social Skills	<ul style="list-style-type: none"> <li>• Friendships</li> <li>• Explaining HL to their friends</li> <li>• Support to develop friendships</li> <li>• Personal independence skills and opportunities for independence</li> <li>• Problem solving</li> <li>• Support to develop problem solving skills with CYP with MMHL</li> <li>• Leading a Team and Self confidence</li> </ul>
5. Resilience	<ul style="list-style-type: none"> <li>• Definition of resilience</li> <li>• Resilience skills and presenting as a resilient person</li> <li>• Interest in the research</li> </ul>

Table 87: Themes and subthemes from the analysis of the interviews with CYP with MMHL.

The findings are presented under the four identified themes and the subthemes that emerged during the analysis of the data. Discussion of each theme begins with an introduction and presents the views of the CYP with MMHL by incorporating quotes from their interviews.

## 6.4 HL/deafness

At the beginning of the interviews the CYP were asked to reflect on their aspirations for their future and how they felt their HL would affect their career choice. They were asked to explain their understanding of their HL, the equipment they used and their feelings about sharing information associated with their HL with other people: friends, prospective employers et al. Each pupil discussed the support they received from a ToD and their school.

### 6.4.1 Aspirations

The CYP were asked if they had considered a job or career path after education.



Figure 8: Word cloud, identified aspirations of the CYP with MMHL

The word cloud (Figure 6) presents a mix of roles including: computer programmer, law, police or law enforcement and hairdresser. From the nine CYP interviewed, law or law enforcement or a role involving computers such as computer programmer were the most

referenced. eight of the nine CYP discussed possible career choices; three out of seven identified a law or law enforcement role and three identified a career associated with computers or information technology (IT). However, one of the CYP who identified computers, or IT, stated they had also considered being an architect, so was a little undecided. The CYP were then asked if they had considered how this role was going to be achieved considering their plans in relation to qualifications they would need, as well as whether they intended to study at college or university. They were also asked why they had chosen the role or were thinking of a particular career.

Daisy was aware of the steps potentially required to achieve her chosen career path in hairdressing. She had already completed a work experience placement and was aware that further study was required. She understood what was needed to develop a career in hairdressing and had made a plan to enable her to achieve this.

***Daisy:*** (Year 11. 15 years old. Bilateral moderate HL wears two BTE)

*"I put hairdresser .....I did work experience at (NAME) hairdressers in (LOCATION) last week.....you have to go to college to learn how to do that..."*

Robert had considered a broad career path, although he was not sure of the exact role. He appeared to require some further support and guidance regarding what jobs could be

available and would match his skill set. Robert was appropriately drawing on his strengths and interests to guide his ideas which was important. Robert was in Year 10, 15 years of age and therefore had a further year to apply for college courses or consider A level options.

**Robert:** *(Year 10. 15 years old. Bilateral mild HL has two BTE, but only wears one).*

*'...I'd like to go into law or law enforcement.... I like sticking up for people and I'm quite protective person...'*

#### **6.4.2 Support and Encouragement**

The following quotes highlight that the CYP sought ideas and information from people around them when considering a potential career or job role. The views of the CYP participating in the interviews demonstrated that support was both positive and negative in relation to how those around them felt their HL would affect their career prospects.

Matthew's mother appeared to have low expectations of what could be achieved by her son because of his HL. This view was influencing Matthew's own views and aspirations in that he believed that his HL would prevent from attending University and subsequently limit the jobs available to him. Matthew was beginning to form strong views about what would be possible.

**Matthew:** (Year 8. 13 years old. Bilateral mild HL; no HA prescribed although expected following next audiological appointment)

*"I have had lots of different ideas ...well my mum....and some people say it is no point going to University especially if you are deaf.....My Mum said it will be hard for me to get a job anyway because I am deaf....."*

Both Thomas and William appeared to have ruled out certain careers because of their HL or because they wore HAs. They had not highlighted a reason or a person who had suggested that a specific job or career path may not be possible but had lowered their own aspirations and laid the blame directly with their HL and HA. Thomas has just transferred to secondary school and was 11 years of age, yet he had already ruled out pursuing certain jobs.

**Thomas:** (Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)

*"I would like to be a Police Office with helicopters ... but I don't think because of my ears I would be able to do that so may be a Paramedic or Physio .....hmmm... I don't think I can do these jobs because of my hearing, but I think I could do it and I would like to do them, but .....you know with my hearing loss you just can't ..."*

**William:** *(Year 9. 13 years old. Bilateral mild/moderate HL; has two bone anchored hearing aids (BAHA). Has RA, but has not used it in secondary school)*

*"...well I have never been a big dreamer...I've never been like that you know, I wanna be an astronaut, I wanna be a DOCTOR ...I've never been like that....I want a little challenge for me...PAUSE.....I think what can you do with these?" (points to HA)*

The final question related to aspirations, which allowed for a brief conversation before the task ended. This was a constructive conclusion which initiated a discussion and allowed the researcher to thank the participants.

The question relating to career aspirations was the first asked at the start of the interviews, the rationale being to generate the conversation from a known starting point as the CYP had presented an idea at the conclusion of their questionnaire. At this point, there had been no discussion in relation to HL and how this could or would affect their career choices. The views expressed by the CYP were spontaneous and the researcher did not ask leading questions. When the CYP highlighted HL as an issue to a chosen career or cited the views of other people, the researcher asked them to expand their responses.



Analysis of the questionnaires showed that four out of the nine students had not identified a career or possible job role they would like to pursue. During the interviews, however, all nine CYP discussed possible roles and their own feelings or those of family, friends, and teachers about their initial career aspirations. Mary was the only young person who did not specify a potential career path: she presented with a variety of skills and attributes within sport, music, and creative arts, but had not contemplated a certain job or role. Some of the other students had identified a career path, but they were already judging their possibilities and the likelihood of achieving their goal. The CYP saw their HL as the factor that would hold them back and prevent them from pursuing their chosen career. It was interesting that some CYP discussed misconceptions of parents in believing their HL would prevent them from going on to college or employment in particular jobs.

The interviews presented information relating to career aspirations and demonstrated that the CYP at this stage in their education and life were considering goals and appeared to set high personal ambitions. The CYP were holding onto their views and hopes at this point, even though some parents were presenting an alternative view that may or may not be achieved due to their HL.

#### **6.4.3 Hearing and Assistive Technology**

The participants used different amplification equipment, depending upon their type and level of HL. Some had not been prescribed HA, others were provided with one or two behind

the ear hearing aids (BTE), the commonly recognised type of hearing aid. Two had a bone anchored hearing aid (BAHA), fixed via an abutment to the mastoid bone behind the ear. Two had not been prescribed HA, but it had been discussed as a possibility to support their hearing in specific situations.

Some also had assistive listening devices such as RA that enhance access to the teacher's voice. The identified speaker (usually the teacher) wears a transmitter, and the young person has a receiver attached to their hearing aid. The system gives the speaker's voice an advantage over background noise (NDCS, 2005).

The CYP were asked whether they could describe and explain to another person, such as a teacher or other pupils, why they have a HA or need to use an assistive listening device and how the different devices help them.

Thomas was comfortable with people seeing his HA and was happy to show them to people if asked about them. The quote from Thomas demonstrated he was unsure how to describe the level of HL to others and, although happy and confident to wear a HA and use a RA he did not know how to explain why it was important for him and how they worked. As a secondary school pupil, this task would be required as he would need to ask several teachers each day to wear the RA transmitter. There could be new or temporary teachers during the school year to whom he would have to explain the function of the equipment and how to wear it correctly, otherwise it would be of no benefit.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)*

*"...I'm not sure, .....I can show them the HA, but I don't know what else to say to them .... I don't know what to say about my HL, but know it make things louder ...."*

Attitudes towards the HA and assistive technology highlighted that the CYP saw and experienced the benefit of using the equipment, but six of the seven only used it in school. They did so solely because their parents or teachers had told them that they had to but, if given a personal choice, they would try to cope without.

Anna disliked the HAs and would immediately remove them as soon she finished her last lesson in school. Many of the CYP who participated in the interviews also described that it was often the first thing they did as they left school, even before getting on the school bus, and that they would not wear them again until the next day. Three of the CYP explicitly said that they would definitely not wear them outside of school at all. When asked to explain, the key reason given related to being 'different' from their friends. A feeling of people judging them as a person was also a major factor.

**Anna:** (Year 9. 14 years old. Bilateral moderate HL has two BTE and RA which she does not use)

*"....when I get home , yeah the first thing I do is take them out."(pointing to the HA) ... people are gonna judge me..... when I'm out ... if they see me with these (points to HA) I feel like there gonna judge me. They gonna see them and not me ..."*

All seven of the CYP who participated in the interviews and who had been provided with HA stated that they knew they benefitted from wearing them, but this was not a strong enough reason to wear them in social situations or when with peers. The specific concern and dislike of the equipment related to being judged negatively due to needing to use HAs.

Daisy identified that outside of school, such as evenings, weekends, and holidays, she did not wear her HA. Despite having made this decision, she suggested that she would be open to having further discussions about why she had made the choice and possible options in the future.

**Daisy :** (Year 11. 15 years old. Bilateral moderate HL wears two BTE)

*"..... I don't think a teacher has asked me about my HA before or why I don't like them .....I liked telling you...it was good."*

The provision of information about a child or young person's HL and the equipment they use is often the responsibility of a ToD (Simpson (2017)). It was important to investigate the level of support the CYP considered they received from a ToD within the interviews, but this is also discussed later within this chapter (see 5.4.6)

#### **6.4.4 Explaining their Deafness to an Employer**

When asked whether they would inform a future employer of their HL, all nine CYP were unsure. Daisy was initially confident about telling an employer but felt that, rather than it being her responsibility, it could be a task fulfilled by her parents or teacher on her behalf. Some CYP were keen to not wear HAs and did not feel people needed to know about their HL. This related to the perceived negativity they believed people would have about them and they did not want to be judged or seen just as a person with HL or who wore HAs. Daisy was comfortable with potential work colleagues and an employer knowing about her HL, but it was noted that it was her mother rather than Daisy who had presented the information prior to her work experience placement: at 15 years of age, she had not been engaged in the process of disclosure.

**Daisy:** *(Year 11. 15 years old. Bilateral moderate HL wears two BTE)*

*“Yeah, I wouldn’t mind telling them....for my work experience they already knew...because my Mum and Miss (SENCo) told them...”*

During the interview and discussion, the researcher presented information to the CYP highlighting that companies or an employer are required under employment law and Equality Act (2010) to make reasonable adjustments. The adjustments or adaptations would include supporting an employee who had HL. In order to do this, however, an employer would need to know about the individual’s needs. When asked if the CYP knew of this legislation or the making of reasonable adjustments, eight out of the nine CYP said they were not aware of it. Only one young person, John, was partly aware of the provision due to a friend who was slightly older and had been able to access note takers etc when he applied for a college course.

The participants were encouraged to reflect on this legislation and to discuss the implications for them carrying out their role effectively, efficiently and safely if their employer did not know about their HL. Only two of the nine CYP remained adamant that they did not want their employer to know about their HL as they had no intention of wearing their HAs once they left school. The other seven participants were not keen to wear amplification but were quite happy if their employers knew that they had HL and may wear

HAs. Daisy had earlier identified that her Mum and the school SENCo had intervened informing relevant people on her behalf before she started her work experience placement, but she had not been involved.

The next question asked, 'how would you describe your HL to an employer?' When asked why she had not been part of the information sharing, Daisy explained "...I don't really get it (HL), so I can't really tell people..." This view was expressed by all nine students; it was investigated further and is discussed in the next subtheme.

#### **6.4.5 Understanding their hearing loss**

The data showed that seven of the nine CYP appeared happy for an employer to know about their HL as they considered it important and that it would help them be successful in a specific job or role. However, they suggested that their lack of personal understanding of their hearing levels prevented them from sharing it with others.

The data further revealed that the CYP remembered being presented with an explanation of their HL, the associated terminology and equipment provided. This information had been provided when they were younger but, as young adults, they were unsure about the details or how they could explain why a HA or RA benefits them.

Daisy and Robert were both 15 years of age and were planning the next step in their education or considering work and a career at the end of Year 11. Both were prescribed HAs but did not have a clear understanding of their HL and how their HA functioned. Robert mixed up terminology that would confuse someone he was trying to explain his HL to as he described that he had a 'mild understanding'. Robert had a bilateral mild HL, but he informed the researcher he had a 'mild loss', and he had a 'mild understanding' of what that meant. When asked to discuss this further Robert found this difficult and said he 'didn't know just that it is a mild loss' which meant he couldn't hear things. The information Robert provided could be interpreted as that, due to his HL he experienced mild (slight) difficulty in understanding language. The confusion of terminology could mean he would receive inappropriate support in college or employment such as over-simplified instructions or materials rather than simple strategies such as addressing him face-on in appropriate lighting.

Daisy also presented an unclear description of her HL that could mean she may not receive appropriate support in a future work opportunity or college placement. She identified that she was, deaf in one ear, but she could hear in the other as it '... isn't as deaf', this suggested that she could not hear at all in one ear and had limited hearing in the other. In fact, Daisy had a bilateral moderate HL and wore two BTE.



**Daisy :** *(Year 11. 15 years old. Bilateral moderate HL wears two BTE)*

*“Errrm ....well.....I’m deaf in one ear and I can hear in the other, but it isn’t as bad...it isn’t as deaf...”*

**Robert:** *(Year 10. 15 years old. Bilateral mild HL has two BTE, but only wears one).*

*“Mild understanding.....yes only a mild understanding.....I don’t really get it!”*

Andrew was in Year 7, therefore younger than Robert and Daisy; although he was also unclear how to explain his HL, he had only recently transferred to secondary school from primary. There could be opportunities for Andrew to gain greater understanding of his HL whilst developing personal advocacy skills as part of the secondary curriculum during the following four years.

**Andrew:** *(Year 7. 12 years old. Bilateral moderate HL has two BTE and RA)*

*“... yeah it's a little loss it's not a big loss, but it is in both ears....  
yeah*

**Researcher:** *what do you tell people about your HL, how do you explain it?*

*Andrew: Well you know....I am not sure if I know everything, but I do know I have got this loss and it is in both ears and I wear hearing aids ...”*

Mary’s description of her HL was very different from those of Daisy, Robert and Andrew. She was able to provide an account of the family history, how they realised she could not hear and that, following several medical appointments and assessments, the HL and its cause were identified. Mary has a factual story of her HL mainly from the medical perspective and the appointments she attended, but during the interview she was aware that this did not necessarily help her explain the support she would like or appreciate from teachers, friends, or prospective employers. Mary still had at least three years within secondary school but was very aware that she needed self-advocacy skills to help her explain her HL and receive the right support.

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

*“Ok...my HL ....when I was about 7 or about that I realised I couldn’t hear in one ear....or I kept saying I can put my finger in this ear and I can’t hear you....so we went to the doctor and I was referred to .....(name) Children’s Hospital and they saw a Cholesteatoma in my ear .... So I had an operation to get it all out..... so it was all clear.”*

When asked, all of the nine interviewees were happy to inform teachers in school of their HL. However, they did not feel they had a clear understanding of its ramifications and could not present this independently in a succinct manner to others to enable specific support to be provided in the future if they were to disclose their HL. Seven stated that they remembered going through diagrams of the ear and various professionals had tried to describe their HL when they were younger, but they did not have a story to tell to explain their unique situation. It would seem the CYP's ability to share their story or to explain their individual HL was affected by a gap in their knowledge, rather than a feeling of confidence or a lack of willingness.

Thomas was aware that being able to present a personal narrative was important to help people understand his unique situation and how to support him. He also realised that if he understood more about his own hearing and the technology he used, he could support others in their personal development and knowledge.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)*

*" That's the problem ... ....I really like Miss (ToD)...she is so supportive, but I don't really get it, so I can't really tell people ....Last week I help this boy who is coming in September and he has HA and a radio aid and I could talk to him, but I don't know what to say about my HL....."*

#### 6.4.6 Teacher of the Deaf support

The ToD would support the learner to enable them to interpret and understand the results on their audiogram and to manage their equipment (Simpson (2017)). A question asked within the interviews related to how often the CYP worked with a ToD. It is important to clarify that the information provided was from the perspective of the CYP interviewed: it may not be the whole picture, as further, indirect support may be provided to the school.

Number of Support visits per academic year	Participants (%) N=9
A visit each half term (6 visits)	0
A visit each term (3 visits)	0
Annual visit	5
Year 7 and then Year 11	3
Unknown	1

Table 88: Number of support visits by ToD identified by the CYP in the study

The CYP reported that during their meetings, the ToD usually checked their equipment and asked whether they had any problems. They would then speak with the SENCo to discuss the pupil's progress in school.

The CYP all spoke positively about the ToD working with them and there were no concerns expressed if their identified ToD changed when they moved from primary school to secondary school. Within the interviews, all nine of the CYP reported that in their opinion they did not receive enough support and that they felt the visits were short.

The information presented by Mary indicated that she was concerned about how she would cope if there were any problems with her HA and or impact on her learning due to her HL over the next few years. Mary was in Year 8 and had another three years before she completed her GCSE's, but there was an anxiety already present. She suggested that it was important to discuss her views and feelings about her HL and technology, and the opportunity to talk to a specialist teacher would be of value.

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

*"Well this lady came in last year (Year 7) and she only comes in Year 7 and Year 11 .....I won't see her again! I think it would help me to talk about how it makes me feel and they may have some ideas, but I am not going to see them again until the end of Year 11.....what use is that? I will have finished my GCSE's by then so what help would that be?"*

Thomas reported that the visit by a ToD involved checking equipment: HA, RA etc, a discussion with school staff (SENCo and / or class teacher) regarding his progress and strategies.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has two BTE and a RA)*

*"Not often, just if it has gone wrong and they just come in for a general check up..."*

The CYP did state that the ToD always had a short discussion with them about any challenges or difficulties and they were given ideas to assist. Eight of the nine knew the level of support they received, with only one unaware of the level of ToD support to which they were entitled.

The next element of the interview focussed on the support from the school and the class teachers.

#### **6.4.7 School/Class Teacher support**

The CYP described positive support being provided upon transition from primary to secondary school. This often involved the ToD meeting with the SENC /ALNCo, who cascaded the information to all subject teachers to ensure a smooth transition within the first term of Year 7. All the CYP interviewed recollected the Year 6 to Year 7 transfer as a positive

experience; however, as they moved to new year groups and were taught by a different set of teachers, their experience was disparate.

Thomas presented a feeling of anxiety due to the lack of knowledge his teachers had in relation to his HL. He was concerned that teachers were forming an inaccurate picture of him, believing he was not listening. Thomas appeared keen to do well; as he was in Year 7 and therefore had only recently transferred to secondary school, he suggested he did not know how to approach the issue and felt overwhelmed. He identified that his only solution was to walk out of school.

**Thomas:** (Year 7 . 11 years old. Bilateral moderate HL and has two 2 BTE and RA)

*“Well my HL for me is.....sometimes it is like minor and sometimes it is really big because it fluctuates and sometimes in class they don’t realise .... And they ask why are you not listening? .....I am, but I just can’t hear .....it is so annoying because they think I am not listening .....sometimes it is so annoying ..sometimes I just want to walk out of class.....”*

Mary and Anna addressed the issue of good teaching practices to support pupils, but in their opinion the techniques were not being used or the teachers were not aware of them. Mary highlighted that when noise levels increased, the ability to hear the teacher was reduced

and, in addition to this, the teacher moving around the class made it difficult to gain support from lipreading.

Anna was in Year 9 and had been at secondary school for over two years but had decided to stop using the RA. She stated her reason as being that teachers had not used the equipment appropriately, which frustrated her.

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

*"....it depends on the class, because if you have a decent class and the teacher speaks loudly and the class isn't too loud it is ok... sometimes the teachers move around and I can't see them so that doesn't help..."*

**Anna:** *(Year 9. 14 years old. Bilateral moderate HL has two BTE and RA, but does not use it)*

*Researcher: Can I ask why you stopped using the radio aid..?*

*Anna: Well it got a bit too loud ... and teachers didn't turn them off so I got fed-up.....I always sat at the front anyway so it didn't make a difference....."*

The majority of support for CYP with MMHL within this research was provided by the school (SENCo/ALNCo, LSAs and/or class teachers) rather than a ToD. The support provided was



following visits from the ToD and training sessions for key staff during transition and flexible support would be provided by the school during the visits from specialist teachers.

Andrew was in Year 7 and had recently transferred to secondary school. He reported that staff lacked knowledge about his HA and how to support him with general day-to-day checks and maintenance. He had already received a school-based consequence (detention) for not completing homework and to avoid a second situation his impulsive reaction was to run away from the environment. Andrew's account suggested that the SENCo was unaware how to support his routine checks and maintenance. Andrew knew that when he started in Year 7 the SENCo had informed all staff of his HL via the computer system used within secondary schools.

**Andrew:** *(Year 7. 12 years old. Bilateral moderate HL has two BTE and RA)*

*".... in Registration they (HA) just broke.....I had these 2 bits in my hand, yeah.....I just ran away....I hid.....I ran out of school and I was so upset I sat by the cars ....I was crying because they were broken an' no one knows how to mend them.....I just didn't go in to lesson...Sir came .....I told him and he said I had to go into double Maths.....but I couldn't hear anything and If you don't do the work you get in to trouble....I have already had a Detention because I didn't do the homework, but I didn't hear what we had to do ...Sir (SEnCo) doesn't know how to fix it ..."*

Preparation for oral exams and class work was particularly demanding for some pupils due to their HL and speech production.

Daisy and John both enjoyed having conversations with people in smaller groups or in a 1:1 situation, but presenting in front of people caused anxiety. They did not feel prepared for the task and both said they were unable to hear other students prior to their presentation and so were unable to learn from their peers. They were self-conscious about their voice and speech, as they were aware that some words or sounds were not clear and were concerned about how this could affect their mark or how people would perceive them. The oral presentation formed part of the GCSE English exam, and this was a concern for both Daisy and John.

***Daisy :*** (Year 11. 15 years old. Bilateral moderate HL wears two BTE)

*“... I like to chat ..., but I really hate it in big groups .....I don't like standing in front of the class talking in front of everybody....we have to do it all the time and I hate it.....”*

***John :*** (Year 10. 15 years old. Bilateral moderate HL prescribed two BTE, currently only wearing one)

*“Well in English you have to speak in front of people ...I just don't like it.....I hate speaking at the front .....I can't hear people*

*behind me and I hate having a large audience .....when you are in a large group everybody stares at you and I hate it ....”*

Some participants identified that they had become self-conscious about the technology they used during the transition between primary and secondary school. They reported issues relating to image and self-perception as well as an ongoing need to explain to teachers why they used specific equipment or needed support. The frustrations experienced meant some had begun to reject the equipment and cope without. The cumulative effect of the challenges experienced, from the internal feelings about how they were perceived and how teachers in-class support/lack of support, could cause frustration.

Robert was aware his HA helped him, but was making decisions about using them in class due to the behaviour of teachers and peers.

**Robert:** *(Year 10. 15 years old. Bilateral mild HL has two BTE, but only wears 1).*

*“Some of my teachers scream and shout and it is so annoying when you have one of these in (points to hearing aid) then it really hurts. I think that is probably why I stopped wearing them really at one point. I know some kids are just stupid, but when the teacher shouts that is all I hear! “*

William and Mary described situations where they were keen to learn and listen to the information presented by the teacher, but felt the teachers were not aware of the specific

strategies they required to assist their learning. Repeating information is important for clarification; however, it appears the teachers were unaware why the pupil was doing this and became frustrated that they were asking several times. The teacher may have believed that the pupil was not listening.

**William:** *(Year 9. 13 years old. Bilateral MMHL, has two BAHAs and RA, but not used in secondary school)*

*Researcher: “.....when we were working together .....you asked me to repeat words if you didn’t hear them. I was really proud of you because that is the right thing to do. Are you happy to do that in class and are you confident to ask teachers to tell you information again....?”*

*William: “yeah...sometimes, but it depends on the teacher ...sometimes I don’t understand what they say or I just don’t hear ...sometimes I ask, but you know teachers don’t like you askin’.....”*

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

*“Sometimes I find it hard to keep listening so it helps to lipread ...sometimes it depends on the class, because if you have a decent class and the teacher speaks loudly, and the class isn’t*

*too loud it is ok... sometimes the teachers move around and I can't see them so that doesn't help..."*

All participants said their schools used seating plans requiring that pupils sit in specific areas in the classroom. This received mixed support from the CYP; some pupils were placed next to a noisy/disruptive peer, or their position meant that the teacher was in front of a window when addressing the class, so their face was in shadow and any potential benefit from lip reading was lost. The CYP were often away from friends who were their support network, and they also felt that as a compromise they would prefer to use assistive technology, HA and RA more consistently if they sat next to friends.

#### **6.4.8 Summary**

This first section focused on the CYP's perceptions of their own HL and deafness and considered the sub-themes Aspirations for the future; Personal support and encouragement; Discussing their HL with prospective employers; Understanding their HL; Hearing and Assistive Technology; ToD support, and School and class teacher support.

The participants had identified a job or career that they aspired to achieving; however, importantly, they were being influenced by family and friends who believed that their HL meant certain roles and careers would not be open to them.

The CYP did not understand their own HL and therefore found it difficult to explain this to other people, including prospective employers who would be able to make reasonable adjustments to their work environment.

Access to specialist teachers (ToDs) to support their knowledge and understanding of their HL and the equipment they used was limited according to the data gathered. Several had rejected their audiological equipment, believing this would help them 'fit in' with their peers and prevent other people judging them, even though they acknowledge the HA or RA was beneficial. Two of the four CYP who had RAs did not use them; two of the six prescribed Has decided only to wear one, and four of the six said they would not wear the equipment outside of school.

## **6.5 Communication Skills**

Language and communication skills are required for, and associated with, a range of tasks and interactions. In this section, the explicit theme of initiating conversation was identified as a particular challenge by several of the CYP interviewed, and data will be presented.

Within the curriculum, the pupils are required to present an oral piece of work as part of their English GCSE exam but they felt unprepared for this task. They all disliked the assignment, citing reasons relating to confidence, self-esteem and language skills when presenting in front of a group.

This section is not going to discuss this further but considers the responses of the CYP explicitly in relation to communication skills.

#### **6.5.1 Initiating a conversation**

The skill of being able to begin a conversation using pleasantries or an inconsequential remark is important (Ben-Shlomo and Sela, 2021). All the CYP interviewed were aware that language and communication skills such as introducing yourself, having conversations and asking questions were important as they develop into young adults. They had all completed the questionnaire prior to the interviews and the section Communication Skills addressed areas relating to the ability to start, maintain and end conversations with friends and new people. The quantitative data (4.4) identified several questions that the CYP with MMHL found more difficult and challenging compared to the results of the CYP with ELH and SPHL. The specific questions were:

Communication Skills	
<b>49</b>	I can start a new conversation
<b>53</b>	I can maintain a conversation with people
<b>54</b>	I can end a conversation without appearing rude
<b>55</b>	I can ask for help when I don't know something or if I didn't hear something
<b>56</b>	I am friendly and comfortable with new people
<b>57</b>	It doesn't bother me to talk in front of a group of people.

Table 89: Communication statements CYP with MMHL identified they found more challenging compared to their peers.

All those interviewed wanted to discuss this section further but found it difficult to explain what they found hard or how to improve their conversational skills. They were aware that there were skills that they should have but did not feel confident in, and the concern was how would they acquire these communication skills prior to leaving school.

Thomas was conscious that he relied on the other person to initiate the conversation; once a connection was established, he was confident to continue the interaction. He was reflecting on his skills and identified that he was a good communicator but lacked the social skills and etiquette relating to conversational skills.

**Thomas:** (Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)

*"I can't start a new conversation ....that is really hard, but I can have a conversation, like you asked me questions ..... And I like*



*to talk then, but I can't start a conversation that is really hard....  
I'm really friendly, but I don't do it first .....no.....I do talk for  
ever, but I can't do it first....."*

The other participants presented similar views that starting conversations was challenging. When the researcher highlighted that they had been discussing things confidently with them, several replied that this was because the researcher asked questions to start the conversation and that they had agreed to the interview, so it was a constructed event; it didn't feel challenging because they had completed the questionnaire with them in advance.

### **6.5.2 Summary**

Communication skills appear as threads through various elements of the interviews, such as how to explain their HL to family, friends, prospective employers, oral presentations as part of academic work or holding general and polite conversations. This group of CYP indicated that communication was a challenge for them, but identifying/articulating what exactly they found difficult and how to practise the skill to improve their communication was not something they were able to do without support.

## **6.6 Emotional understanding and discussing concerns**

A component of the researcher's definition of resilience was a competency in understanding emotions and being confident to share with other people concerns, worries or situations that led to a certain emotion. This understanding was described in the literature review (see 2.3.6) as emotional literacy.

This section will begin with the views of the CYP regarding their ability to understand emotions and situations that generated the feelings. They were asked if they shared their feelings and emotions with family or friends, both positive and negative, and whether they sought assistance from others to problem solve a situation. The third subsection was support for CYP with MMHL.

In the Introduction to this thesis (1.5.4) the researcher suggested that there were specific support interventions and/or professionals that support children and CYP with ELH and those with SPHL. This section discusses the support and interventions that are available to CYP with MMHL and if they felt they needed to develop specific support due to their HL to allow them to develop emotional skills and competencies.

### 6.6.1 Emotions and emotional literacy

The CYP were asked if they understood the personal effect of emotions by identifying things or feelings they had experienced in relation to a specific emotion: happiness, sadness, worry or nervousness. In response to the question, 'what makes you happy?' or 'when do you feel happy?', they primarily identified being with their family and/or friends but found it difficult to isolate or pinpoint specific achievements or situations. The researcher provided support scenarios to stimulate ideas such as, 'I was happy when I got an 'A' for my homework' or 'I was happy when I was laughing with my friends when we had a picnic or listened to music.' The support provided by the researcher enabled the discussion to develop, but the CYP still found it hard to identify particular situations or events to which they attributed a specific emotion.

The discussion relating to the positive emotions and things that made the CYP happy was limited. Anna presented one fun response and described how food made her happy but, as with the other interviewees, she was unable to identify a positive achievement that made her happy or an event that she could identify as a happy time or occasion.

**Anna:** *(Year 9. 14 years old. Bilateral moderate HL has 2 BTE and has a RA, but does not use it)*

*"Food....I love food and sweets and things that are not healthy."*

The opposing, or what could be perceived as negative feelings of sadness, worry or being nervous, were discussed with the CYP to see if they could identify a situation or event when they experienced that emotion. Because they struggled to correctly interpret these emotions or understand the concept that a situation or event could cause an emotion, the researcher presented an example scenario for each emotion discussed. These examples were feeling sad, ('I was sad when my best friend moved to a new school because I couldn't see her anymore'); being angry ('I felt angry when my little sister took my favourite jumper without asking') and worry ('I was worried that I would be late for school this morning'). The examples were used to assist the CYP by allowing them to reflect on personal situations when they had experienced the named emotions.

Mary highlighted that she worried about a music exam and the need and desire to perform well created anxiety and stress. This knock-on feeling prevented her from practising. She was not celebrating the positive achievement of learning to play an instrument and the addition to her skill set, but rather thinking of what could happen if she did not attain a specific grade.

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

**Researcher:** *"....what sort of things worry you? Do you get worried?"*

*Mary: "Yeah I worry and I get stressed about my exams...if I get high marks or not ..I get stressed about exams , 'cos when I had a violin exam I got stressed so didn't practise ...."*

Anna had made the decision not to wear her HA; however, the worry was again being transferred into a stress and anxiety over something that may happen as a consequence. In a similar situation to Mary, Anna was unable to enjoy the event of being out with her friends because she was considering a potential scenario that may or may not happen due to not wearing her HA.

**Anna:** *(Year 9. 14 years old. Bilateral moderate HL has two BTE and has a RA, but does not use it)*

*Researcher: "...what sort of things worry you?"*

*Anna: Getting killed....or run over, 'cos sometimes I'm on my phone, but sometimes I can't hear ....when I am with my friends I don't wear my HA and if I don't see the green man or its not working ...."*

Robert identified that as a result of a couple of incidents when his HA was broken or the batteries had gone flat, he became anxious and worried that the same situation could occur again. Robert is in Year 10, 15 years of age, and reported that if the situation arose again, he believed that he or staff in school would be able to problem-solve to correct the fault as he would, '...have to go the whole day without hearing...'

**Robert:** *(Year 10. 15 years old. Bilateral mild HL has two BTE, but only wears one).*

*Researcher: "...are there any things that you worry about..?.*

*Robert: "... there have been a couple times when my hearing aid has just stopped working when I'm in the middle of the day. Sometimes I have to go the whole day without hearing, I can do that, but it is just the fact that when people come to talk to me, and I have to constantly say 'what' or 'ah'..... I've just mastered this over the years. I just nod my head and pretend that I know what they are saying and understand."*

John's approach demonstrated that he was trying to understand his own emotions and use the feeling of being worried prior to an exam as inspiration to spur himself on.

**John :** *(Year 10. 15 years old. Bilateral moderate HL prescribed two BTE, currently only wearing one)*

*"I try not to worry, I think....I get nervous, but not worried.....I would worry before an assessment"*

John appeared to be developing strategies to acknowledge the emotion and to use it to his advantage, a stage of emotional control that Mary, Anna and Robert did not appear to have achieved. These three allowed the feelings of worry and anxiety to be experienced even

though the situation was not present and might never present itself: their anxiety and stress was based on a historical situation or hypothetical event.

#### **6.6.2 Discussing emotions**

The researcher investigated how the CYP had processed the feelings they were experiencing and whether they used their support networks to acknowledge an emotion and develop a strategy to approach the situation now or in the future. In response to the questions addressing this aspect, the CYP presented a variety of reactions: some were able to reflect on how they dealt with situations and others presented scenarios demonstrating that they hoped by ignoring something it would go away.

Matthew developed a strategy of ignoring the scenario that was causing him to worry, however he felt he would only be able to do this for a limited time before the worry frustrated him and he became angry. It seemed that not being able to talk about the situation and seek help increased Matthew's anger and his exit plan without any other solution is to walk out of school.

**Matthew:** *(Year 8. 13 years old. Bilateral mild HL no HA prescribed although expected following next audiological appointment)*

**Researcher:** *“How do you deal with those worries – what do you do?”*

**Matthew:** *“I ignore them ....I ignore them about 5 to 10 times and if they carry on I probably get really angry....it is a big problem about me...”*

**Researcher:** *Would it help to try to find different ways of dealing with the problem and to sort it out?*

**Matthew:** *Yeah....I get in really bad trouble...like, a couple of weeks ago I walked out of school because someone was pushing me around ...they pushed me around twice ...the first time I thought it was a one off, but the second time it wasn't so I was going to turn around and kick them .....I decided I would just walk out of school...”*

In comparison to Matthew's response to his emotion and situation, Daisy did share her issues and found that her friends had been supportive. Daisy's friends provided help with a situation she presented to them, and she had also developed some personal self-help and calming strategies such as exercise and taking her mind away from the problem.



***Daisy :*** *(Year 11. 15 years old. Bilateral moderate HL wears two BTE)*

*Researcher: “So what sort of things did you do to help you with that worry?”*

*Daisy: “Well I just try to take my mind off it and maybe go for a walk...”*

*Researcher: When you have a worry, or a problem would you share things with someone ...your friends or mum?*

*Daisy: Yeah, I’m really close to my friends ...they have really helped me, they know I have got a hearing loss and they are really good because they help me....If I can’t spell something they help me or if I don’t hear something they tell me what the homework is....*

The researcher considered that the CYP presented the role asked of family or friends as one of a ‘problem solver’ rather than seeking help to build confidence and capacity. In the example presented by Daisy, the worry or concern presented to her friends is related to schoolwork that is spelling a word or not hearing homework. The solution presented by her friends was to help her spell the word rather than show her how to use the dictionary or locate the word in a textbook. Daisy copied the homework task from a friend rather than asking the teacher to repeat the instruction.

The CYP who participated in the interviews found it difficult to identify the emotion they had experienced correctly as can be seen by the scenarios presented by Mary, Anna, Matthew and Daisy. The examples they gave and the discussions they may have had with family and friends do not allow the people in their support networks to provide them with strategies. The CYP with the MMHL appear to have wanted their support networks to remove the stress and anxiety, rather than encouraging them to develop their own problem-solving strategies.

### **6.6.3 Support for CYP with MMHL**

In response to the questions relating to what support the CYP would like to help them understand and deal with emotions and situations, they unanimously agreed that they would value additional support. As well as knowing how to discuss their feelings to seek help and to develop strategies, the CYP felt these skills would enable them to become confident adults.

The responses provided by Anna, Robert, John and Daisy indicate that they have enjoyed and valued the opportunity during the interview to discuss their emotions. Daisy identified that initially the thought of participating in an interview was daunting, but she gained from discussing specific situations and scenarios and was able to reflect on her own emotions and problems. The group indicated that the opportunity to understand the emotions they were

experiencing in certain situations and the advice offered by friends and family and the researcher as a QToD, was useful.

**Daisy :** *(Year 11. 15 years old. Bilateral moderate HL wears two BTE)*

*" .....it was good to do it [interview], I was a bit nervous before because it sounds scary doesn't it ...interview, but actually it was good fun and I liked talking about things that would help me and you said it would help your work with other deaf kids....."*

**John :** *(Year 10. 15 years old. Bilateral moderate HL prescribed two BTE, currently only wearing one)*

*"I don't mind people giving me ideas, I don't mind really because it does help if people give you ideas and help you think about things..."*

**Robert:** *(Year 10. 15 years old. Bilateral mild HL has two BTE, but only wears one).*

*".. I have liked talking about it [HL] and it has made me think."*

**Anna:** *(Year 9. 14 years old. Bilateral moderate HL has two BTE and has a RA, but does not use it)*

**Researcher:** *“What sort of things would help children and young people learn social skills or emotional skills or resilience?”*

**Anna:** *“... some people may not want to talk, but they could write it down...you gave me that quiz [problem solving scenarios/vignettes] yeah and that was good cos it helps you think. You could talk about stuff that was worry you and if you didn’t get stuff ...”*

#### **6.6.4 Summary**

This section focused on emotional skills and the CYP presented that they found this area challenging. Identifying the emotion experienced in a situation or event was difficult and some therefore found sharing concerns with family or friends difficult as they had not understood the situation individually. There were some CYP who had sought assistance, but whether it was the way it was requested or the reaction of family and friends, solutions were provided rather than developed with the CYP with MMHL themselves.

Vignettes and examples of situations when a person may experience a specific emotion were used and related to support. Some of the CYP interviewed felt this strategy was useful and provided them with ideas rather than solving the problem for them.

## **6.7 Social Skills**

As part of the questionnaire, the elements relating to the development of social skills that could be transferable from school to adult life were: friendships; leading a team; personal independence and opportunities for independence; problem solving and self-confidence. These are the sub-themes identified in this section of the data analysis.

### **6.7.1 Friendship**

During the interviews, the CYP discussed that being with their friends made them happy and that their friends and friendships were important to enable them to work successfully in school. It was a thought-provoking element of the research to investigate how the CYP made and developed their friendships. To previous questions, the respondents suggested they found it hard to initiate conversations, yet their friends and friendships were an important part of their life. They identified that they relied on their friends to help them in school, and they would speak to them when advice was required to solve a problem.

In response to the question, 'do you prefer to make friends using social media?' all nine CYP interviewed stated that they did not have a social media account and did not feel this would be a good way to make a friendship in the way they felt a friend was or should be.

The size of the friendship groups was discussed. The questionnaire asked if the CYP felt they had one or two close friends or a large friendship group. From the interviews, seven out of the nine CYP said they had a larger group of friends rather than one or two close friends;

however, two said they had a small group of friends. The interviews allowed for expansion of answers and for discussion of decisions in more depth, revealing that they all - even those who felt they were part of a larger friendship cohort - relied upon a small group of about two to three friends. Outside of the close friends, the CYP said they had peers who they knew but generally would not seek support or assistance from. The larger group gave the CYP a confidence that they were well liked, but they would not confide in them, as highlighted by Daisy:

*Daisy (Year 11. 15 years old. Bilateral moderate HL wears two BTE)*

*“ ....I’ve got four (friends).. I do have a group, but they are...well they are not close friends that I go out with.....I just know them and I like them....”*

All CYP interviewed reported that making and maintaining friendships was challenging.

Thomas discussed the challenges experienced in developing friendships and maintaining or repairing the relationship even following a disagreement. As individuals, people are free to develop their own views and opinions on various aspects of life such as work, politics, religion, exercise or foods they want to eat or not eat. To develop friendships that become close, people may discuss such issues to ascertain whether the other person has similar views. Thomas identified that it was hard instigating such discussions and if he had a

disagreement with someone or they had a different opinion to his, he was unsure how to repair the friendship or conversation.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has two BTE and RA)*

*"Well, I have friends, but sometimes it is hard because you don't know what they are thinking ....it can be hard with friends sometimes because you can get frustrated...what do you do when you argue ...it is just hard isn't it...?"*

Mary had a moderate HL and attended a mainstream school as opposed to a HIRB. Mary's friendship group comprised CYP of her own age, but they did not have an identified HL. Mary said that her friends were generally supportive and helpful, especially within school, but she felt that as they did not have HL they were unable to empathise with her everyday challenges such as, missing sections of conversations or the end of jokes. Mary valued her friends and stated they would repeat things to help her, but this became laborious, and they gave up or forgot. Socially, she missed sections of conversations and her friends would repeat information; however, there were times when their replies frustrated her as the pace of social conversations were quick with several interactions.

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

**Researcher:** *“you were telling me about your friends....you told me that you miss or don’t hear your friends’ conversations ..do you ask your friends to repeat things?”*

**Mary:** *“Yeah, normally they are pretty good, but they do get fed-up ....the most annoying one is ‘it doesn’t matter’ and then they walk off and .....you know it does matter! I don’t know what they are telling me .... I really hate it, because it does matter I don’t know the joke or the thing they are talking about, but I don’t ask anymore....”*

The researcher was interested in knowing whether the CYP had discussed their HL with their friends or explained why they need to have information repeated as Mary suggested.

### **6.7.2 Explaining hearing loss to friends**

The earlier conversation around the CYP’s understanding of their HL meant that, when discussing this as part of the interviews, all nine CYP said they did not endeavour to explain their HL to their friends. There was an assumption that their friends being able to see the hearing aid negated the need to add or provide further explanation, as highlighted by Daisy:



***Daisy :*** *(Year 11. 15 years old. Bilateral moderate HL wears two BTE)*

*Daisy: “ I have known two of them [friends] since Year 2, the others [friends] were since Year 7...”*

*Researcher: What have you told them about your HL?*

*Daisy: Well they can see my hearing aid and (Name) has known me since Year 2, about when we were five years old (approximately ten years ago) so she has known (me) for ages .. the others know and they don’t mind.....”*

In asking whether the CYP had told their friends about their HL, the researcher aimed to investigate how confident the CYP were in sharing information about themselves with peers who could understand and assist them if required. Daisy assumed that, as her friends had known her for approximately ten years and because the HA was visible, she may not need to say anything else.

Similarly, Thomas also suggested that because his friends had known him for a period of time and could see his HA he may not need to explain things further. He also presented the idea that as one of his friends has a visual impairment, they might empathise with him because of the challenges he may experience.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)*

**Researcher:** *"...have you explained your HL to your friends, have they ever asked questions?"*

**Thomas:** *"...some of them ....some of my friends have ....some have sight problems so they can kind of understand.... some of my friends just say 'what are you on about?' Most of them understand ...I think..... we've been friends since PAUSE we were little."*

In a previous subsection (5.7.1) Mary highlighted problems she experienced in relation to missing sections of a sentence or part of a joke and being told 'it doesn't matter'. She had previously (5.4.5) demonstrated some understanding of her HL that would be possible to share with her friends. An explanation may have made tricky social situations easier, but Mary felt her HA caused a problem in building relationships and decided that she would prefer not to tell her friends anything about her HL or her HA.

**Researcher:** *"Have you told your friends at orchestra about your HL?"*

**Mary:** *"No....sometimes they tell me to take it off (points to BAHA) because it beeps when everybody is playing ..... they get annoyed .... I don't want to tell them...no I just don't want to say anything...."*

Friendships evolve over time and friends created in primary school can often change when a young person transfers to secondary school due to the development of their own interests and personal views and opinions. When asked why they had chosen not to tell their friends some identified that they didn't want to be defined by their HL, they wanted to fit in and having a HA made them different from their peers. The researcher was keen to ask about support the CYP received to enable them to develop friendships or skills to make friends.

### **6.7.3 Support to develop friendships**

The interviewees identified that providing clear and simple phrases that could be used to explain their HL would be valuable. A personal understanding and acceptance would allow them to share this with people they met, including new friends. The participants with a MMHL all attended mainstream schools and were often the only person with HL in their Year Group. Several of the CYP mentioned that they felt different from their friends and their HL sometimes presented a barrier because of this difference. Meeting other CYP with the same level of HL was suggested as a helpful strategy by one young person during his interview, and the researcher suggested it to four other interviewees who felt this would be a valuable opportunity and would help them learn communication and social interaction skills as a group and from each other. Thomas said he had not met another person with HL and supported the suggestion:

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has two BTE and RA)*

*"I've never met anyone with a hearing loss... it would be good I think. I like meeting new people."*

#### **6.7.4 Personal independence and opportunities for independence**

There were concerns presented from family and the CYP themselves regarding their ability to see friends outside of school. During the interviews they expressed their own anxieties about this, and some felt they were vulnerable when out in the community, especially when they had decided not to wear their HA. They knew this could put them at an increased danger as they could not hear environmental sounds or alarms. Some of the CYP also provided information about anxieties their families felt if they went out with their friends; again, this was because their HL put them at an increased risk.

The friendships that had been created were mainly within the school setting. Only two CYP took part in out of school clubs or activities such as sport or being part of an orchestra.

Mary and Thomas both discussed that they did not meet friends outside of school or engage in other activities because they believe that their parents consider such activities could be dangerous. The CYP hinted that their parents felt they were vulnerable due to their HL and

thus might discourage activities that could be associated with personal growth and friendship development.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)*

*"I don't see them outside of school because my Mum says I am not allowed out because of my hearing. I won't hear the cars and it would be dangerous, so I have to have someone with me to go out.....I have to have a friend to walk with me to my Dad's house and he does that for me so I am not on my own.....in my Primary school I had two friends [names] and I walked to Dad's I was a bit nervous, but I was ok.... I would like to get the bus on my own, but I would be nervous.... People say it is dangerous for me...my Mum is nervous for me because she doesn't know if I could do it, so she said she can pick me up from places....."*

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

*Researcher: "...do you go into town with your friends shopping?"*

*Mary: I use to do it ...we use to get the same bus we got home from school, but it got a bit dangerous ....the road was at the bottom, .... it is a really busy road and my parents wouldn't let me go because it is too busy ....."*

#### **6.7.5 Problem solving**

Vignettes were used to present scenarios to the CYP, encouraging them to reflect on situations such as how they would plan a particular event, deal with a situation or problem that arose or how they would negotiate their way through a scenario (Appendix 9.13)

The shielding from danger, or what were perceived as dangerous situations as identified in the previous section, meant that the CYP generally found it challenging to successfully complete these hypothetical activities. One vignette identified a scenario where a group of CYP were planning to get a train or bus to town to go shopping or for a social activity. They were asked whether they could plan the trip; then they were asked what they would do if they split up from their friends and arranged to meet at a certain time to travel home but their friends were not at the meeting point at the set time.

Andrew was 12 years old and had recently transferred to secondary school. He discussed the first element of the vignette and identified that he would struggle to know how to plan a bus or train journey independently. He suggested that if he went with friends, he would be able to copy and follow their lead and would feel confident to ask for help. Andrew appeared

willing to attempt this challenge but needed to be provided with an opportunity to learn the skills.

**Andrew:** *(Year 7. 12 years old. Bilateral moderate HL has two BTE and RA)*

*"I wouldn't want to do it on my own [Train or bus journey] ..... I don't think I know what to do? If you go with your mates you can copy them....and you are not on your own....you can ask for some help...."*

Mary is a year older than Andrew but, like him, she did not feel she had the skills to plan the trip and would leave it to her friends. The researcher developed the scenario and presented the challenge relating to losing contact with her friend. Mary began to think logically about what to do next and suggested that she would phone her friends, which would be a sensible and appropriate next step, but then she appeared to doubt her decision and felt she would panic. However, she then began to think that knowing other telephone numbers such as her friend's parents could mean she could phone them. Mary showed she does have potential to develop problem solving skills, but initially did not believe in her own abilities or may not have had previous opportunities to consider such scenarios.

**Mary:** *(Year 8. 13 years old. Unilateral moderate HL and has one BAHA)*

**Researcher:** *“Who would plan the trip?”*

**Mary:** *“My friends ....I’m terrible ....[NAME OF FRIEND] they would plan it, they are better at it than me....”*

**Researcher:** *“ ...my problem is you have lost your friends and the bus back is in 10 minutes and you can’t find them anywhere, what would you do?”*

**Mary:** *Call them..?*

**Researcher:** *Good, but they don’t pick up ...what would you do?*

**Mary:** *“ PAUSE... I don’t know, sorry... [PAUSE]...panic [WORRIED LOOK] ....yeah, panic really.....I don’t know ...I don’t have their parents’ number ...but if I did I would phone them.....I would try to get their parents’ numbers.....”*

#### **6.7.6 Support to develop problem solving skills**

In the previous section the CYP were presented with scenarios to see how they may react to various challenges. Thomas reflected on the tasks and felt the exercise was a good learning opportunity. Thomas was in Year 7 (12 years old) and was aware that his sister, who was two years older than him, could complete some tasks independently; these were skills that he



would like to develop, but realised he needed to learn how to approach various tasks.

Thomas also recognised that some curriculum subjects could provide an opportunity to discuss life skills, such as Personal, Social and Health Education (PSHE).

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)*

*'...it is good to think about problems and what you would do....like my sister is in Year 9 and she can get the bus and I would like to, but I think I need to learn how to do it....In our school we do social skills, everybody does social skills as part of PSHE [Personal, Social and Health Education].....It is really good because it is about adult life and how you shouldn't get stressed about things ..... I think it is good because it helps you for the future.'*

The CYP in the interview considered the vignettes (Appendix 13) and when presented with a scenario and given time to consider a plan, began to develop useful plans and ideas to help address the problems. They highlighted that they did not feel they had the skills but could learn them if provided with support and opportunities.

#### **6.7.7 Leading a team and self confidence**

A question was asked in relation to the vignette about planning an outing with friends, with more probing questions aimed at finding whether the CYP had been proactive in leading

their group of friends. Several stated that they did not feel they had the problem-solving or independence skills to organise a trip with friends such as a visit to the cinema or a short shopping jaunt. The CYP with MMHL identified that they would be happy if another member of the group took control of the event and organised it.

To develop the discussion, the researcher asked if the CYP had ever had experience of learning independence and problem-solving skills in a relatively safe environment within school by being asked to be a Team Leader or Team Captain. From the cohort of nine CYP with MMHL, only one reported that they had had such an opportunity but the experience was not viewed as successful because the team they had led lost the task/game and the individual felt their teammates had not listened to their instructions. On reflection, however, they said that they would be willing to have a further attempt at leading a team, but suggested that they needed to learn specific skills first.

William thought leading a team was something he could do and would like to have a go at, but he expressed concern relating to failing or losing and that if this happened, he would not be considered a good leader. During the discussion he talked himself out of the task suggesting that people would not follow his instructions which he would struggle to know how to present.

**William:** *(Year 9. 13 years old. Bilateral MMHL has two BAHAs and RA but not used in secondary school)*

**William:** *"No...No... I have never been a leader...I always think I could do it, but then I can't..."*

**Researcher:** *Why do you think you can't do it?*

**William:** *".. people have to look up you ... and they don't.."*

**Researcher:** *"If someone showed you how to do it would you give it a go?"*

**William:** *"Well I'd be too nervous ...what if I got somethin' wrong .....you know I can't hear everythin' ...I could get it wrong.....You have to lead people and tell them to go that way or that way or that way....what if it goes wrong.....if I got it wrong I'd be like....you are not a good leader"*

In this study, only one young person with MMHL had been asked to be a team leader and the task had not been perceived as successful. In the eyes of the young person, this meant they were not a good leader. Others had not volunteered or been provided with the opportunity but acknowledged that a person would need to learn specific skills, some of which were only gained by having the experience of leading a team.

## 6.8 Resilience

The final element of the interviews pulled together the theme of the research, the umbrella term resilience. The questionnaire devised as part of the quantitative element of the research and the interviews segment of the qualitative data drilled down into the data presented, encapsulated the researcher's definition of resilience and the component parts that are required to be a resilient person. This section considers the sub-themes of definition of resilience; resilience skills and presenting as a resilient person, and interest in the research.

### 6.8.1 Definition of resilience

The CYP were asked what they understood by the term 'resilience'.

Thomas described resilience as a thing to acquire, that is 'resilience means ...having resilience'. He is unable to precisely clarify what he means but does describe an ability to deal with specific situations especially negative events.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has two BTE and a RA)*

*"Resilience means like ....having resilience, you know having skills like not being scared ... not being nervous.... Yeah.... It*

*means like you have resilience you carry on if something goes wrong or if you are angry about something you carry on.”*

Mary highlighted that the word resilience was mentioned quite a lot in her school. Like Thomas, she struggled to identify the exact details about what she meant but appreciated that it relates to skills and qualities a person requires to work and deal with a variety of situations. She suggested that it was not about giving up when challenges became difficult, but it was about finding solutions.

***Mary:** (Year 8. 13 years old. Unilateral moderate HL and has one bone anchored hearing aid)*

*“...the teachers talk about it **A LOT**..... it is like being able to cope by yourself .....like doing things in any situation...”*

### **6.8.2 Resilience skills and presenting as a resilient person**

The CYP interviewed found defining resilience difficult, but considered that it was a quality that could be acquired. The terms ‘resilience’ and ‘resilience skills’ appeared to have been used in school a lot, so the researcher asked what qualities a person would need to show that they were a resilient person.

Anna identified resilience as a quality people gain as they mature, but she also associated it with getting things right.

**Anna:** *(Year 9. 14 years old. Bilateral moderate HL has two BTE and a RA, but does not use it)*

**Researcher:** *"Have you heard the word resilient?"*

**Anna:** *Yeah ...the teachers use it all the time!*

**Researcher:** *"what do you understand about the word resilient?"*

**Anna:** *.....I don't know....more mature?.....get stuff right?*

Anna suggests that if a person is resilient it implies success or achievement. The process of learning from personal mistakes or planning solutions to problems and challenges enables a person to develop skills, but the CYP discussed resilience as a reward they could potentially achieve when they have acquired several skills, talents or elements. They described achieving resilience or acquiring resilience skills as an aptitude people acquire as they mature or something that can be taught in a lesson. The CYP were therefore asked to try to measure how resilient they felt or to say how resilient they felt they were.

Thomas marked himself at 5 out of 10 because he felt that at home he gave up on things. The measure for this view was not numerical, it was Thomas' own personal assessment: he judged that he had some skills that enabled him to be resilient and was trying to factor in what environment or situation he felt he was most resilient. At home he did not feel he was able to work through problems such as an issue with his HA; instead, he was prepared to forget about the issue in order to reduce his anxiety and to prevent negative emotions. He felt he was encouraged to challenge himself in school, so if a task was hard then it was better to work a way through it. Thomas appeared to understand what resilience meant and, at 12 years of age, was aware he was still learning different skills.

**Thomas:** *(Year 7 . 11 years old. Bilateral moderate HL and has 2 BTE and RA)*

*"No....no I'm about a 5 (out of 10) ...because at home I just go upstairs until I feel better and in school it can be hard.....if my HA go I try to get my emotions out .....but they come out in the wrong way ....in school I try to keep going because the teachers say you have to finish your work ....."*

### **6.8.3 Summary and interest in the research**

This section presented the concepts of 'resilience' and 'being a resilient person' to the CYP with MMHL. 'Resilience' was a term the CYP had heard regularly in school, but they found it

challenging when asked to define it; however, initially, several suggested that it was an individual skill or quality.

Discussing resilience and being a resilient person allowed the CYP to explore various qualities that they felt encapsulated this concept; it was building up of skills over time through the experience of different tasks. The interviews and participating in the study had made them reflect and consider opportunities they have had or haven't had to learn skills to become resilient. Several highlighted the whole situation had been interesting to them and, although initially nervous about taking part, they hoped the data the researcher gathered would help other CYP with MMHL.

## **6.9 Conclusion and Summary**

The researcher found the interviews conducted and analysed during this stage of the research project to be interesting and thought-provoking. The CYP selected for the interviews were of different ages, genders and locations; however, some of their responses were comparable.

Initially, they were asked about their aspirations for the future and possible careers. During the ages of 11-15 CYP begin to consider potential careers or jobs, but the CYP in this study presented information about their choices that suggested they were forming views based upon comments of people around them such as their family and friends. It is important to



highlight that the views of parents and the teachers were not sought as part of this research project and therefore what was expressed as parental views is the impression of the CYP themselves and may not necessarily reflect their genuine opinions. Throughout the interviews, the CYP all appeared to present some negative attitudes relating to how some specific jobs may not be appropriate due to their HL and such comments appeared to be guiding how they viewed their own future career prospects. The interviews do not detail the context relating to the comments made by parents nor the age of the young person.

The role of peers and family and how they could influence the CYP with MMHL was a topic that permeated several themes and sub-themes and appeared to influence how the CYP acquired other social independence skills. The interviewees suggested that to protect them in some situations, their family may have dissuaded them from planning a day out or suggested that they should only go with a group of friends as they may have been vulnerable. This may have prevented the CYP from acquiring life skills and independence skills alongside their peers, such as planning a shopping trip. The CYP were considering what was required to be confident young adults and were observing peers and siblings developing such skills. Some did not feel they were being afforded the same opportunities as their hearing peers or siblings or believed they were being shielded to prevent them being put in danger. This area will be discussed in the next chapter.

Vignettes were written prior to the research to provide opportunities for the CYP to discuss specific skills and situations from a third person perspective. The aim was to reduce concern

about discussing their own feelings or views. The vignettes were a useful starting point, although all the CYP interviewed switched the scenarios around to talk about their own situation. The opportunity to discuss concerns and issues was celebrated by the CYP and, despite being initially apprehensive about the concept of an interview, all said they had enjoyed the experience and learnt from the process. The outcome of this approach will be addressed in the Discussion Chapter (Chapter 6) to consider support and opportunities CYP with MMHL would welcome in relation to developing social and emotional resilience skills. The findings from this chapter will be explored in depth in the Discussion Chapter.

# Chapter 7: DISCUSSION

## 7.1 Introduction

The qualitative and quantitative data gathered during the study were presented and analysed in the previous two chapters. This chapter will pull together the results from both sets of data and present the findings to answer the original research question and subsidiary questions.

The research question asked, 'How resilient are children and CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?' To address the question the three subsidiary questions were:

- Do CYP with MMHL have different resilience skills compared to their hearing peers?
- Do CYP with MMHL have different resilience skills compared to CYP with SPHL?
- Do CYP with MMHL have the resilience skills to enable them to plan for adult life such as approaching an employer, telephoning audiology for assistance with their HA or seeking help in a new location?

The discussion will reflect on the findings in relation to literature addressing CYP with MMHL. The initial section of this chapter will discuss themes highlighted in the questionnaire

which represent the researcher's definition of resilience, namely: optimism; attitude to life; emotional awareness; self-control/organisation; social support networks; sense of humour; self-belief and self-esteem, and communication skills. The qualitative and quantitative results will dovetail within this chapter to enable the researcher to consider the findings based upon the questions asked, the implications for ToD practice and the policies supporting CYP with MMHL will be considered.

The second element of this chapter considers and reflects on the research tools and methodology in consideration to the research question and the results that the project generated.

The conclusion will bring the three sections of the discussion together as a clear interpretation of the results, with proposals for future research

## **7.2 Optimism**

This section linked to the area of motivation in the literature review (2.3.4), which Goodman et al. (2015:7) suggest is '...the reason why individuals strive towards goals.' The researcher investigated whether the CYP with MMHL were optimistic about their futures and believed that they could achieve exam success that would enable them to gain employment or go on to further education. The findings of the quantitative data analysis suggest that the CYP with MMHL provided similar answers to their peers with ELH and SPHL. All nine of the CYP

interviewed had ideas about their future careers but, during the discussion, expressed doubts about the viability because of issues relating to their HL raised by friends and family.

The contributions from some of the CYP, such as Matthew and William, suggest they felt that their HL would hold them back and prevent some job opportunities being available.

Research presented by Dye and Kyle (2001), identified that there is a higher level of unemployment of deaf adults when compared to the employability rate of hearing adults.

This supports Goodman et al (2015:26) who considered the concept of extrinsic motivation as relating to, '...fear of failure, fear of disappointing parents or others, the pursuit of a future goal..'. The young interviewees in this survey were affected by the views of parents and those around them regarding what a deaf person could or could not achieve, and were making career choices in line with these perceptions. Deci and Ryan (2000) identified that as people mature through childhood into young adults, they are motivated to gain exam success as a means of securing a university place or a role in a chosen career and positive support from adults is important as a motivator.

This research suggests that, although they had aspirations for the future, the roles chosen or applications for university places were being influenced by comments from parents and family members. The findings of this study supported previous research by Deci and Ryan (2000) and Dye and Kyle (2001), but specifically identified that it is relevant to CYP with any level of HL, not just those identified as Deaf with SPHL.

### **7.3 Understanding deafness**

The qualitative data suggested that some of the CYP with MMHL considered that their HL would affect their future job and employment opportunities. To ascertain whether they would be able to disclose to prospective employers, they were asked during the interviews how they would describe their HL and the equipment they use to other people. The quantitative data presented that, as a group, the CYP with MMHL felt unable to talk positively about themselves and their HL.

Brice and Strauss (2016b) proposed that CYP with HL consider the concept of identity challenging. This research supports this view because the participants were beginning to form the view that their HL was going to potentially impact upon future careers and them as an individual. Deci and Ryan (2000) discussed SDT and the autonomy or a belief a person considers they have to manage their own goals and activities. In this study, the data suggest that the CYP with MMHL contradict this belief, their view being that their future career is governed by their HL and they did not feel in control of their future.

A further factor of SDT is the concept of connection and relationships, in that people need to feel a sense of belonging or connection to a specific group of people (Deci and Ryan, 2000). In this research, the CYP with MMHL were not only considering which peer group they related to, but were reflecting on and considering what being deaf meant to them. When they were presented with the statement that they could talk positively about their HA or HL,

they disagreed. This was in contrast to the CYP who had SPHL who stated in the questionnaire that they were confident doing so, supporting the research relating to Deaf Culture and Deaf identity presented by Marschark et al. (2017) and Bat-Chava (2000). The finding that arose from this research was that the CYP with MMHL appeared to find self-perception and identity difficult. Previous research has not specifically identified this group of CYP as experiencing such challenges.

The qualitative data explored the reasons why the CYP with MMHL lacked confidence in discussing their HL with other people. In the interviews, the 11-year-olds stated that they were generally happy to disclose their HL and tell people that they wore a hearing aid, however they felt unable to confidently explain details of their HL to other people. The lack of understanding about their HL might be due to age and as they matured an increased knowledge could develop. However, 15-year-olds in this research were also unable to confidently discuss their HL and equipment. These CYP were generally reluctant to disclose and explain their HL to friends, teachers, and other people, suggesting that between the ages 11 to 15, CYP with MMHL do not develop a broader knowledge of their audiological status. There could be a variety of reasons for this including age, friendship group and knowledge of their own HL and equipment.

Previous research conducted in Australia by Punch and Hyde (2011) used qualitative methods to investigate earlier quantitative data and through the interviews suggested that CYP with CI experienced issues relating to self-concept. This was in contrast to a recent study

by Terlektsi et al. (2020b) which was considered to be the first qualitative study of CYP aged 13-19 with moderate to severe HL investigating peer relationships. Terlektsi et al. (2020b) suggested that, in contrast to the research by Punch and Hyde (2011), CYP presented with positive self-concepts and discussed positive relationships with friends. They also found that the CYP in their study with a moderate HL experienced challenges relating to creating friendships, particularly those within mainstream settings, which was similar to the findings of this current study.

This current study identified the same difficulties of developing friendships and feeling different from peers was also experienced by those with MMHL. The implications for practice from Terlektsi et al. (2020b) was that those with a moderate HL experienced challenges similar to those recorded with SPHL and that they can often be considered a 'neglected' group because they 'can hear' (Antia et al., 2009). The results of this current study would concur with these findings.

It is important to develop a personal understanding and confidence associated with hearing levels in order to share relevant information with employers and prevent underemployment/unemployment. Garberoglio et al. (2017) presented the challenges experienced by deaf CYP in the United States in relation to underemployment, a figure of employed people aged 16-64 in the United States was identified by Erickson et al. (2017) as 51.4%. Office of National Statistics (ONS) (2019) highlighted that in the UK there had been a reduction in the employment statistics of those aged 18-24 compared to the previous year.



The figures do not specify how many of these CYP had HL or whether there were fewer CYP in this age group compared to the previous year. The Totaljobs (2017) survey of employees who were Deaf or had HL, reported that 19% of those who completed the survey had not informed their employer that they had HL or were Deaf. In relation to the findings in this research, the CYP not only felt they had insufficient knowledge to pass on to prospective employers, but also, as they approach school leaving age, some appeared less comfortable in telling people about their HL.

Some of the CYP stated that they only wore HA in school and removed them as soon as they left school. There may be a variety of reasons for this that could be explored in future research with this cohort, including elements of SDT associated to Deaf Culture/Identity and understanding the social group with which they affiliated (Hintermair, 2007).

#### **7.4 Teacher of the Deaf support**

Simpson (2017), suggests that the role of a ToD can include discussing ‘... the implications of HL with the deaf learner, parents and families, teachers, all involved agencies especially in the context of education.’ In this current research, the CYP stated that they did not receive regular support from a ToD to develop this knowledge.

LAs and Sensory Support/Hearing Impairment services use criteria to identify the level of support to be offered to each child and young person with HL. The NatSIP Eligibility

Framework (NatSIP, 2017) is used by many LAs, aiming to ensure parity across the UK. Each element on the checklist is provided with a score, allowing the LA and the Sensory Support Teams to allocate pupils to the caseload of its ToDs. A pupil scoring highly on the checklist with SPHL and high level of need, could receive a minimum of twice weekly visits from a ToD, while a child with a mild HL and no other criteria may receive an annual visit or be taken off the ToD caseload.

As the CYP with MMHL are considered able to access sound to some degree and language scores are often higher than those with SPHL, they are considered to require less support. This corresponds with the findings of this research in that the CYP stated that they did not see a ToD regularly during their secondary years. The quantity of support varied, amongst those with MMHL, although this could be as a result of those who used HA that may have required some ongoing monitoring etc. Thus, based on the questionnaire and interviews, most of the pupils identified that they received just an annual visit or were not currently receiving any ToD support.

In addition to the need for a ToD to support understanding of HL and the equipment used, CYP with HL also require support to develop their language skills (Knoors and Marschark, 2012; Marschark and Hauser, 2012; Moeller, 2000). The assessments employed in this research demonstrated that the language skills of the CYP with MMHL, were commensurate with their chronological age, while the skills of the CYP with SPHL were considerably behind their chronological age. Language scores are one element used by the Eligibility Framework

to ascertain the level of ToD input which would narrow the gap between chronological age and the age equivalent assessment results.

McGowan et al. (2008) identified that any identified HL greater than 20dB may impact on a child's speech production and language acquisition. Sahlén et al. (2018) suggested that up to 50% of deaf children identified as Deaf or hard of hearing could meet criteria for having DLD, including those who used HAs (Briscoe et al., 2001). Reflecting on this research the CYP within this study would appear to benefit from direct support to enhance language skills, but the data gathered suggests the CYP did not feel they received this.

The data for both receptive and expressive language assessments were higher for those with ELH than those with MMHL and SPHL, although the results for those with MMHL were approximately commensurate with their age. This suggests that the differences presented in the questionnaires and information discussed as part of the interviews relating to the social emotional skills of CYP with MMHL and their perceived ability to be resilient was not associated to language difficulties. Although there is limited research in the development of social and emotional skills of CYP with HL (Laugen et al., 2017), the research by Moeller (2000) and Yoshinaga-Itano (1999) suggest that the difficulties CYP with HL experience in language acquisition could affect the development of social and emotional skills. The findings of this research study present that language levels are not specifically an indication of why some deaf CYP experience difficulties, as the group with MMHL in this study

experienced some difficulty with social and emotional skills while their language scores were commensurate with their age.

### **7.5 Attitude to life**

This section investigated how the CYP planned activities outside school. The quantitative data yielded similar results for all three groups in that, some youngsters were proactive in planning activities and others were not, and there was no direct correlation between HL and the ability to think and plan activities.

The qualitative data asked which tasks or activities the CYP planned outside of school and the results suggested that the youngsters with MMHL found it challenging to organise: their choice of activities was influenced by family and friends, as well as their self-perception of how safe they would be. Some CYP reported that parents provided transport to and from places because they believed their HL would present a danger when using public transport or crossing roads. This current research presents the view that those around the CYP could be seen as protecting and avoiding stressful, or what could be viewed as difficult, life experiences but, ultimately, this can prevent CYP from developing resilience skills that enable them to cope in a variety of situations (Young et al., 2008).

The data gathered in this study suggest that the CYP were not developing independence skills in a safe or scaffolded way as presented by Vygotsky's ZPD (Vygotsky (2012); Warford

(2011). It is important for CYP to learn how to plan activities and be encouraged to test out their plans in a safe and secure environment (Vygotsky, 2012; Warford, 2011) but the CYP with MMHL in this study, suggested that opportunities to plan events and activities were reduced due to their HL. The skills identified also relate to those within the umbrella term of EF as highlighted by Jones et al. (2020), as well as the social interaction skills termed character skills by Heckman and Kautz (2013). They present that 'character' is an aptitude that could be taught, rather than an innate trait and is enhanced from early years through to adolescence by interactions with social situations. The participants in this research did not feel that they were being provided with opportunities to safely learn and practise such skills under specific guidance.

## **7.6 Emotional Awareness**

The quantitative findings of this study identified that CYP with MMHL were generally able to identify things that made them happy but found it difficult to share the experiences with friends or family. When discussing things that made them sad or worried, the CYP found it challenging to identify events or incidents that caused these emotions. It could be said that these are harder situations to identify and that other CYP may have also found this challenging. The emotions of fear and sadness are within a group of emotions identified by Shaver et al. (1987) that children acquire knowledge of, as they experience specific situations during childhood and the labels for emotions are used to describe the event. Shaver et al. (1987) consider a hierarchy to understanding emotions and that 'worry' comes

into a second tier of emotional labels under the term 'fear' and the term 'worry' is used less frequently and in a specific situation such as being worried about failing an exam. Shaver et al. (1987) present that the worry is not about the failed exam itself, but the knock-on effects of this that demands a higher level of thinking, such as what parents would say or think, how this would affect job prospects or a university place. The limited use of the term within everyday environmental situations can mean the child doesn't hear it regularly and it therefore becomes a label attached to an explicit situation.

From the findings of this study, the parents of the CYP are trying to protect them from situations that may cause them to worry or make them sad. The CYP in this study found it difficult to label emotions relating to specific situations and to then share these moments with family and friends. The need to discuss emotions and situations with adolescents is important according to Hayes and Ciarrochi (2015:66) 'Once they learn to step back from feelings and simply notice them, their emotions will no longer seem to be toxic or barriers to valued action. CYP can then cease fighting their feelings and redirect their energy to the challenging task of living a fun, meaningful and productive life.' The CYP in this study did not discuss their feelings and this may lead to them not hearing the emotional label in context and be able to add it to their lexicon.

The quantitative data highlighted a significant relationship between HL and the ability to identify things that made the CYP worried or sad. The interesting fact as an outcome of this research was that the CYP with SPHL presented similar answers to those with ELH. The

findings suggested that the group of CYP with MMHL experienced difficulty identifying things that made them sad or worried. Understanding and identifying specific emotions and using appropriate emotional language can be an area of challenge for deaf children as identified by Calderon and Greenberg (2011): the child learns the vocabulary by hearing their parents use it in a specific context. Although support for deaf children and CYP with SPHL is available through Deaf CAMHS and programmes such as Healthy Minds (NDCS), similar support to CYP with MMHL (who, according to the present study do not present with the same level of emotional literacy or understanding) is not available.

The ability to understand and express appropriate emotions can be a challenge for people in general (Steinel et al., 2008), but as identified above, there are interventions to support those with ELH and SPHL. In this research the CYP with MMHL may not meet the access criteria to engage with intervention programmes such as Healthy Minds (NDCS) or Deaf CAMHS and as highlighted earlier, may not meet criteria for support from a ToD.

The literature review showed there is limited research on emotional competencies and understanding of those identified with MMHL. Calderon and Greenberg (2011); Meadow et al. (1981) and NDCS (2016) highlight a link between language and language competencies and a child or young person's ability to acquire beneficial emotional skills. This research found that CYP with MMHL presented language skills, both receptive and expressive, appropriate and adequate for their chronological age. This could suggest that there was not a risk factor and a need for ToD support or participation in an identified intervention.

The CYP with MMHL had language skills comparable to chronological age and therefore could hear and understand vocabulary, yet presented in this research that they struggled with emotional concepts. This group presented data suggesting that specific support is required to teach the concept of emotions and emotional literacy to those with MMHL. If explicitly teaching the understanding of emotions, there needs to be consideration of how this is achieved, as the current methods of applying language to a situation is not building emotional literacy for this group, a view supported by Dalton (2011).

## **7.7 Social skills**

### **7.7.1 Organisation skills and flexibility**

The CYP with MMHL presented similar scores to those of the other two groups when asked about responding to unexpected changes at home or in school. However, when asked if they had ever had opportunity to lead a team, this group of CYP said that they had had limited or no experience. This was supported by the qualitative data as the CYP with MMHL in this research said that they would have liked to have been encouraged to lead a team or group task, although acknowledged that the role was a difficult one as communication and instructions to the team would have to be clear. They further claimed that they either had not been provided with the opportunity or, if they had been asked to be a leader, it hadn't worked the way they thought it would. In other words, the opportunities provided were



limited and they felt they were not prepared for the role. The definition of social skills presented by Goodman et al. (2015:34) included, ‘...communication, kindness, sharing and cooperation...’, a view supported by other research showing that children require opportunities to practise and develop these skills from childhood through to adolescence (Elliott and Gresham, 2013; Rose-Krasnor, 1997; Rose-Krasnor and Denham, 2009).

Laugen et al. (2017) demonstrated in their research that children and CYP with HL experience difficulty acquiring social competency skills and that this is often associated with delays in language skills, a view supported by Hoffman et al. (2015) and Stevenson et al. (2010). It could be argued that, from the findings of this research, further studies would be beneficial to investigate whether those with MMHL experience specific challenges in learning language-based skills. As stated, the language assessments of this cohort were generally comparable to their chronological age therefore no identified gaps were recognised, yet the CYP did not feel they had been provided with the opportunities to practise or learn additional skills such as those required to lead a team.

In the literature relating to resilience skills and their development, the focus appeared to be on overcoming the ‘risk’ which could be identified as HL and successfully overcoming the barrier was measured in academic success, such as Tomblin et al. (2020). A recent study by Hatamizadeh et al. (2020) considered interventions that focussed on emotional and behavioural difficulties and peer relationships, the findings suggesting that, although some initial success of the interventions was recorded, the long term effects were not as

productive. This suggests further research is required to consider why CYP with MMHL do not appear to maintain skills taught and, as identified within this research, why they do not appear to be given the opportunity to practise skills within school activities.

### **7.7.2 Social networks and friendships**

Friendships and support networks were discussed, and the quantitative data showed the CYP with MMHL did not just have one or two close friends, but they did acknowledge that their friendship groups were small, in contrast to the friendship groups of the other two cohorts.

The concept and value of friends and friendship groups was discussed further during the interviews. Heckman and Kautz (2013) argued that an element of character skill or personality trait is a person's ability to successfully connect with people and their social group. An element of this is the concept of self-perception, that is, who I am and the social group I relate to.

Marsh and Parker (1984) presented the hypothesis of 'Big Fish in a Small Pond': that high achievers educated with those considered with a lower academic ability report a higher self-concept. This proposed that CYP with ELH may receive a boost to their self-esteem by being friends with someone with HL who may be considered less academically successful.

Hintermair (2007) presented research on biculturally deaf, those who relate to a Deaf

Culture due to their use of a sign language but can also successfully use oral communication. This group were also reported to have a clear self-concept and association with two different friendship groups.

Hintermair (2007) considered the group that experienced the greatest challenge were those identified as acultural as they cannot access Deaf Culture or communicate using sign language and also experience challenges with oral communication with hearing people. This lack of association with a social group can impact on a person's self-esteem, as highlighted by Bat-Chava et al. (2005) and Leigh and Stinson (1991); reversing Marsh and Parker (1984), this group of CYP could view themselves as 'Small Fish in a Big Pond'.

In the qualitative data, the CYP with MMHL suggested that opportunities to lead teams or to take part in activities outside of school with friends were limited due to their parents' feelings that they needed a hearing friend to support them or act as a chaperone. During the interviews, some of the CYP also stated that they selected their friends as they felt they would be able to help and support them due to their HL. They discussed how having a larger friendship group gave them a feeling of being well liked, which was important to them, but the close friends were those who were empathetic and were able to support them if required. Stinson et al. (1996) reported that CYP with HL who attended mainstream school had limited opportunity to know and mix with other CYP with HL. The findings of this current research could support the view that in this case the CYP carefully selected their friendship

group to include hearing peers who demonstrated empathy towards them and the challenges they experienced due to their HL.

The participants in this study stated that they felt their parents feared for their safety if they went out on their own because of their HL. This finding concurs with the literature on resilience, if the view that HL is a perceived risk factor or disability which has to be overcome in order to achieve (Young et al., 2008). Rutter (1987) proposed that if those around a child with an additional need such as HL is considered in this way, they often hold or present lower expectations of their children. The purpose for the friendship was as a protector not as a member of a group who shared similar interests or views.

In the analysis of the qualitative data, the CYP stated that making and maintaining friendships was challenging. If a friendship or a discussion between friends broke down they found repairing it difficult. The results of the study suggest the CYP with MMHL may require support and guidance to maintain friendships. All the CYP with MMHL attended mainstream schools without specialist provision such as a HIRB. It is suggested that CYP in this situation are susceptible to being isolated and bullied due to their differences (Weiner and Miller, 2006; Wolters et al., 2011). Earlier research by Stinson et al. (1996) found that when CYP with HL interacted with hearing peers their emotional confidence didn't increase. The concept of building friendships relates to the feeling of belonging within the social group, a shared language and culture and not believing they are different, this group are not a 'Big Fish in a Small Pond', as described by Marsh and Parker (1984).

### **7.7.3 Sense of humour**

The quantitative data suggested that the CYP with MMHL found it difficult to admit when they had made a mistake and to seek help from family and friends. They found it difficult to laugh at a mistake they had made or see that we all make mistakes or do things wrong. An ability to develop a sense of humour and to laugh at one's own mistakes is seen as a positive personal aptitude or a release valve that can enable a person to deal with stressful situations that occur in life and as a way of discharging tension and anxiety (Abel, 2002; Kuiper and Martin, 2010; Ruch, 1998 /2010; Lefcourt et al., 1995; Yovetich et al., 1990).

Martin (2018:223): 'By joking and laughing about issues that normally arouse feelings of anxiety and tension, children feel less threatened and gain a sense of mastery over these topics.' The ability to see a mistake in a less serious way is healthy and allows a person to address mistakes positively and proactively (Martin, 2018; Martin et al., 1993). The findings of this current research found that the CYP were unable to identify specific emotions and discuss events with family and friends. In the data relating to their perception of humour and being able to laugh at their own mistakes and things they do, it was found that they did not have an outlet for the stress and anxiety that can occur within everyday life.

### **7.7.4 Self-belief and self esteem**

The research data identified that the CYP found it difficult to consider themselves as a special person with unique qualities and skills, which was different from the participants

with ELH or SPHL. They also lacked confidence in their appearance, with several CYP discussing the technology (HA) and how it was not used outside school: they understood and appreciated the benefits it provided but cited the desire and need to fit in with peers and not wishing to be judged for using a hearing aid.

The findings of this research correspond with previous studies relating to self-concept/self-esteem problems experienced by deaf CYP (Hindley et al., 1994b; van Gent et al., 2011). Issues relating to self-esteem/self-concept can adversely affect the person's mental health and are linked to behavioural as well as emotional disorders in deaf children (Mejstad et al., 2008b). The prevalence of mental health conditions in deaf children is considered to be higher than those in their peers with ELH (Hindley et al., 1994b; Van Gent et al., 2007; van Gent et al., 2011). Van Gent et al. (2007) hypothesised that there was a link between having an additional physical health condition such as being deaf and what they termed as an issue with the central nervous system and other conditions, that was a factor in negative mental health. The term 'additional factors' was also considered in research by Dammeyer (2010) and considered to be the level and cause of HL; the age it was identified; educational provision and hearing level of parents, which were views supported by Hindley et al. (1994b) and Polat (2003).

Although deaf CYP do appear to present with issues relating to self-esteem that could result in inappropriate behaviours, some areas are not consistent and researchers disagree with specific findings. An example relates to mode of language: some research considered that

the mode of language might influence the level of considered risk which then affected positive mental health. It was proposed - although not tested – that CYP with spoken language may be considered to be at less risk due to their ability to converse with those without an identified HL, (Vostanis et al., 1997). The association between mode of language or communication was not identified in research by Hindley et al. (1994b) and Polat (2003) who considered that there were other factors that could affect this and not solely mode of language and communication.

Polat (2003) identified that CYP with a higher level of HL presented lower overall ratings on Meadow/Kendall Social and Emotional Adjustment Inventory (SEAI) and suggested that this would then determine why they would warrant specialist support. Students who used HA and who could access speech presented better psychosocial scores within the study by Polat (2003). The comments contributed by the CYP in this study, supported this. They felt they would benefit from the support of a ToD as they were finding it challenging to understand and accept their HL within a hearing world. The period of adolescence is a complex time of cognitive, physical, emotional and social development, where growth can appear to happen quickly (Brice and Strauss (2016a). This research did not aim to delve into the psychology of personality development but to briefly highlight the complexity of development. The growth and understanding of who we are is influenced by those around us: parents, family, peers and others within society (Harter, 2012).

This study considered CYP specifically with MMHL, the majority of earlier studies having considered CYP with SPHL who communicated using sign language, such as the research of Hindley et al. (1994b), or included those with additional needs (Polat, 2003). It is recognised that the transition or maturity from childhood and adolescence through to adulthood is a challenging time, as it is a period when CYP are considering who they are and how their role in society (Blakemore and Mills, 2014). This is a time when CYP want to fit in with a peer group and begin to feel insecure and sometimes awkward about perceived differences (Angelides and Aravi, 2006).

There are two perspectives that investigate how children and CYP with HL develop their personality and sense of who they are: the ecological model presented by Bronfenbrenner (1979) and research reflecting the medical model that sees HL as a deficit to overcome or cure, often linked to advancement in technology such as CI (Arnos and Pandya, 2003; Hintermair and Albertini, 2005). Hintermair and Albertini (2005) discussed the value of medical and technical advancements, but also considered the importance of families and children with HL having information, as well as time and space, to make individual decisions regarding who they are and their future. The ecological model presented by Bronfenbrenner (1979) places the CYP at the centre of the model and considers the people and environmental factors that can and do influence them as they develop this sense of identity. At the centre of four systems that interact with each other is the child, in the first instance the Microsystem (school, family, friends). The Microsystem is the initial group of people who affect social structures and for CYP with HL can influence their understanding of their HL and



attitudes towards language and amplification equipment. The second system, Mesosystem interacts with the Microsystem and in this instance can refer to professionals such as QToDs, audiologists or Speech Therapists who use their professional knowledge and skills to support people in the microsystem living and working with the CYP. The Exosystem interact again with the previous two systems, but relates to policies, documents, programmes of study or research development that guide the professionals working with the CYP. The final system, Macrosystem relates to laws, cultural beliefs and expectations of society and of the family or community. These four systems interact with each other enabling the CYP to develop as a unique individual and personality. The final area of Bronfenbrenner's model is the Chronosystem, this is the development the CYP makes over time from being an infant, to adolescence and adulthood, in this scenario this will relate to their understanding of HL and their own needs and support required.

Hintermair (2007) suggested that people considered as biculturally deaf and hearing people have an advantage in relation to satisfaction in life and self-esteem, compared to those are termed as marginally acultural. Bicultural deaf people are those who have one language considered to be their heritage and then the socially dominant language; in this case it could be BSL and spoken English respectively. Hearing people have access to the socially dominant language, English. The CYP with MMHL in this study may be considered marginally acultural as they could hear and use spoken language, English, and function within a hearing world although the level of interaction is affected by the level of their HL and the use of audiological equipment. The hearing world may at times be challenging for those with

MMHL as it may not relate specifically to who they are. At the same time, they may not be individuals who relate to Deaf culture and/or use BSL. This could present a debate as to which group those with MMHL predominantly relate to. The findings of this research suggest that the CYP are struggling with the issue of identity.

The view of identity and to which cohort people with MMHL feel they relate to was discussed by Leigh (1999) who considered that, as individuals, people develop their personality by the societal links they have and by mediated environments. Society can be face-to-face and via electronic media such as online platforms (Childs, 2008). This interpretation was supported by Nikolarazi and Hadjikakou (2006) who suggested that 'identity' was constructed by the person's experiences and interactions with others. Hintermair (2007) discussed this as part of the social support /acculturation in that the relationships and interactions a person has helps develop their personality.

The CYP in the current research were struggling to find a social group to be with, they did not identify as deaf as they said they could hear and used spoken language and do not sign, but they were conscious that their HL and equipment made it difficult to link with hearing CYP. The responses the CYP provided also support the research of Cohen et al. (2000) who discussed the concept of social networks and friendship groups providing positive lifestyles, mental health and could enhance career opportunities. The CYP in this research were looking for a social network that they could see themselves fitting into, but having HL appeared to present as an added challenge. This current study highlights key points made in

previous research and links with suggestions that, for CYP who are deaf or have HL, the concept of identity and identity development is important (Bat-Chava, 1994; Glickman and Carey, 1993; Erting and Kuntze, 2008; Leigh et al., 1998; Stinson et al., 1996). This research particularly relates to the findings of Bat-Chava (2000) and Maxwell-McCaw and Zea (2011) who discussed that those who were marginally acculturation had less self-esteem and demonstrated a reduced satisfaction in their life when compared with those with ELH. The results of this research concurred with this finding, but from elements highlighted previously in relation to support from specialist teachers, ToD, and access to programmes of work and interventions that can assist are limited.

#### **7.7.5 Language and Communication**

The aim of the study was not to evaluate language but to use the data as a screening tool ensuring that the language skills were not the reason for any differences or commonalities found in the social emotional skills of CYP with MMH compared with those with ELH and SPHL. As discussed earlier (5:3ii Teacher of the Deaf support), the language assessments employed in this research demonstrated that the mean scores for the CYP with ELH were above their chronological age in both the receptive and expressive assessments. However, for the CYP with SPHL, the mean score was well below their chronological age. This information would support NatSIP Eligibility Framework (discussed earlier) stating a ToD is needed to support a deaf learner with SPHL in developing language skills. The language skills of the CYP with MMHL in this research were slightly below and approximately

commensurate their chronological age, -3.31 months receptive vocabulary and -5.89 months expressive vocabulary. The scores recorded by those with MMHL would not be considered sufficient to meet the criteria in the Eligibility Framework to allow regular access from a ToD to support language skills.

The findings in this study support the research of Tomaszewski (2001) and Tomaszewski et al. (2019) that children and CYP with HL experience considerable challenges when learning and acquiring spoken language in comparison with those with ELH. Their research was conducted with CYP in Poland, but studies conducted within other countries produced similar findings. Although there was no distinguishable data between MMHL and those with SPHL, an earlier study by Gregory and Bishop (1983) looked at the language development of deaf children as they started formal education. Their study considered that on average the number of words and vocabulary used by deaf children was approximately 150 words compared to approximately 2000 words identified by Hodgson (1954). This view is supported by Marschark and Hauser (2008), who presented that a child with HL (deaf) often begins school less articulate and with a reduced lexicon than their hearing peers.

There are several reasons for this, including access to language from an audiological perspective and reduced input from parents and care givers providing language as a stimulus. The studies presented are older, but the researcher wanted to show that for nearly 50 years research has shown that CYP with HL enter school with a significantly lower level of linguistic skills than their peers with ELH, yet the cohort of CYP who participated in this

research did not state they received specialist support from a ToD. The reason supporting this policy could link to research such as that by Halliday et al. (2017) who considered a range of language assessments and compared results between those with MMHL and ELH. They concluded that those with MMHL produced lower scores than their peers, although the results were within expected levels. There were, however, individual scores that highlighted these children experiencing significant challenges with written and oral language.

The findings of this research study presented similar results, suggesting that it is important to consider the support of ToD for CYP individually rather than as a group. The language scores achieved in this study are important due to the link between language ability, cognitive development and a child's/young person's ability to complete specific language-based tasks such as planning, organisation and those categorised under EF (Hall, 2017; Hall et al., 2017; Humphries et al., 2012). Hall et al. (2017) report that it has been documented through research that CYP with identified HL (deaf) present issues that are now termed as EF difficulties. They acknowledge that Pintner and Paterson (1917) initially identified the challenges experienced by deaf children and further research presented similar outcomes (Lesser and Easser, 1972; Quittner et al., 1994; Smith et al., 1998) as well as more recent research following the introduction of the Newborn Hearing Screening Programme (NHSP) (Beer et al., 2014; Conway et al., 2011; Dammeyer, 2010; Remine et al., 2008).

The role language skills play in EF tasks is important. Some CYP with MMHL who participated in this research study experienced deficits within their language development yet were not

provided with support to enhance their skills. The interviews also revealed that most of the CYP who wore HA did not use the technology outside of school, which further reduced their ability to hear and develop language skills related to learning social skills and EF skills within a peer group. The other important finding was that the parents and teachers of this cohort of CYP were reported by the CYP to be overprotective or not providing opportunities to learn and develop skills.

CYP require the opportunity to learn and develop social skills that allow them to interact with others during real life situations that are structured (Goodman et al., 2015). This current research study highlights that CYP who had MMHL felt they were not provided with opportunities to be team leaders or to plan and experience social activities that would enable them to use and develop EF skills. The interviews with the CYP also suggested that there was limited access to ToDs and other specialists, who could support with vocabulary as well as considering the higher order language skills associated with EF.

## **7.8 Conclusion and Implications for practice**

This chapter has identified that challenges that have been identified in previous research specifically relating to children and CYP with SPHL or those who have a CI, also have implications for CYP with MMHL. Resilience skills required under the researcher's definition, such as the understanding of emotions; self-concept and understanding their own HL and the equipment they used; motivation and optimism, as well as social skills and aptitudes in language and communication relate to CYP with MMHL. The significant difficulties

experienced by CYP with SPHL have resulted in support programmes such as Healthy Minds (NDCS), National Deaf CAMHS and regular access to support from ToDs. Research relating to CYP with MMHL is still limited but this research suggests that targeted interventions are required to support this cohort to acquire social skills that could help them become more employable.

The study showed that the CYP involved experienced difficulties and lacked support, and that appropriate interventions would have implications for the role of a ToD and possibly an increased workload. The CRIDE report (2019) identified that 78% of children and CYP who were identified with HL greater than 20dB were in mainstream schools with no specialist provision, yet based on the NatSIP Eligibility Framework (2017) this MMHL cohort will receive limited access to a ToD to support and specific teaching.

In the section relating to optimism, the CYP identified a job or career path that they would like to pursue but comments from friends, relatives and others were influencing their choices. The researcher considers that, based on the data from this research study, specific advice and guidance, as well as identified role models, would support this group of CYP as they make and develop career choices.

The data gathered during the interviews suggested that the level of understanding the CYP with MMHL had about their own HL and the technology they used was varied. As the CYP grow older, their support requirements change and a deeper understanding of their HL is

required to address the increasing challenges of the curriculum and the need to take personal responsibility for their equipment. The importance of developing self-advocacy and self-perception skills was discussed in the literature review (Chapter 2) as a process of child development through the stages of childhood, adolescence and adulthood as described by Harter (2012).

The nine CYP who participated in the interviews required an understanding of their HL and the equipment they used. This is a time in their lives when there are physical changes as well as psychosocial developments that include forming personalities and demonstrating they can make autonomous choices (Klimstra et al., 2009): it is important that they can make informed decisions from facts and information. Although the development of a person's identity starts in early childhood, it is during the second decade of their life, adolescence, when self-identity and understanding of who they are as people, their beliefs, values and social groups they relate to, begin to be formalised (Arnold, 2017; Crocetti, 2017; Eichas et al., 2015).

Adolescents are keen to fit in with a peer group and being different, or appearing different, due to needing equipment can be challenging (Hintermair, 2007). The CYP in this study required support to help them develop an understanding of who they are, and this included an understanding of their hearing impairment. In 1950 and 1968, Erikson investigated the development that occurs during adolescence in relation to creating an established personal identity (Crocetti, 2017). Crocetti (2017) discussed the important changes and decisions that



adolescents are presented with during this time. For CYP with MMHL, this includes understanding their HL and any equipment they use; this does not define them, but is an important part of self-identity. This is needed to help them explain their HA and deafness to other people and potentially to prospective employers and work colleagues (Hintermair, 2007).

Access to a ToD is important in supporting the young person in developing a deeper understanding of their HL as they grow and to enable them to present it independently to different audiences in various situations (Hintermair, 2007; Simpson, 2017).

An additional factor that was raised during the research was the need for ongoing support for schools to enable staff to work with CYP to check equipment and to problem solve issues that may arise. Providing regular training in how to undertake basic checks of HA and RA is beneficial. The literature review (Chapter 2) highlighted that the role and responsibility for ensuring reasonable adjustments and support is provided to ensure all CYP can access the curriculum is the responsibility of the school, and class teachers; however additional training and support is required (DfE, 2014; DfE and DoH, 2014).

The data from this research suggest that CYP with MMHL may not be provided with opportunities to develop social independence skills, linking to research from Hintermair (2007); Leigh and Stinson (1991); Rutter (1987); Young et al. (2008). The cohort participating in the study identified activities they wanted to do outside of school, however felt they were

influenced by others in relation to the dangers that they may experience as a young person with HL. Due to the perceived dangers, the CYP said that they did not complete specific activities unless friends were there to ensure they were safe. This supported previous research by Hintermair (2007) and Young et al. (2008)

It is important that CYP are provided with opportunities to develop independent living skills such as planning a day trip to the cinema or shops with friends. Scaffolding the task as presented by Vygotsky's philosophy could enable the young person to prepare for the event and plan what may happen (Vygotsky, 2012). It is not possible to fully prepare CYP for all eventualities that may occur in life, but teaching specific skills and providing opportunities to plan and experience activities in a structured way can allow CYP to develop independence and resilience skills (Vygotsky, 2012; Warford, 2011). Planning an event provides CYP with skills to enable them to move from what they can currently do and develop skills within Vygotsky's ZPD (Morin, 2012; Vygotsky, 2012) as well as allowing them opportunity to consider coping strategies that may be required for unforeseen events.

Rutter (2000) questions whether adults involved with CYP should consider the risks an activity presents and then decide whether the level of risk is acceptable before encouraging a young person to take part. HL is not in itself a risk, but a condition, therefore should the fact a young person has a HL be viewed as a risk? If this is the case, the researcher would question whether this adds to the youngsters' vulnerability, as they are not provided with opportunities to acquire and practise coping skills. The CYP who participated in the

interviews agreed that their opportunities were restricted because of these perceptions and that their HL was a perceived risk.

Based on the quantitative and qualitative findings of this and previous research, it could be argued that it is important that ToDs challenge restrictions that can be imposed and support opportunities that provide CYP with MMHL to learn new skills in a structured way. By challenging and supporting both parents and teachers to present learning in this way, CYP can be empowered to try new activities and tasks and to acquire new independence skills (Vygotsky, 2012; Warford, 2011).

The research question posed for this study asked whether CYP with MMHL consider themselves to be resilient and able to demonstrate resilience skills when presented with specific scenarios. Their responses suggest they are not resilient and do not have the resilience skills, but this is not due to an inability to acquire the skills, but limited opportunity to learn and practise them in a safe and structured environment (Warford, 2011). This finding suggest support is required, but possibly different from that offered to those with SPHL in relation to developing language skills.

This research suggest that CYP do not have the knowledge about their own HL and equipment to make informed choices about using equipment outside of school or to explain to people what their HL means and how people can support them. Information relating to

this within an educational setting would be presented by a ToD and this group of CYP have limited time with such a specialist teacher.

It was important to understand what was meant as resilience or being resilient and this was presented as part of the Literature Review (Chapter 2). The factors used within this study related to identification of HL and CYP's understanding of their HL and equipment they used, support from specialist teachers, language skills, self-perception, motivation and aspirations for the future, understanding of emotions and social skills. This study considered that resilience was a fluid set of qualities and attributes that a person draws upon when in different situations and environments, as presented by Pooley and Cohen (2010). This was opposed to the concept of resilience as a person's ability to achieve in the face of adversity or to bounce back if presented with a trauma (Bland et al., 1994; Herrman et al., 2011).

The research question for this study was; how resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities? first two sub-questions considered if CYP with MMHL have different resilience skills compared with their peers with ELH and those with SPHL. The CYP with MMHL did not appear to present with the same skill level as their peers; they needed to have an understanding of their HL and the equipment that they used, and those with SPHL appeared more confident about this than those with MMHL. Those with MMHL learn the same skills as their peers but, appear to not be afforded with the same opportunities to practice and develop them such as planning a trip out with friends or leading a team. The CYP with MMHL had aspirations for the future; however,

their goals were being affected by their parents who believed their HL would prevent them obtaining certain jobs or college/university places. The lack of opportunities to practise specific skills in everyday situations such as leading a team, planning a trip out with friends, being able to explain support they would require from a potential employer.

The third sub-question considered if the CYP have the resilience skills to enable them to plan for adult life. The CYP in this study do not appear to be being provided with opportunities to build up the set of attributes that they could use in different situations and environments, therefore at present they do not appear to be presenting as gaining resilience skills.

## Chapter 8: CONCLUSION

*“There is no real ending. It’s just the place where you stop the story.”*

*(Herbert and Herbert, 1969)*

### 8.1 Introduction

The concluding chapter of this thesis will summarise the main findings from the research and consider how they could contribute to the field of deaf education. Implications for practice will be discussed, reflecting on how the findings may affect work completed in schools (teachers and LSAs), by ToDs and Sensory Support Teams and parents. Following this, limitations of the research and the research tools used will be addressed. Possibilities for future research and how this study could influence other work will complete the chapter.

### 8.2 Summary of the research findings

#### 8.2.1 How resilient are children and CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?

The research tools used within this study were piloted during phase one (Chapter 4).

Following this, the second phase collated information from language assessments and the use of a questionnaire designed for this study, under the themes of resilience identified and presented by the researcher (Chapter 5 : Phase 2 Questionnaire data, see 5.3). Two areas

defining the researcher's use of resilience in this study related to the self-perception and self-esteem of those with MMHL. The study identified that the CYP with MMHL experienced more difficulties relating to self-esteem and self-perception compared to their peers with ELH and those with SPHL (see 5.3.7). This also included an understanding of their HL and being able to present this to other people: those with MMHL suggested this was challenging which contrasted with the knowledge and understanding presented by those with SPHL (see 5.3.1.vi). The data in this phase of the study highlighted that the language assessments, both receptive and expressive of those with MMHL were comparable to the CYP's chronological age (see 5.4.3). LAs and Hearing Support Teams identify CYP who are most in need of support from ToDs, and many use the Eligibility Framework (NatSIP, 2017). A criterion in the Eligibility Framework is the language levels of the child or young person, and the results of the assessments conducted in this survey did not meet the criteria. In phase three of the study, the CYP with MMHL, identified that they experienced difficulties with various aspects of social communication including introducing themselves to others, starting and ending conversations appropriately. This was in contrast to both the other groups who did not identify this as an area of specific challenge for them (see 5.3.8).

The third phase involved interviewing a group of CYP with MMHL (Chapter 6: Phase 3 Interview data). They discussed several areas, again linked to the researcher's explanation of resilience and areas that were significant from the questionnaires conducted in phase two of the study. It identified that the participating CYP with MMHL were affected by views of family members about their HL (see 6.4.2). They discussed negative opinions regarding

potential job and career aspirations that could be unavailable to them because of their HL. They also described not being encouraged to attempt activities such as planning leisure time activities with their friends which would develop social and independence skills (see 6.7.4). This reduced their opportunities to apply social and language skills learnt in lessons in real life situations. The perception of why the CYP should not complete such tasks was that they would be at risk or vulnerable because of their HL (see 6.7.4). These views were having a knock-on effect on some of the CYP, who felt that their HL did make them vulnerable and put them at risk.

### **8.2.2 Do children and CYP with MMHL have different resilience skills compared to their hearing peers?**

The findings of Phase Two and Phase Three of this study suggested that the CYP with MMHL did have different resilience skills compared to their peers with ELH. They were not only different, but they were also less developed due to not being provided with the opportunities such as leading a team (see 5.3.4.ii and 6.7.7) to practise such skills in a structured environment or task, that those with ELH felt they had opportunity to take part in.



### **8.2.3 Do children and CYP with MMHL have different resilience skills compared to children and CYP with SPHL?**

This study also demonstrated that this group of CYP with MMHL had different resilience skills from those with SPHL, who showed that they were more confident with their personal identity and their HL: were able to discuss this and understood their HL, which they could explain to others if appropriate (see 5.3.1.vi). In contrast, those with MMHL did not generally present with an understanding of their HL and equipment they used or a willingness to share information with others. The analysis of question 6 (5.3.1.vi) asked 'I can tell people about my hearing loss and my HA or other equipment I use? Table 18 presented the analysis of this question. It identified that 55.1% of CYP with MMHL disagreed or strongly disagreed with the statement, compared with 25.0% of the CYP with SPHL. As discussed, earlier Bronfenbrenner (1979) identified professionals are instrumental in supporting the development of the child as part of the Microsystem. In this study it was identified that 54% of those with SPHL attended a HIRB with access to QToD and specialist TAs. The Eligibility Framework (NatSIP, 2017) is used to identify targeted support and CYP with SPHL are considered low incidence, but high need and receive specialist QToD support and interventions, however alternatively those with MMHL are identified as low incidence, low need and therefore do not receive regular support from a QToD.

#### **8.2.4 Do children and CYP with MMHL have the resilience skills to enable them to plan for adult life?**

The findings suggest that some of the CYP with MMHL do not have the resilience skills that would support them as they move into adult life. Vygotsky in 1920s considered the ZPD, a process in child development when knowledgeable people around CYP such as parents and teachers, provide opportunities and a structure to enable them to develop their learning and acquire skills beyond those they comfortably and independently can complete. The CYP with MMHL in this study observed activities and tasks their peers were beginning to do as they matured, such as being able to plan social or leisure activities independently or lead group tasks in school (see 5.3.2.i, 5.3.2.ii, 5.3.4.ii and 6.7.7). The opportunity to practise skills in Vygotsky's ZPD did not appear to be being presented to the CYP with MMHL. This was preventing them from acquiring resilience skills as defined in this study, as a set of fluid qualities and attributes that a person draws upon when in different situations and environments (Pooley and Cohen, 2010), (see 2.4). The lack of an opportunity to try skills in a scaffolded and structured environment can mean that the CYP does not move from the area of acquired skill to potential learning in the ZPD.

#### **8.3 Reflection on the stories that inspired the research**

As a QToD, the researcher presented the stories of two CYP supported on their caseload: Rachel (1.3.1) and Jack (1.3.2). Their stories and the challenges they experienced relating to resilience and resilience skills they required but did not have, were discussed. The research question posed in this study considered whether the challenges Rachel and Jack experienced

were more prevalent and experienced by a wider population of CYP with MMHL. The findings suggest that CYP with MMHL do find it challenging to acquire and use a range of skills independently in order to present as resilient. The CYP in this survey did not understand their HL nor did they feel they had relevant information that would enable them to independently discuss their HL and the equipment they use, to other people to ensure they received the support they needed. A further finding related to aspirations and opportunities to try independence skills in real life scenarios, but these were restricted due to perceptions of the parents of the CYP who felt they were vulnerable and were at risk of harm due to their HL.

#### **8.4 Contribution to the field**

*"I've always heard every ending is also a beginning. We just don't know it at the time. I'd like to believe that's true."*

*(Jeff and Messer, 2012)*

The above quotation from a character in the television series Criminal Minds related to a fictional story but is true of this research. The story that the researcher intended to present initially began with Rachel and Jack that led on to considering wider resilience skills of CYP with MMHL. Although the story is complete from the perspective of this thesis, the findings do provide useful information and will add to the field of research as well as the work of practitioners.

### **Implications for schools, teachers and pupils.**

The stories of Rachel and Jack were presented as CYP who did not present as resilient in the situations presented to them and the researcher wanted to consider if CYP with MMHL required additional support to learn and develop resilience skills. In this study, Thomas (Year 7, 11 years old with bilateral moderate HL and had 2 BTE and RA), reported that he was concerned that staff in school did not know how to support him as he felt they had little knowledge of his HL and how to use the equipment. When his HA broke or did not work, his class teachers felt he was not listening and as a result of this he could not complete work in class or correctly record homework activities. Thomas reported that when he requested support to fix the HA the SENCo was unable to do this but did contact the supporting ToD.

The CRIDE (2019) survey identified that 78% of deaf CYP are educated in mainstream schools, which would include those with MMHL as they would not meet criteria for specialist support from a school for the deaf or a resourced unit within in a school as their HL would not be identified as significant to warrant this intense support. The Eligibility Framework (NatSIP, 2017) checklist calculates CYP with MMHL do not require the same level of support as those with SPHL.

These findings suggest that deaf awareness training is needed for all school staff to enable them to consider the help required by pupils with MMHL. This training can ensure that staff understand the equipment used by specific pupils and how as teachers they should use it appropriately in class. Deaf awareness training should be provided to all teachers and LSAs,

and it would be of benefit to present awareness sessions to the pupils in the school. It is however important to identify that CYP with HL are identified by LAs as a low incidence group of pupils. Those within this group with high needs are CYP with SPHL and access identified support, however those with MMHL are identified as low incidence, low need. SENCos/ALNCos should have instruction to know how to listen to a HA regularly, to identify small faults and understand how to support a pupil to independently clean and maintain their HA equipment, as well as complete some simple maintenance that can allow a pupil to continue with their learning and participate in class before a ToD can visit.

Furthermore, as considered in the discussion chapter (7.5 Attitude to life), the CYP with MMHL in this survey identified that they did not feel they were provided with opportunities to practise skills in real life situations. This was considered to be due to parental views that their HL made them vulnerable but also limited opportunities of being a team leader within group activities. Providing an opportunity to enable children and CYP to extend and enhance their learning through scaffolded tasks in the curriculum is important and reflects Vygotsky's philosophy (Vygotsky, 2012; Warford, 2011). The participants with MMHL in this survey did not feel they were provided with opportunities to develop some skills associated with resilience and teachers and SENCos should be encouraged to consider how they could facilitate this learning.

### **8.5 Parental support and aspirations of those with MMHL**

The findings of this study suggested that the parents of the CYP who took part considered that various careers and jobs would not be possible for their child, because of the HL (see 6.4.2). Matthew was 13 years old and had a mild HL and at the time of the interviews did not require HA. He had not settled on a specific career, but his views were changing due to feedback he was receiving from family and other people around him. Other CYP in this survey received similar advice in relation to job aspirations. This implies that support to families of children and CYP throughout their son/daughter's time in education is required, to enable them to understand that some roles may be more challenging or that access arrangements may need to be applied for if they decided to go to college or university. The explanation of what can be available and to ensure those with MMHL have high aspirations could be provided during parent evening consultations, meetings with the SENCo during such meetings and support given to careers advisors by ToDs to ensure positive and appropriate information is provided during secondary education.

### **8.6 Implications for Teachers of the Deaf and Sensory Support teams**

The findings of this study suggested that CYP with MMHL require support to enable them to build and apply resilience skills in various situations. To address the highlighted findings, ToDs should consider the identified areas from this research: Deaf awareness training recommended for schools; mainstream teachers and LSAs and specific training to ensure they are able to regularly check audiological equipment and report any faults to ToDs. Work

with careers staff in secondary schools would also be of value to ensure information about support available in workplaces, further and higher education is passed on.

The CYP with MMHL identified that understanding their own HL and the maintenance of equipment was limited. The focus of monitoring visits could include building their knowledge about this to allow them to share information confidently with others. Research has previously highlighted that the measure of a CYP's resilience skills was measured in academic achievement despite their HL, for example Pooley and Cohen (2010). As part of the support for CYP with MMHL it could include increased conversations associated with resilience skills and opportunities to develop and practise skills to support pupils.

It must be highlighted that the role of a ToD is a busy and varied one and that many of the points are addressed by ToDs in their support visits and identified as priorities by Sensory Support Teams. The elements are highlighted as key findings from this study and suggestions for practice.

### **8.7 Contribution of the study to the field of deaf education**

It was identified within the review of literature (Chapter 2) that little research had been undertaken focussing on the resilience skills of deaf CYP, specifically research that considered those with MMHL and involved qualitative research methods. This study considered if the initial observations of the researcher involving two pupils, Rachel and Jack,

were unique situations or whether the challenges they experienced with acquiring skills that would enable them to present as resilient in a variety of situations were experienced by others with MMHL.

The criteria in the NatSIP Eligibility Framework (NatSIP, 2017) is used by Sensory Support Teams to identify pupils who require ToD support. This research proposes that the criteria that assesses the severity of the HL and academic ability and achievement may not highlight all pupils who require support, especially those with MMHL, or who require assistance in understanding their HL even at a mild or moderate level. The findings from this study show that the criteria may require some reviewing or an additional area to enable those with MMHL with identified needs to access more support from a ToD if required.

The CYP in this research presented areas in which a ToD could support their understanding and skills development. A ToD support visit could include an opportunity to consider resilience skills linked with understanding and explaining their HL and equipment, and aspects of self-perception or problem-solving scenarios to consider how they would approach situations in real life.

The findings from this research present a discussion about how sensory support teams and LAs define the needs of deaf children and CYP. The NatSIP Eligibility Framework (NatSIP, 2017) has been an invaluable tool to provide a consistent measure of the needs of deaf CYP throughout the UK; however, the focus has primarily been on audiological support along



with language development and ensuring academic engagement. The results of this research propose that the acquisition of social and emotional skills is important to ensure CYP are able to become resilient. The assessment of such support may not be as definitive as previous research that highlights language development of children and CYP with SPHL do experience challenges within language development and therefore require specific teaching from ToD (Marschark and Hauser, 2012).

The areas of resilience discussed in this thesis considered: optimism; attitude to life; emotional awareness; self-control/organisation; social support networks; sense of humour; self-belief and self-esteem, and communication skills. The participants with MMHL suggested that this group does require support from ToDs to enable the development of such skills and discuss emotions as well as problem solving situations during individual or group sessions. This support is acknowledged and provided generally to all CYP through specific programmes for those with SPHL, such as those run by Deaf CAMHS and Healthy Minds (NDCS, 2020b).

The word 'resilience' was a challenging area to consider, as previous studies relating to the same theme have not always explicitly defined it. The term in relation to deaf children, as discussed within the literature review (see 2.4) often related to achieving despite being deaf and most research involved CYP with SPHL or those whose mode of communication was primarily sign language. This research identified CYP with MMHL who communicated orally and, through the mixed methods, gathered quantitative data that compared views of those with MMHL to those with ELH and SPHL. The qualitative interviews enabled the researcher

to explore some of the answers presented in the questionnaires which presented a holistic view of the CYP with MMHL.

### **8.8 Research Strengths**

As part of the review and evaluation of a research study, it is important to identify the elements that went well and can be celebrated as findings from the unique study or strategies that can and should be used in future research.

The initial aim of this research was to provide a voice to CYP with MMHL as very little research has been completed with this group, especially qualitative research that directly gathered their views and opinions. This research was specifically about CYP aged 11-15 with MMHL, and the data and the findings highlight that more research is required to support this group of CYP.

This research presented the researcher's definition of resilience and, from this, a questionnaire to investigate how resilient CYP felt they were and the skills they perceived they had, were investigated. The bespoke questionnaire was valuable as a tool as others that were considered for the study looked at different aspects of resilience and did not reflect the focus of the researcher's study. This questionnaire enabled the propositions to be completed by all three cohorts and the results to be compared and allowed the answers provided by some of the MMHL to be investigated further during the interviews. There were limitations

to this questionnaire, and these will be presented in the next section (see 7.9); however, having a questionnaire that developed from the definition of resilience and led into the interview vignettes enabled the research to have a solid structure and remain focussed through each phase.

The strength of this study was the engagement of the participants. The deaf population is heterogeneous, and this also applies to the group classified as MMHL, as the level of HL differs, and audiological equipment varies or may not be used or required. The present research recruited pupils from different LAs that presented a cross section of pupils identified as MMHL and from a mix of socioeconomic backgrounds. Although further research could, and should, be conducted in the future, this has enabled the researcher to consider generalisations from the findings presented.

A further strength of this study lies in the main findings. It was identified that although currently there are no specific intervention programmes for CYP with MMHL that teach and develop social and emotional skills, there is a need to support this group of CYP to enable them to feel resilient when presented with different situations. The CYP are audiological identified as deaf as they have a measurable HL and this diagnosis can mean family and friends believe that some career opportunities are not available to them. The CYP who participated in this study were being influenced by these views when considering their own career aspirations.

As a result of the findings, access to ToDs to support the development of social and emotional skills that can help a young person present as resilient in certain situations was limited. Pupils allocated to a ToD caseload was assessed by LAs using NatSIP Eligibility Framework (NatSIP, 2017) which has primarily focussed on audiological and language needs. This research questions whether other factors should be taken into consideration such as the social and emotional resilience skills of the child or young person.

## **8.9 Limitations of this research**

This study has presented and discussed findings from CYP with MMHL, a cohort and area of study that has had little focussed work previously. There were many findings and strengths of the study but, upon reflection, the researcher has identified several limitations associated with the sample, research tools and research design

### **8.9.1 Sample size**

The sample size selected for the study was initially identified as forty pupils in each of the three groups of CYP; ELH, SPHL and MMHL; this was reviewed and thirty was then identified as the target for each group. One reason for reviewing the initial sample size was because it was not the original aim to consider a large-scale study. Another was that the researcher initially experienced some reluctance from schools about engaging as the area of resilience skills is a developing area and strategies are not embedded in school practice. The revised number of 30 within each group was achieved for those with ELH, but 29 for those with

MMHL and 24 of those with SPHL. Although the target 30 participants were not identified in all three groups, the researcher considered the sample size to be the maximum that was possible and achievable within the time period (Gorard, 2003).

It was acknowledged that CYP with MMHL are a heterogeneous group and at times this made it difficult to identify participants. The number of CYP who took part in the study was slightly lower than the initial target, yet the data yielded interesting findings. The participants who signed up to take part within the identified time frame was sufficient to present data to answer the research question posed.

Malterud et al. (2016) suggested that, within the review of qualitative research, the exactness of why the researcher selected the sample size and an explanation to why some research has a small sample size is of value (Carlsen and Glenton, 2011; Mason, 2010). 'In quantitative studies, power calculations determines which sample size (N) is necessary to demonstrate effects of a certain magnitude from an intervention' (Malterud et al., 2016:1753). Within qualitative research that relate to interviews, they report that there is not a similar calculation as a researcher often identifies saturation as the reason for their sample size. The phrase saturation was initially presented by Glaser and Strauss (2017) who devised Grounded Theory, a process where new members of the sample and their data are compared to the previous data and the analysis of this. Under Grounded Theory, a researcher would reach saturation when any new data being gathered does not add any further element to the analysis or to the research question posed (Malterud et al., 2016).

With no specific calculation for the sample size within qualitative data, it is often considered that the *N*, or number within the sample, is established by the researcher when a sample of relevant size is identified and is of significant disparity to make clear or demonstrate the point made and presented by the data analysis (Kuzel, 1999; Marshall, 1996; Patton, 2015).

This was a mixed methods research study. The researcher originally proposed equal groups of 30 participants, but this was not achieved as it was particularly challenging within the timeframe to identify CYP with SPHL who did not have CI and were oral communicators. Equally, the CYP with MMHL as stated (subsection) formed a heterogeneous group and it was important to ensure the participants met the selection criteria. Although members of the target group with MMHL were different from the perspective of HL and technology used, the researcher considers that this added to the findings and the discussion. As reported by the Consortium for Research in Deaf Education (2019) in the review of literature (Chapter 2), 78% of deaf children and CYP are educated in mainstream schools and would include CYP with MMHL. The NatSIP (2019) Eligibility Framework highlighted that the CYP with MMHL would not meet criteria for high level support from a QToD. The potential disparate target group, however, represented wide and varied elements relating to this group of CYP.

The researcher identified herself as the person to gather the data to ensure consistency (see 3.10.6); however, in order to identify participants and to complete all tasks meant their time was restricted. Geographical locations accessible to the researcher were identified and it was important that the selection criteria were consistent for all three groups, meaning that

in some schools there was only one participant, and it was inevitable that the process of gathering the data was time consuming. The process of gathering the data as a researcher was invaluable and facilitated the initial phase of the analysis as there was already knowledge of the material.

### **8.9.2 Research Tools**

The research tools selected for this study were; a bespoke questionnaire and the use of interviews. The data presented some interesting findings; however, upon reflection, there were some limitations with the design of the research tools.

#### **8.9.2.i Questionnaire**

The questionnaire was not standardised as it was created by the researcher using the definition of resilience and the elements considered by the researcher required for CYP with MMHL to demonstrate resilience skills (see 2.4). In Phase One the CYP who were members of the pilot group discussed the questionnaire and liked the themes and the style. There were fifty-seven questions, and, upon reflection, this may have been too many to analyse in this small-scale research study. Although the pilot group presented positive feedback, the researcher felt that having so many questions could cause participant lethargy and that by the end of the questionnaire individuals might not be answering the questions as enthusiastically as the first set of questions. The researcher was aware of this and was able to present short breaks if it appeared the CYP were becoming tired during the task. This was

an important reflection from conducting this research that would be built into future studies and when working with other professionals who would be asked to gather data for a study. The questionnaire was certainly of value and the findings presented issues regarding levels of support for CYP with MMHL, that would allow them to learn and develop specific skills in order to present as resilient. The questionnaire could have been made shorter by grouping some questions together. For example, Question 13 asked if the young person discussed things that worried them with friends or family and Question 15 asked the same question, but about things that made them sad. Within the section on language and communication, Question 51 presented a statement relating to not feeling shy when they met new people and then Question 56 rephrased the question by asking if they were friendly and comfortable with new people. There are several questions/statements that were ambiguous that would require rewording if used in a future study or replicated in other areas (Table 86 below).

Example statements that require rewording	
9	When I get home from school/school holidays I am not bored and can find things to do.
30	I can think of things by myself (initiative) to help a friend or my family.
36	I can identify the areas that I need to work on and improve my skills.



<b>41</b>	I don't compare myself to other people.
<b>43</b>	I am not concerned about what others think of me.
<b>51</b>	I am not shy when I am with other people.

Table 90: Example statements that require rewording from the questionnaire.

In reviewing the questionnaire at the end of the research it was certainly of value and enabled the researcher to answer the initial research question. If conducting the study again, the questionnaire would be streamlined to avoid repetition and overlap. However, the questionnaire related directly to the researcher's definition of resilience, and they did not feel, based upon their definition, questions were left unanswered.

A possible limitation of this study is that multiple tests on the same set of data have been run as a result of having so many questions in the questionnaire presented to the same research sample. This may have resulted in the null hypothesis ( $H_0$ ) being rejected when it was actually true. To address this the researcher could have lowered the statistical level of significance and increased the sample size, this would reduce the probability of any Type 1 errors. By reducing the risk of this error would increase the probability of the findings being able to be applied to the MMHL population in general.

#### 8.9.2.ii Interviews

This study specifically considered the views of CYP with MMHL. This presented a limitation as, although the views of this group were presented, the study did not include interviews with all three groups. This may have supported the findings of the interviews and enabled the researcher to cross reference the challenges experienced by those with MMHL with the other groups.

#### 8.10 Future research

To the best of the researcher's knowledge, this is the first study investigating the resilience skills of CYP with MMHL, that included qualitative data, the voice of the CYP, and did not focus on resilience from the perspective of academic achievement. If, as discussed, the role of ToD could change to include more MMHL on their caseload and support them with developing and practising resilience skills in real life scenarios, a larger scale study would be of value. The mixed methods format of the study using the language assessments, questionnaire and then interviews presented interesting data and findings, as have been discussed. The development of the questionnaire to refine the propositions could enable it to be presented as part of a wider and larger study.

Furthermore, the findings of this study identified that CYP with MMHL would benefit from specific support and access to interventions to acquire particular skills. The results of this study could be used to look at intervention support and the effectiveness of supporting CYP

with MMHL gain resilience skills. A longitudinal study could investigate the impact of teaching specific skills associated to resilience to CYP with MMHL whilst in education and review its impact by considering how resilient the CYP with MMHL are as they transfer from school to employment or college/university. A longitudinal study could also consider the impact of the skills taught through scaffolding (Vygotsky, 2012; Warford, 2011) and opportunities to develop independence skills within school and social activities with peers. This could consider the how resilient the subjects felt as young adults when addressing specific situations within everyday life following school and education.

Moreover, this study identified perceived limited opportunities to practise skills learned in real-life situations using Vygotsky's scaffolding approach that encourages a child/young person to move from the comfort of acquired skill to the ZPD (Vygotsky, 2012; Warford, 2011). Future research could identify and investigate the effectiveness of strategies that support CYP with MMHL to extend their potential and their experiences of leading team and coordinating activities.

Finally, this research considered a view of resilience skills that has not been presented in the majority of research previously, particularly with CYP with a HL and especially those with MMHL. It is important to consider that the view and concept of resilience presented in this study is of value to schools, CYP and their families, as well as to the roles of support professionals. Therefore, further research that looks at resilience in this way is of value rather than the view that being resilient is considered as overcoming adversity which,

although of value in some ways, presents HL as an obstacle that the CYP have to overcome before they can achieve.

### **8.11 Summary**

This chapter aimed to pull together the key findings of the study as defined in the research question. As identified in the quote from Herbert and Herbert (1969), it presented the end of the story that was introduced and instigated by Rachel and Jack. The study identified that the CYP who participated in this research presented in a similar way to the youngsters who initially inspired it. The findings highlighted implications for schools, teachers, ToDs, parents and sensory support teams in how adaptations could be made to support these CYP develop resilience skills. The discussion of strategies and implications for practitioners intimated how this research could develop into further work and potential changes in policies and protocols that identify support CYP with a HL receive. This highlights the developments that could evolve from the findings in this study to provide the support to CYP with MMHL, 'I've always heard every ending is also a beginning...' (Jeff and Messer, 2012)

## Chapter 9: REFERENCE LIST

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## **Chapter 10: APPENDICES**

## 10.1 Appendix 1 - University of Birmingham Ethical Approval Letter

Dear Dr. Elizabeth Hodges & Dr. Emmanouela Terleksi,

Re: "Social, emotional and resilience skills of adolescents with mild/moderate hearing loss."  
Application for Ethical Review ERN\_18-1692

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly brought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at <https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx>) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (<https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx>) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at [healthandsafety@contacts.bham.ac.uk](mailto:healthandsafety@contacts.bham.ac.uk).

Kind regards,

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## 10.2 Appendix 2 – Information Leaflet – Schools



UNIVERSITY OF  
BIRMINGHAM

### School Information

#### **Resilience Skills of Children and Young People with a mild / moderate hearing loss**

I am inviting young people aged 11-15 years of age to participate in this research. The information sheet briefly details what the young people will be asked to do if they agree to take part in the research project. The parents / guardians will be provided with information sheets / leaflets and will be asked to sign a consent form agreeing for their son/daughter to be spoken to about the project. My contact details are on the back of this information sheet and on the leaflets if you have any further questions following our discussion. I will provide details to all the young people who are interested in participating and once parental consent is provided I will also ask for their agreement to participate in the tasks.

#### **Purpose of the project**

This research project is looking to investigate the resilience skills of young people who have a mild / moderate hearing loss. It will investigate if these young people are resilient in life situations and are able to apply social and emotional skills that they have been taught. There are specialist support agencies and interventions for young people who have a severe / profound loss and who have expected levels of hearing. I am looking if some additional support may be needed for young people with a mild / moderate hearing loss.

### **Who are the young people who will be asked to participate?**

I would like to recruit a group of participants aged between 11-15 years of age who have:-

- Expected levels of hearing,
- Mild / moderate hearing loss,
- Severe / profound hearing loss,

I would like a group of at least 30 participants from each of the groups identified to allow me to look at the results and compare any differences between the different groups of young people. The groups of young people will be from several schools not just your school.

Some of the young people who volunteer to take part may not be selected to complete the tasks. I need to ensure I have a variety of young people from different areas and who have different experiences.

### **What will the young people be asked to do if they participate**

The young people who are selected to take part in the research project may be asked to take part in one or more of the 3 tasks identified below:-

- **TASK 1**

Focus Group - A Focus Group of approx. 8 young people (no specified hearing ability) – A group discussion about what are social and emotional skills (45 minutes). This group will also be asked to pilot the questionnaire.

- **TASKS 2**

All 3 groups of young people (hearing, mild/moderate loss and severe/profound loss) will be asked to:-

1. Language Activity - Complete a language activity that will take no more than 30 minutes. This will allow me to ensure they have the language skills to participate in

the questionnaire / interview without becoming distressed about the language being used. I aim to research if there are any differences in resilience skills when compared to language abilities.

2. Questionnaire - Complete a Questionnaire survey that will take no more than 20 minutes. This will allow me to consider if there are any differences between different groups of young people ie young people with mild / moderate hearing loss compared to young people with expected levels of hearing and those with severe/ profound hearing loss.

- **TASK 3**

Interview – Some young people (8-10) with a mild / moderate hearing from the group of 30 will be asked to take part in an interview. It will last between 30-45 minutes. The interviews will enable me to investigate further the answers the young people provided in their questionnaires. There may only be one or two young people from each participating school.

The interviews will consist of questions based upon the themes identified in the questionnaires and also, they will be given short stories (vignettes) and asked their opinion on the situation or how they would deal with the problem. I am looking for a range of different young people for the interviews therefore not all young people with a mild/ moderate hearing loss will be asked to take part in an interview.

**When will the research take place?**

The study will take place during **Spring and Summer Terms 2019.**

If as a school you would like to support this project I will discuss and agree dates and times with you to ensure there is minimum disruption to you as a school and to the young people

**Are there any potential risks and benefits to participating in the research?**

The benefit of the research is to gain the views from the young people themselves. Quite often policies and decisions are made about children and young people without asking them directly what their views are. The aim of the research is to consider if young people with a mild / moderate hearing loss have the resilience skills to prepare them for adult life.

Specialist support is provided for young people with hearing and those with a severe / profound loss and I want to research if this group of young people require support that reflects their specific needs.

Addressing social and emotional skills and abilities with young people is a sensitive area and participants may through the research reveal situations where they feel vulnerable or in need of support.

Before participating in the project – questionnaire or the interviews, the young people will be informed that if they disclose any information that suggests they or someone else is at risk then I will follow the School's Safeguarding Policy and inform the appropriate member of staff and signpost the young people to the member of staff who can support them.

If the young people become upset during any of the tasks, they will be aware that I will inform the identified contact for my project / appropriate member of staff to ensure they receive support.

#### **Is information obtained during the research confidential?**

Yes, all data collected during the research study will be strictly confidential. When the data collected is presented in the final report, participants and their schools will not be individually identifiable and pseudonyms will be used to report information from interviews.

The data obtained will be stored securely on the University of Birmingham data store and this will be password protected and only I as the researcher will have direct access to this data.

#### **Do the young people have to participate in the research?**

No, the research is voluntary and if the parents do not want me to speak to their son / daughter I will not participate in the research. If the parents decide not to allow permission for their son / daughter to participate I will explain that this will not affect any support or work being completed by the school or the Teacher of the Deaf / Hearing Impaired Support Team.

If the parents agree to their son / daughter taking part in the research project they will need



to sign the consent form and return it to school or to the Teacher of the Deaf. I will then speak directly to the young person and gain their agreement to take part in the tasks.

Please can the consent forms be returned to the School Reception and I will arrange a date to collect the forms.

**Can the young people withdraw from the research project?**

Yes, the young people can withdraw from the research project at anytime up to **31<sup>st</sup>**

**December 2019**. After this date the data will have been analysed and the information will be being written up.

**What support am I asking from you as a school?**

I would like to approach the parents / guardians of the identified groups of young people and the young people themselves explaining that I have spoken to you as a school and the Head Teacher and that you have given me permission for the work to be completed during school time. The work agreed may include some or all of the following; a Focus Group of young people, language tasks and questionnaire and an interview.

I would like to ask that you will allow me to put posters up around school advertising my research and that Mr /Mrs ..... (SENCo or Receptionist) will be a contact for the Young People to collect an information leaflet and Consent Form. I request that all returning Consent Forms are collected in the box I will provide. I will arrange a date with Mr / Mrs ..... a week later to collect the forms.

**Feedback from the research**

Following the completion of the research study I will provide a brief one-page summary of the findings for the parents/guardians, young people and to you as a supporting school of the research study.

Thank you for your help and support and I have provided my contact details if you require any more details regarding the project.

**Further Information / Contact details**

If you require any further clarification or information regarding this research please contact:

Researcher – Catherine Walker

Email address –

Address – School of Education,

University of Birmingham,

Edgbaston,

Birmingham

My Supervisors are:-

Dr. Liz Hodges

Dr Emmanouela Terlektsi

### 10.3 Appendix 3 – Information Leaflet – Sensory Support Teams /ToDs



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#### Information – Sensory Services / Teachers of the Deaf

#### Resilience Skills of Children and Young People with a mild / moderate hearing loss

I am inviting young people aged 11-15 years of age to participate in this research. The information sheet briefly details what the young people will be asked to do if they agree to take part in the research project. I will speak to the Head Teacher / Principle and Head of Special Educational / Additional Needs of the individual schools to explain the research project and to gain their support and consent to complete work during school time. The parents / guardians will be provided with information sheets / leaflets and will be asked to sign a consent form agreeing for their son/daughter to be spoken to about the project. I will provide details to all the young people who are interested in participating and once parental consent is provided I will also ask for their agreement to participate in the tasks. My contact details are on the back of this information sheet and on the leaflets if you have any further questions following our discussion.

#### Purpose of the project

This research project is looking to investigate the resilience skills of young people who have a mild / moderate hearing loss. It will investigate if these young people are resilient in life situations and are able to apply social and emotional skills that they have been taught. There are specialist support agencies and interventions for young people who have a severe /

profound loss and who have expected levels of hearing. I am looking if some additional support may be needed for young people with a mild / moderate hearing loss.

**Who are the young people who will be asked to participate?**

I would like to recruit a group of participants who are aged between 11-15 years of age who have:-

- Expected levels of hearing,
- Mild / moderate hearing loss,
- Severe / profound hearing loss,

I would like to recruit 30 participants from each of the groups identified to allow me to look at the results and compare any differences between the different groups of young people.

The groups of young people will be from several schools. Some of the young people who volunteer to take part may not be selected to complete the tasks. I need to ensure I have a variety of young people from different areas and who have different experiences.

**What will the young people be asked to do if they participate**

The young people who are selected to take part in the research project may be asked to take part in one or more of the 3 tasks identified below:-

- **TASK 1**  
Focus Group - A Focus Group of approx. 8 young people (no specified hearing ability) – A group discussion about what are social and emotional skills (45 minutes). This group will also be asked to pilot the questionnaire.
- **TASKS 2 (CORE TASKS)**  
All 3 groups of young people (hearing, mild/moderate loss and severe/profound loss) will be asked to:-

3. Language Activity - Complete a language activity that will take no more than 30 minutes. This will allow me to ensure they have the language skills to participate in the questionnaire / interview without becoming distressed about the language being used. I aim to research if there are any differences in resilience skills when compared to language abilities.
  4. Questionnaire - Complete a questionnaire survey that will take no more than 20 minutes. This will allow me to consider if there are any differences between different groups of young people ie young people with mild / moderate hearing loss compared to young people with expected levels of hearing and those with severe/ profound hearing loss.
- **TASK 3**  
Interview – Some young people (8-10) with a mild / moderate hearing from the group of 30 will be asked to take part in an interview. It will last between 30-45 minutes. There may only be one or two young people from each participating school. The interviews will enable me to investigate further the answers the young people provided in their questionnaires.

The interviews will consist of questions based upon the themes identified in the questionnaires and also, they will be given short stories (vignettes) and asked their opinion on the situation or how they would deal with the problem. I am looking for a range of different young people for the interviews therefore not all young people with a mild/ moderate hearing loss will be asked to take part in an interview.

### **When will the research take place?**

The study will take place during *Spring and Summer Terms 2019.*

If as a Team you would like to support this project I will discuss and agree dates and times with you and the schools to ensure there is minimum disruption to you, the school and to the young people.

### **Are there any potential risks and benefits to participating in the research?**

The benefit of the research is to gain the views from the young people themselves. Quite

often policies and decisions are made about children and young people without asking them directly what their views are.

Addressing social and emotional skills and abilities with young people is a sensitive area and participants may through the research reveal situations where they feel vulnerable or in need of support.

Before participating in the project – questionnaire or the interviews, the young people will be informed that if they disclose any information that suggests they or someone else is at risk then I will follow the School's Safeguarding Policy and inform the appropriate member of staff and signpost the young people to the member of staff who can support them.

If the young people become upset during any of the tasks, they will be aware that I will inform the identified contact for my project / appropriate member of staff to ensure they receive support.

#### **Is information obtained during the research confidential?**

Yes, all data collected during the research study will be strictly confidential. When the data collected is presented in the final report, participants and their schools will not be individually identifiable and pseudonyms will be used to report information from interviews.

The data obtained will be stored securely on the University of Birmingham Data Store and this will be password protected and only I as the researcher will have direct access to this data.

#### **Do the young people have to participate in the research?**

No, the research is voluntary and if their parents do not want me to speak to their son / daughter they will not participate in the research. If the parents decide not to allow permission for their son / daughter to participate I will explain that this will not affect any support or work being completed by the school or the Teacher of the Deaf / Hearing Impaired Support Team.

Please can the consent forms for students with a hearing loss, both mild / moderate and severe / profound be collected by the Teachers of the Deaf. I will arrange a date to collect the forms from your team to allow me to identify and contact the students.

**Can the young people withdraw from the research project?**

Yes, the young people can withdraw from the research project at anytime up to **31<sup>st</sup>**

**December 2019** . After this date the data will have been analysed and the information will be being written up.

**What support am I asking from you as a ToD / Hearing Impaired Service?**

I would like to approach the parents / guardians of young people with identified hearing loss and the young people themselves explaining. It is important that I can explain that I have spoken to you as a Hearing Impaired Service and that any involvement will not affect the work being completed by and individual ToD or level of support provided. The work agreed may include some or all of the following; a Focus Group of young people, a language activity and questionnaire and possibly an interview. I may require ToDs to complete the Language assessments to help me baseline the pupils selected for participation in the research.

I need to approach young people with a mild / moderate and severe / profound hearing loss and request that you highlight young people that fit in to the identified criteria. I require Consent from their parents / guardians to gather information and to contact their son /daughter. I would like to ask if the Teachers of the Deaf would provide the young people with the information leaflets and Consent Forms and collect them the following week. I will arrange a date with you after this to collect all the Consent Forms from you.

**Feedback from the research**

Following the completion of the research study I will provide a brief one-page summary of the findings for the parents/guardians, young people, the participating school and you as the Hearing Impaired Service.

Thank you for your help and support and I have provided my contact details if you require any more details regarding the project.

**Further Information / Contact details:**

Researcher – Catherine Walker

Email address –

Address – School of Education,

University of Birmingham,

Edgbaston,

Birmingham

My Supervisors are:-

Dr. Liz Hodges

Dr Emmanouela Terlektsi



#### **10.4 Appendix 4 – Information Sheet (detailed) – Participants.**



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##### **Resilience Skills of Children and Young People with a mild / moderate hearing loss**

I am inviting young people aged 11-15 years of age to participate in this research. The information sheet briefly details what the young people will be asked to do if they agree to take part in the research project. I will speak to the Head Teacher / Principle and Head of Special Educational / Additional Needs of the individual schools to explain the research project and to gain their support and consent to complete work during school time. The parents / guardians will be provided with information sheets / leaflets and will be asked to sign a consent form agreeing for their son/daughter to be spoken to about the project. I will provide details to all the young people who are interested in participating and once parental consent is provided I will also ask for their agreement to participate in the tasks. My contact details are on the back of this information sheet and on the leaflets if you have any further questions following our discussion.

##### **Purpose of the project**

This research project is looking to investigate the resilience skills of young people who have a mild / moderate hearing loss. It will investigate if these young people are resilient in life situations and are able to apply social and emotional skills that they have been taught. There are specialist support agencies and interventions for young people who have a severe /

profound loss and who have expected levels of hearing. I am looking if some additional support may be needed for young people with a mild / moderate hearing loss.

**Who are the young people who will be asked to participate?**

I would like to recruit a group of participants who are aged between 11-15 years of age who have:-

- Expected levels of hearing,
- Mild / moderate hearing loss,
- Severe / profound hearing loss,

I would like to recruit 30 participants from each of the groups identified to allow me to look at the results and compare any differences between the different groups of young people.

The groups of young people will be from several schools. Some of the young people who volunteer to take part may not be selected to complete the tasks. I need to ensure I have a variety of young people from different areas and who have different experiences.

**What will the young people be asked to do if they participate**

The young people who are selected to take part in the research project may be asked to take part in one or more of the 3 tasks identified below:-

- **TASK 1**  
Focus Group - A Focus Group of approx. 8 young people (no specified hearing ability) – A group discussion about what are social and emotional skills (45 minutes). This group will also be asked to pilot the questionnaire.
- **TASKS 2 (CORE TASKS)**  
All 3 groups of young people (hearing, mild/moderate loss and severe/profound loss) will be asked to:-

5. Language Activity - Complete a language activity that will take no more than 30 minutes. This will allow me to ensure they have the language skills to participate in the questionnaire / interview without becoming distressed about the language being used. I aim to research if there are any differences in resilience skills when compared to language abilities.
  6. Questionnaire - Complete a questionnaire survey that will take no more than 20 minutes. This will allow me to consider if there are any differences between different groups of young people ie young people with mild / moderate hearing loss compared to young people with expected levels of hearing and those with severe/ profound hearing loss.
- **TASK 3**  
Interview – Some young people (8-10) with a mild / moderate hearing from the group of 30 will be asked to take part in an interview. It will last between 30-45 minutes. There may only be one or two young people from each participating school. The interviews will enable me to investigate further the answers the young people provided in their questionnaires.

The interviews will consist of questions based upon the themes identified in the questionnaires and also, they will be given short stories (vignettes) and asked their opinion on the situation or how they would deal with the problem. I am looking for a range of different young people for the interviews therefore not all young people with a mild/ moderate hearing loss will be asked to take part in an interview.

### **When will the research take place?**

The study will take place during *Spring and Summer Terms 2019.*

If as a Team you would like to support this project I will discuss and agree dates and times with you and the schools to ensure there is minimum disruption to you, the school and to the young people.

### **Are there any potential risks and benefits to participating in the research?**

The benefit of the research is to gain the views from the young people themselves. Quite

often policies and decisions are made about children and young people without asking them directly what their views are.

Addressing social and emotional skills and abilities with young people is a sensitive area and participants may through the research reveal situations where they feel vulnerable or in need of support.

Before participating in the project – questionnaire or the interviews, the young people will be informed that if they disclose any information that suggests they or someone else is at risk then I will follow the School's Safeguarding Policy and inform the appropriate member of staff and signpost the young people to the member of staff who can support them.

If the young people become upset during any of the tasks, they will be aware that I will inform the identified contact for my project / appropriate member of staff to ensure they receive support.

**Is information obtained during the research confidential?**

Yes, all data collected during the research study will be strictly confidential. When the data collected is presented in the final report, participants and their schools will not be individually identifiable and pseudonyms will be used to report information from interviews.

The data obtained will be stored securely on the University of Birmingham Data Store and this will be password protected and only I as the researcher will have direct access to this data.

**Do the young people have to participate in the research?**

No, the research is voluntary and if their parents do not want me to speak to their son / daughter they will not participate in the research. If the parents decide not to allow permission for their son / daughter to participate I will explain that this will not affect any support or work being completed by the school or the Teacher of the Deaf / Hearing Impaired Support Team.

Please can the consent forms for students with a hearing loss, both mild / moderate and severe / profound be collected by the Teachers of the Deaf. I will arrange a date to collect the forms from your team to allow me to identify and contact the students.

**Can the young people withdraw from the research project?**

Yes, the young people can withdraw from the research project at anytime up to **31<sup>st</sup>**

**December 2019** . After this date the data will have been analysed and the information will be being written up.

**What support am I asking from you as a ToD / Hearing Impaired Service?**

I would like to approach the parents / guardians of young people with identified hearing loss and the young people themselves explaining. It is important that I can explain that I have spoken to you as a Hearing Impaired Service and that any involvement will not affect the work being completed by and individual ToD or level of support provided. The work agreed may include some or all of the following; a Focus Group of young people, a language activity and questionnaire and possibly an interview. I may require ToDs to complete the Language assessments to help me baseline the pupils selected for participation in the research.

I need to approach young people with a mild / moderate and severe / profound hearing loss and request that you highlight young people that fit in to the identified criteria. I require Consent from their parents / guardians to gather information and to contact their son /daughter. I would like to ask if the Teachers of the Deaf would provide the young people with the information leaflets and Consent Forms and collect them the following week. I will arrange a date with you after this to collect all the Consent Forms from you.

**Feedback from the research**

Following the completion of the research study I will provide a brief one-page summary of the findings for the parents/guardians, young people, the participating school and you as the Hearing Impaired Service.

Thank you for your help and support and I have provided my contact details if you require any more details regarding the project.

**Further Information / Contact details:**

Researcher – Catherine Walker

Email address –

Address – School of Education,

University of Birmingham,

Edgbaston,

Birmingham

My Supervisors are:-

Dr. Liz Hodges

Dr Emmanouela Terlektsi

# I need YOUR help!

Date – Spring  
/Summer Term  
2019



shutterstock.com • 1023568351

*I am completing a research project on the social and emotional resilience skills of young people.*

**Please pick up a leaflet from:**

- Miss Walker (Head of Year 8)
- Room 154)



I would like a group of participants aged between 11-15 years of age who have:-

- Expected levels of hearing,
- Mild / moderate hearing loss,
- Severe / profound hearing loss,

What you need to do is:-

- Join in a group discussion (30 minutes)
- Complete a language task and questionnaire (20 minutes)
- Interview (30-45 minutes)

What you won't need to do is take an exam!

Thank you

## 10.6 Appendix 6 – Participant Information Sheet (detailed)

### **Participant Information Leaflet (detailed)**

- This information sheet has been put together for the young people who will be asked to participate in the research project.
  - It is a detailed account of all the information and areas that the participants need to be aware of when they agree to take part in the research. The participants are encouraged to share and discuss the information with their family before agreeing to take part in the research project.
  - This information leaflet is a detailed account, [a brief summary](#) is also provided. This second leaflet allow participants to check / review information at a quick glance.
  - Both the detailed information sheet and the leaflet can be kept by the young people.
-



## Participant Information Leaflet

Study title: Resilience skills of young people with a mild / moderate hearing loss

Researcher Name:

\_\_\_\_ Catherine Walker \_\_\_\_

Contact e-mail of Researcher:

\_\_\_\_ [Redacted] \_\_\_\_

Research Supervisor Name:

\_\_\_\_ Dr. Liz Hodges \_\_\_\_

I would like to invite you to take part in a study that I am carrying out as part of my PhD (Doctorate) at Birmingham University

Before you decide whether or not you wish to take part, you should read the information provided below carefully and, if you wish, discuss it with your family and teachers / friends, if you think it is appropriate. Take time to ask questions – don't feel rushed and don't feel under pressure to make a quick decision. I have provided my contact details if you would like to discuss anything about my research before you decide to take part.

You should clearly understand what you are agreeing to with this research study so that you can make a decision that is right for you. This process is known as 'Informed Consent'.

You don't have to take part in this study and a decision not to take part will have no effect on you.

You can change your mind about taking part in the study any time you like. Even if the study has started, you can still change your mind and 'opt out'. You don't have to give me a reason. If you do 'opt out' please be reassured that your decision will not have any effect on you.

#### Why is this study being done?

This study is taking place to find out if young people with a mild / moderate hearing loss require different social and emotional skills support compared to those who have expected levels of hearing and those with a severe / profound hearing loss.

I am also looking at studying if young people with mild / moderate hearing loss are able to apply the skills to help them prepare for the next stage of their development beyond school / education) ie resilience skills.

|

#### Why am you being asked to take part?

I am inviting you to take part in this research because I need to recruit participants to take part in a questionnaire survey and one interview lasting 30-45 minutes long. I need a group of participants who are aged between 11-15 years of age who have:-

- Expected levels of hearing,
- Mild / moderate hearing loss,
- Severe / profound hearing loss,

I have asked you to participate as I feel that the information you will provide will be invaluable to my research. I believe in 'Pupil Voice' and feel that it is important to ask young people their views and opinions.

#### How will the study be carried out?

I have spoken to your Head Teacher and the study will take place during school time. Your Head Teacher has allowed me to complete the questionnaires during Tutorial Time or at a time suitable to you and your school.

The questionnaire survey will be completed during the second half of the Spring Term - May / June and the interviews will be completed in the Summer Term – July 2019.

The young people I require for the study are those with:-

- Expected levels of hearing (30 participants)
- Mild / moderate hearing loss (30 participants)
- Severe / profound hearing loss (30 participants)

I plan to interview 8 – 10 young people who have a mild / moderate hearing loss. The interviews will last 30-45 minutes. The participants will be asked questions similar to those on the questionnaire. They may also be presented with short stories and asked their opinion about the story or how they would deal with the situation if it was them.

Some of the young people who volunteer to take part in the research project may not be selected to complete the tasks. I need to ensure I have a variety of young people from different areas and who have different experiences.

#### **What will happen to me if I agree to take part?**

If you agree to take part in the research project I may ask you to take part in one or more of the 3 tasks identified below:-

- **Task 1** - Group discussion (45 minutes) about social /emotional skills and resilience
- **Tasks 2** – Complete a language activity that will take no more than 30 minutes  
- Complete a Questionnaire survey that will take no more than 20 minutes
- **Task 3** - Possibly participate in an interview (30-45 minutes)

Some young people (8-10) with a mild / moderate hearing loss only, will be asked to take part in an interview.

The interviews will enable me to investigate further the answers the young people provided in their questionnaires. I am looking for a range of different young people for the interviews therefore not all young people with a mild/moderate hearing loss will be asked to take part in an interview. There may only be one or two young people from each participating school.

The interviews will consist of questions based upon the themes identified in the questionnaires and also, they will be given short stories (vignettes) and asked their opinion on the situation or how they would deal with the problem.

I have asked permission from your Head Teacher and all the task will be completed during school time. They may be completed during Tutorial Time or at a time agreed with you.

The study will take place during Spring and Summer Terms 2019. I will then look at all the information provided and consider if it gives me details about the support or different

teaching methods young people with a mild / moderate hearing loss may require whilst at school.

Participation in the research project is voluntary and you decide whether you would like to take part or not.

- If you agree to complete the *questionnaire* all the tasks will take no more than 1 hour and
- if you agree to participate in the *interview as well as the questionnaire* the total time I am asking from you is 1 ½ hours.

The language assessments will be completed by your visiting teacher of the deaf or myself.

The interviews will be conducted by myself. I will record the interviews (audio recording) this will allow me to listen to the interview again and reflect on the information you provide. Once the interviews have been typed up the audio recordings will be deleted.

#### **What happens if I don't want to take part?**

Nothing will happen if you do not want to take part in my research. I am inviting you to participate, but you have the right to accept or turn down the offer. Participation in the research project is voluntary.

If you decide not to participate, this will not affect any work that you are doing in school or from the Hearing Impaired Support Team.

If during the research project you decide that you no longer want to participate in the research or for your data to be included, then you have the right to withdraw from the project at anytime up to 31<sup>st</sup> December 2019 . After this date the data will have been analysed and the information will be being written up.

#### **How will my participation benefit the research and young people.**

I am keen to gain gather 'student voice'. As a teacher it is easy to look at a situation and think we know what could be done to help young people. I believe it is important to ask you directly to gather your opinions, this is why I have created a questionnaire and interview stories.



Following the gathering of information (questionnaires and interviews) I will look at all the information and consider if there are any particular points that are mentioned by several people. I will consider all the information provided and then write it up as part of my PhD assignment (thesis). I will write a one page summary of the research and will make sure you receive a copy, this will make sure you know how your information has been important to my research, but also how it may help young people in schools.

#### **What will happen to the information I provide?**

The information you provide is very important and I will store the information securely. All the questionnaire data and interview information will be stored on a secure site based at Birmingham University. This area will be password protected and only myself as the researcher will have access to all the information. I will share some information without names / school being identified with my two Supervisors - Dr. Liz Hodges / Dr. Emmanouela Terlektsi.

The information will be stored securely at the University of Birmingham for a maximum of 10 years as a check of my work, but only I will have access to the information. After the 10 years your information will automatically be deleted.

#### **Is the study confidential?**

##### **Records**

As a participant in the research you will not be named, or your school or where you live. This information is not required for my research or thesis and will not be documented in any written work I complete. You will be given a code number when completing the questionnaire, you are not asked to give me your name. This is to make sure I have the correct number of participants from the 3 groups: hearing, mild/moderate hearing loss and severe/profound hearing loss.

In my written thesis I may refer to some of your comments from the interviews, but your name will be changed and your school or town where you live will not be mentioned. All information is private and confidential, that is I will not directly name you in any written documentation.

##### **Safeguarding**

The information you provide during the interviews will not be discussed with other people with your name attached to the information. I will not discuss the information you provide directly with your parents or teachers.

If during the interview you disclose something about social and emotional health that I consider puts you or others at risk I am obliged to follow the School's Safeguarding Policy to ensure that I share the information with the correct professionals who can support, you or give you advice.

If you become upset during any of the tasks, I will inform the identified contact for my project / appropriate member of staff to ensure you receive support.

#### **Information**

All data and information you provide me as a researcher will be stored securely at Birmingham University in a specific account for my research. This account is secure and password protected, only I will have the password. I will share collected data with my PhD Supervisors (Dr Liz Hodges / Dr Emmanouela Terleksi) but again they will have to access the information using a specific password I provide them. No one else will have access to the information you provide me.

Your information will be stored securely on the University of Birmingham data storage system for up to 10 years, but only I as the researcher will be able to access it. It will be automatically deleted after 10 years.

#### **Results**

I will look at all the information provided to me to see if there are any common ideas. My work will be written up and published in my PhD thesis. I will send out a one-page summary to you so you know what conclusions I have found in my research and you will know how your information has helped me and other young people.

You will not be named individually in my thesis, however if I use some information that you gave me, I will change your name to ensure your details are confidential and private.

#### **Future Work**

Following the completion of my thesis I may be invited to present my research and its findings to other researchers or teachers / professionals. I will again ensure your details are confidential and you will not be named in my work.

**Where can I get further information?**

If you have any further questions about this research study or if you need any further information now or at any time in the future, please contact:

**Name:** Catherine Walker



**Address :** School of Education, Edgbaston Campus, Birmingham



**Phone No:**




**E-mail address:**

**My Supervisors are:-**

**Dr. Liz Hodges**

**Dr Emmanouela Terlektsi**

## 10.7 Appendix 7 – Participant Leaflet – Hearing Students (summary)



# Research Information

**What will happen to the information gathered?**

All information collected during the research study will be strictly confidential. It will be stored securely on the University of Birmingham data store and this will be password protected and only I as the researcher will have direct access to it.

When I write the final report, participants and their schools will not be individually identifiable and pseudonyms will be used to report information from interviews.

**Where can I get further information?**

If you have any further questions about this research study or if you need any further information now or at any time in the future, please contact:


**Researcher:** Catherine Walker

**My Supervisors are:-**

Dr. Liz Hodges                      Dr Emmanouela Terlektsi

Address : School of Education, Edgbaston Campus, Birmingham

E-mail address: [Redacted]

Thank you 

## Participant Information Leaflet - Hearing Students





[juliangooden.com](http://juliangooden.com)



[ethicsconsultation.birmingham.ac.uk](http://ethicsconsultation.birmingham.ac.uk)

### *Resilience skills of young people with a mild / moderate hearing loss*





## Research Information

### ***Why is this study being done?***

This study is taking place to find out if young people with a mild / moderate hearing loss consider themselves to be resilient. Resilience skills can help us deal with challenges we face in life now or can help us prepare for life beyond school.

I am also considering if young people with mild / moderate hearing loss require different social and emotional skills support as specialist professionals and interventions are available for hearing and profoundly deaf children and young people, but not those with a mild / moderate hearing loss.

As a young person with expected levels of hearing I am asking you to take part so that I can compare the results between the different group— hearing, mild / moderate hearing loss and those with severe / profound hearing loss.

### ***What will happen to me if I agree to take part?***

If you agree to take part in the research project I may ask you to: take part in one or both of the 2 tasks identified.

**TASK 1** - Take part in a 45 minute group discussion about what are social and emotional skills. This will be lead by myself and audio recorded.

#### **TASKS 2**

- A) Language activity that will take no more than 30 minutes, completed by myself.  
B) Questionnaire survey that will take no more than 20 minutes.

### ***Consent to take part in the research project.***

In order for me to speak to you I require consent from your parents / guardian. They must sign the Consent Form and return it to school. With the Consent Form completed I will arrange to meet you and ask if you are willing to complete one or more of the tasks identified.



## Research Information

Your DO NOT have to take part in this research, it is a voluntary activity. You can withdraw from the project at any point up to 31st December 2019.

### ***When will the research take place?***

I have asked permission from your Head Teacher and all the task will be completed during school time and at a time agreed with you.

The study will take place during Spring and Summer Terms 2019.

### ***Who will take part in the research?***

The young people I require for the study are aged 11-15 years with:-

- Expected levels of hearing (30 participants)
- Mild / moderate hearing loss (30 participants)
- Severe / profound hearing loss (30 participants)

Although you have expressed an interest in the project you may not be chosen to complete the tasks, as I need to ensure I have a range of young people from different schools and who have had different experiences. I would like to thank you however for expressing an interest in the research project

## 10.8 Appendix 8 – Participant Leaflet – Students with a hearing loss (summary)



### Research Information

#### What will happen to the information gathered?

All information collected during the research study will be strictly confidential. It will be stored securely on the University of Birmingham data store and this will be password protected and only I as the researcher will have direct access to it.

When I write the final report, participants and their schools will not be individually identifiable and pseudonyms will be used to report information from interviews.

#### Where can I get further information?

If you have any further questions about this research study or if you need any further information now or at any time in the future, please contact:

Researcher: Catherine Walker

#### My Supervisors are:-

Dr. Liz Hodges

Dr Emmanouela Terlektsi



Address : School of Education, Edgbaston Campus, Birmingham



E-mail address:

Thank you

### Participant Information Leaflet



[lulliangooden.com](http://lulliangooden.com)



[ethicsconsultation.net](http://ethicsconsultation.net)

**Resilience skills of young people with a  
mild / moderate hearing loss**





## Research Information

### **Why is this study being done?**

This study is taking place to find out if young people with a mild / moderate hearing loss have appropriate resilience skills. Resilience skills can help people deal with challenges we face in life now or can help us prepare for life beyond school.

I am also investigating if young people with mild / moderate hearing loss require different social and emotional skills support compared to those who have expected levels of hearing and those with a severe / profound hearing loss. Specialist professionals and interventions are available for hearing and profoundly deaf children and young people, but not those with a mild / moderate hearing loss.

### **What will happen to me if I agree to take part?**

If you agree to take part in the research project I may ask you to take part in one or more of the 3 tasks-

#### **TASK 1**

Group Discussion - Take part in a 45 minute group discussion about what are social and emotional skills. This will be audio recorded.

#### **TASKS 2 (CORE TASKS)**

- A) Language activity that will take no more than 30 minutes, completed by your visiting Teacher of the Deaf or myself.  
B) Questionnaire survey that will take no more than 20 minutes.

#### **TASK 3**

Interview with myself that will last between 30-45 minutes. will audio record the interviews to allow me to reflect on the information you provide. Once typed up the audio recordings will be deleted.

I will only interview 8 – 10 young people with a mild / moderate hearing loss. They will be asked questions similar to those on the questionnaire and they will be given short stories and asked their opinion on the situation or how they would deal with the problem. I am looking for a range of different young people for the interviews therefore you may not be chosen.



## Research Information

### **Consent to take part in the research project.**

In order for me to speak to you I require consent from your parents / guardian. They must sign the Consent Form and return it to school or to the Teacher of the Deaf. With the Consent Form completed I will arrange to meet you and ask if you are will to complete one or more of the tasks identified.

I will ask the Teacher of the Deaf information about your hearing levels including aided hearing level and when you were aided

Your DO NOT have to take part in this research, it is a voluntary activity. You can withdraw from the project at any point up to 31st December 2019.

### **When will the research take place?**

I have asked permission from your Head Teacher and all the task will be completed during school time and at a time agreed with you. This will ensure a minimum affect to your lessons.

The study will take place during Spring and Summer Terms 2019.

### **Who will take part in the research?**

The young people I require for the study are aged 11-15 years with:-

- Expected levels of hearing (30 participants)
- Mild / moderate hearing loss (30 participants)
- Severe / profound hearing loss (30 participants)

I am looking for a range of different young people to take part in my research. You may not be chosen, or you may only be asked to complete one or two tasks. I would like to thank you for offering to take part in my research project.

## 10.9 Appendix 9 – Information Sheet – Parent/Guardian (detailed)



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### Parent Information

#### **Resilience Skills of Children and Young People with a mild / moderate hearing loss**

I am inviting your son / daughter to participate in this research. Please read the information sheet and attached leaflet to decide if you are willing to give permission for your son/daughter to take part in the research. My contact details are on the back of this information sheet and on the leaflet if you have any further questions.

#### **Purpose of the project**

This research project is looking to investigate the resilience skills of young people who have a mild / moderate hearing loss. It will investigate if these young people are resilient in life situations and are able to apply social and emotional skills that they have been taught. There are specialist support agencies and interventions for young people who have a severe / profound loss and who have expected levels of hearing. I am looking if some additional support may be needed for young people with a mild / moderate hearing loss.

To help me compare results of young people with a mild / moderate loss I need to ask young people who have a severe / profound hearing loss and who have expected levels of hearing to take part in my research.

Your son / daughter has this leaflet as they have expressed an interest in the project or they match the requirements i.e. aged 11-15 and have either expected levels of hearing, a mild/moderate hearing loss or a severe/profound hearing loss.

Some of the young people who volunteer to take part may not be selected to complete the tasks. I need to ensure I have a variety of young people from different areas and who have different experiences.

**What will my son / daughter be asked to do if they participate?**

If you agree to let me speak to your son/daughter they may be asked to take part in one or more of the 3 tasks identified below:-

1. **Task 1** -Group discussion about what are social and emotional skills (45 minutes).
2. **Tasks 2 (CORE TASKS)**  
*Complete a language activity that will take no more than 30 minutes*  
*Complete a questionnaire survey that will take no more than 20 minutes.*
3. **Task 3** Interview – A small number of participants (8-10) with a mild / moderate hearing loss will be asked to participate in an interview, it will last between 30-45 minutes.

The interviews will consist of questions based upon the themes identified in the questionnaires and also, they will be given short stories (vignettes) and asked their opinion on the situation or how they would deal with the problem. I am looking for a range of different young people for the interviews therefore not all young people with a mild/ moderate hearing loss will be asked to take part in an interview.

**When will the research take place?**

The study will take place during **Spring and Summer Terms 2019.**

I will discuss and agree dates and times with the school to ensure there is minimum disruption to the school and to the young people who participate in the project.

**Are there any potential risks and benefits to participating in the research?**

The benefit of the research is to gain the views from the young people themselves. Quite often policies and decisions are made about children and young people without asking them directly what their views are.

Addressing social and emotional skills and abilities with young people is a sensitive area and participants may, through the research, reveal situations where they feel vulnerable or in need of support.

Before participating in the project – questionnaire or the interviews, the young people will be informed that if they disclose any information that suggests they or someone else is at risk then I will follow the school's safeguarding policy and inform the appropriate member of staff and signpost the young people to a member of staff who can support them.

If the young people become upset during any of the tasks, they will be aware that I will inform the identified contact for my project / appropriate member of staff to ensure they receive support.

**Is information obtained during the research confidential?**

Yes, all data collected during the research study will be strictly confidential. When the data collected is presented in the final report, participants and their schools will not be individually identifiable, and pseudonyms will be used to report information from interviews.

The data obtained will be stored securely on the University of Birmingham data store and this will be password protected and only I as the researcher will have direct access to this data.

**Does my son / daughter have to participate in the research?**

No, the research is voluntary and if you do not want me to speak to your son / daughter I will not ask to speak to them as part of the research. If you decide not to allow permission for your son / daughter to participate this will not affect any support or work being completed

by the school or the teacher of the Deaf / Hearing Impaired Support Team.

If you agree to your son / daughter taking part in the research project please sign the consent form and return it to school or to the Teacher of the Deaf. I will then speak directly to them and gain their agreement to take part in the tasks.

**Can my son / daughter withdraw from the research project?**

Yes, your son / daughter can withdraw from the research project at anytime up to **31<sup>st</sup>**

**December 2019** . After this date the data will have been analysed and the information will be being written up.

**Feedback from the research**

Following the completion of the research study I will provide a brief one-page summary of the research study and its findings for the young people, the supporting schools and to you as parents/guardians.

Thank you for your help and support and I have provided my contact details if you require any more details regarding the project.

**Further Information / Contact details**

If you require any further clarification or information regarding this research please contact:

Researcher – Catherine Walker

Email address – 

Address – School of Education,  
University of Birmingham,  
Edgbaston,  
Birmingham

My Supervisors are:-

Dr. Liz Hodges




Dr Emmanouela Terleksi





## 10.10 Appendix 10 – Information Leaflet – Parent/Guardian (summary)



### Research Information

**What will happen to the information gathered?**

All information collected during the research study will be strictly confidential. It will be stored securely on the University of Birmingham data store and this will be password protected and only I as the researcher will have direct access to it.

When I write the final report, participants and their schools will not be individually identifiable and pseudonyms will be used to report information from interviews.

**Where can I get further information?**

If you have any further questions about this research study or if you need any further information now or at any time in the future, please contact:

**Researcher:** Catherine Walker


**My Supervisors are:**

Dr. Liz Hodges                      Dr Emmanouela Terlektsi



Address : School of Education, Edgbaston Campus, Birmingham

E-mail address: [redacted]


Thank you



### Parent / Guardian Information Leaflet



juliengooden.com



ethicsconsultation.co.uk

**Resilience skills of young people with a mild / moderate hearing loss**



## Research Information

### Why is this study being done?

*This study is taking place to find out if young people with a mild / moderate hearing loss have appropriate resilience skills. Resilience skills can help people deal with challenges they face in life now or can help us prepare for life beyond school.*

*I am also looking at studying if young people with mild / moderate hearing loss require different social and emotional skills support compared to those who have expected levels of hearing and those with a severe / profound hearing loss. Specialist professionals and interventions are available for hearing and profoundly deaf children and young people, but not those with a mild / moderate hearing loss.*

### What tasks will your son / daughter take part in?

*There are 3 parts to my research and your son / daughter may take part in one or more of the tasks:*

**TASK 1** - Take part in a 45 minute group discussion about what are social and emotional skills. This will be audio recorded.

#### **TASKS 2 (CORE TASKS)**

*Complete a language activity that will take no more than 30 minutes*

*Complete a Questionnaire survey that will take no more than 20 minutes.*

**TASK 3** - Interview that will last between 30-45 minutes. The interviews will be audio recorded as this will allow me to reflect on the information the young people provide. Once the interviews have been typed up the audio recordings will be deleted.

*I plan to only interview 8 – 10 young people with a mild / moderate hearing loss. The interviews will last 30-45 minutes. The participants will be asked questions similar to those on the questionnaire and also they will be given short stories and asked their opinion on the situation or how they would deal with the problem. I am looking for a range of different young people for the interviews. Your son / daughter may not be chosen.*



## Research Information

### Consent to take part in the research project.

*In order for me to speak to your son/daughter I require your consent. If you are happy for me to speak to them please sign the Consent Form and return it to school or to the Teacher of the Deaf. I will not speak to them without this consent.*

*If your son / daughter has a hearing loss the consent will allow me to identify the level of hearing loss they experience and to ask for their aided hearing level.*

*Your son/ daughter does not have to take part in this research, it is a voluntary activity. They can withdraw from the project at any point up to 31st December 2019.*

### When will the research take place?

*The study will take place during Spring and Summer Terms 2019.*

*I have asked permission from the Head Teacher and all the task will be completed during school time and at a time agreed with your son/ daughter. This will ensure a minimum affect to their lessons.*

### Who will take part in the research?

*The young people I require for the study are aged 11-15 years with:-*

- Expected levels of hearing (30 participants)
- Mild / moderate hearing loss (30 participants)
- Severe / profound hearing loss (30 participants)

*Your son / daughter has this leaflet as they have expressed an interest in the project or they match the above requirements. They may not be chosen to take part in the final project, as I need to ensure I have a range of young people with different experiences.*

## 10.11 Appendix 11 – Research Consent Form (blank)



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### Consent Form

#### Research Project

A study of the social and emotional resilience skills of young people aged 11-15 years of age with a mild / moderate hearing loss. The research is part of my PhD study at the University of Birmingham.

My name - .....

School - .....

Age - ..... Signature - .....

Please circle your answer to the following questions.

- |   |            |           |
|---|------------|-----------|
| 1. I have been given a leaflet to explain the project?        | <b>YES</b> | <b>NO</b> |
| 2. I would like to take part in the project?                  | <b>YES</b> | <b>NO</b> |
| 3. I Know I can stop taking part in the research at Any time? | <b>YES</b> | <b>NO</b> |

- |   |     |    |
|---|-----|----|
| 4. I would like to take part in: -  |     |    |
| - A Group Discussion  | YES | NO |
| - Language task and Questionnaire   | YES | NO |
| - Interview   | YES | NO |
| 5. I understand that the researcher (Catherine) will record the Group Discussion and Interview using a digital recorder.  | YES | NO |
| 6. I understand that my answers will be in a report, but my Name will NOT be in the report.   | YES | NO |
| 7. I understand that if the researcher (Catherine) becomes Concerned about my wellbeing during the interview she will Let someone know in school so that they can support me. | YES | NO |

Thank you



## **Parental Consent Form**

### **Research Project**

A study of the social and emotional resilience skills of young people aged 11-15 years of age with a mild / moderate hearing loss.

### **Purpose of the Study**

This study is being completed as part of my PhD study at the University of Birmingham. Any information that is collected as part of the research study will be stored electronically in a secure data store at the University of Birmingham. The information will be password protected and only accessed by myself as the researcher and shared with my supervising tutors Dr. Liz Hodges and Dr. Emmanouela Terlektsi. The information will be stored at the University of Birmingham and will only be used for the purpose of this research study. No identifiable personal data including names or your son/ daughter's school will be included in the final report.

**Statements of consent** (please tick each statement and sign to allow your son/daughter to participate in the research project)

☐

I confirm that I have read and understand the participant information leaflet for this study.

☐

I have had opportunity to ask questions about the research project if necessary and I have had them answered satisfactorily.

☐

I understand that my son daughter's participation in this research project is voluntary and that I and they have a right to withdraw from the study without giving any

reason. If we withdraw from the study, it will have no effect on the work / support being offered by the school or the Teacher of the Deaf / Hearing Impaired Service.

☐ I understand that 31/12/2019 is the deadline for withdrawal from the study and any information will be destroyed and not included in the research if we choose to withdraw on or before this date. I understand that it will not be possible to remove any data from the research study after 31/12/2019.

☐ I understand that the researcher will contact my son / daughter to participate in one or all of the following activities – Group Discussion, Language task and Questionnaire and Interview.

**Please complete and return to School/ Teacher of the Deaf by DATE TO BE INSERTED**

PART B TO BE COMPLETED BY THE **PARENT/GUARDIAN** (1)

I have read and understood the accompanying letter and information leaflet and give permission for the young person (named) to take part in the research study.

Name of son / daughter (please circle) - .....

I am parent / guardian (Please circle). Name - .....

Signature - .....

Date - ...../...../.....





### Child Anxiety Life Interference Scale (CALIS Child Version)

Child's name:	Date:
---------------	-------

1. Do fears and worries upset or distress you?

Not at all      Only a little      Sometimes      Quite a lot      A great deal  
0                      1                      2                      3                      4

2. How much do fears and worries make it difficult for you to do the following things?

	Not at all	Only a little	Some times	Quite a lot	A great deal
a. Getting on with parents	0	1	2	3	4
b. Getting on with brothers and sisters (Answer 'Not at All' if you are an only child)	0	1	2	3	4
c. Being with friends outside of school	0	1	2	3	4
d. Getting your schoolwork done	0	1	2	3	4
e. Being with class mates at recess and lunch	0	1	2	3	4
f. Playing sport	0	1	2	3	4
g. Doing enjoyable activities like going to parties, movies or holidays	0	1	2	3	4
h. Daily activities such as getting ready for school, homework, playing and going to sleep	0	1	2	3	4

## 10.13 Appendix 13 – Child Automatic Thought Scale (CATS)



### Children's Automatic Thoughts Scale (CATS)

Name:	Today's Date:	
Date of Birth:	Gender: Male/ Female	Grade:

Instructions: Listed below are some thoughts that children and adolescents have said pop into their heads. Please read each thought carefully and decide how often, if at all, each thought popped into your head over the past week. Circle your answer in the following way:

Not at all      Sometimes      Fairly often      Often      All the time  
0                      1                      2                      3                      4

Say to yourself: "Over the past week I thought..."	Not at all	Some times	Fairly often	Often	All the time
1. Kids will think I'm stupid	0	1	2	3	4
2. I have the right to take revenge on people if they deserve it	0	1	2	3	4
3. I can't do anything right	0	1	2	3	4
4. I'm going to have an accident	0	1	2	3	4
5. Other kids are stupid	0	1	2	3	4
6. I'm worried that I'm going to get teased	0	1	2	3	4
7. I'm going crazy	0	1	2	3	4
8. Kids are going to laugh at me	0	1	2	3	4
9. I'm going to die	0	1	2	3	4
10. Most people are against me	0	1	2	3	4
11. I am worthless	0	1	2	3	4
12. My mum or dad are going to get hurt	0	1	2	3	4
13. Nothing ever works out for me anymore	0	1	2	3	4
14. I'm going to look silly	0	1	2	3	4
15. I won't let anyone get away with picking on me	0	1	2	3	4
16. I'm scared of losing control	0	1	2	3	4
17. It's my fault that things have gone wrong	0	1	2	3	4
18. People are thinking bad things about me	0	1	2	3	4
19. If someone hurts me, I have the right to hurt them back	0	1	2	3	4
20. I'm going to get hurt	0	1	2	3	4

centreforemotionalhealth.com.au

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Original Publication: Schniering, C. A. & Rapee, R. M. (2002)

The information in this document is not intended as a substitute for professional medical advice, diagnosis or treatment.





## Children's Automatic Thoughts Scale (CATS)

Name:

Today's Date:

Say to yourself: "Over the past week I thought..."	Not at all	Some times	Fairly often	Often	All the time
21. I'm afraid of what other kids will think of me	0	1	2	3	4
22. Some people deserve what they get	0	1	2	3	4
23. I've made such a mess of my life	0	1	2	3	4
24. Something awful is going to happen	0	1	2	3	4
25. I look like an idiot	0	1	2	3	4
26. I'll never be as good as other people are	0	1	2	3	4
27. I always get blamed for things that are not my fault	0	1	2	3	4
28. I am a failure	0	1	2	3	4
29. Other kids are making fun of me	0	1	2	3	4
30. Life is not worth living	0	1	2	3	4
31. Everyone is staring at me	0	1	2	3	4
32. I'm afraid I will make a fool of myself	0	1	2	3	4
33. I'm scared that somebody might die	0	1	2	3	4
34. I will never overcome my problems	0	1	2	3	4
35. People always try to get me into trouble	0	1	2	3	4
36. There is something very wrong with me	0	1	2	3	4
37. Some people are bad	0	1	2	3	4
38. I hate myself	0	1	2	3	4
39. Something will happen to someone I care about	0	1	2	3	4
40. Bad people deserve to get punished	0	1	2	3	4

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Original Publication: Schniering, C. A. & Rapee, R. M. (2002)

The information in this document is not intended as a substitute for professional medical advice, diagnosis or treatment.

## 10.14 Appendix 14 – Strengths and Difficulties Questionnaire (SDQ)

### Strengths and Difficulties Questionnaire

P 4-17

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months.

Child's Name .....

Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children (treats, toys, pencils etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often has temper tantrums or hot tempers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, tends to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally obedient, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries, often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, down-hearted or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets on better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sees tasks through to the end, good attention span	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

**Please turn over - there are a few more questions on the other side**

Overall, do you think that your child has difficulties in one or more of the following areas:  
emotions, concentration, behaviour or being able to get on with other people?

No	Yes- minor difficulties	Yes- definite difficulties	Yes- severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered "Yes", please answer the following questions about these difficulties:

• How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	Over a year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties upset or distress your child?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties interfere with your child's everyday life in the following areas?

	Not at all	Only a little	Quite a lot	A great deal
HOME LIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASSROOM LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties put a burden on you or the family as a whole?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature .....

Date .....

Mother/Father/Other (please specify:)

**Thank you very much for your help**

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## 10.15 Appendix 15 – All Special Kids (ASK) Social Skills Club pre-assessment questionnaire



### ASK SOCIAL SKILLS CLUB PRE-ASSESSMENT QUESTIONNAIRE

Based on the parent and therapist's assessments, each group is tailored to meet the specific needs of the children within that particular group. The information requested in this questionnaire will be used to help with the programme facilitator with their initial assessment.

<b>Student's Name</b> (Last name, First name)
<b>Parent or Guardian</b> (Last name, First name.):
<b>Date:</b>

Please rate your child's skills in the following areas:

Conversational Skills	Good	Average	Below Average
Maintaining appropriate physical distance from others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Listening skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using tone of voice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Using appropriate greetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introducing yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Starting a conversation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking turns speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowing how and when to interrupt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Staying on topic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintaining a conversation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Joining a conversation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ending a conversation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Asking questions when you don't understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saying "I don't know"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Introducing topics of interest to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shifting topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not talking too long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with sensitive topics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complimenting others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Cooperative Play</b>	<b>Good</b>	<b>Average</b>	<b>Below Average</b>
Asking someone to play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Joining others in play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compromising	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sharing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking turns	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playing a game	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with losing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with winning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ending a play activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accepts when other children ask to play	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Friendship Management</b>	<b>Good</b>	<b>Average</b>	<b>Below Average</b>
Informal versus formal behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respecting personal boundaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facts versus opinions (respecting other's opinions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sharing a friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting attention in positive ways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offering help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When to tell on someone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Modesty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate touch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with peer pressure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with rumors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calling a friend on the phone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Answering the phone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Getting to know someone new	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Apologizes when appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Empathy</b>	<b>Good</b>	<b>Average</b>	<b>Below Average</b>
Showing understanding for other's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheering up a friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<b>Self-Regulation</b>	<b>Good</b>	<b>Average</b>	<b>Below Average</b>
Recognizes feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feeling thermometer (placing feelings in perspective)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Keeping calm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Understanding anger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Talking to others when upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with family problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Problem solving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with a mistake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trying when something is difficult	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tries again when frustrated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trying something new	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Conflict Management</b>	<b>Good</b>	<b>Average</b>	<b>Below Average</b>
Asserting yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accepting "No" for an answer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with teasing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has different words to deal with teasing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with being left out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoiding being "set-up"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Giving criticism in a positive way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Accepting criticism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Having respectful attitude	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please return the completed form to the programme facilitator at

[socialskills@allspecialkids.org](mailto:socialskills@allspecialkids.org) prior to arranging a mandatory social skills assessment.

## 10.16 Appendix 16 - Research Questionnaire



UNIVERSITY OF  
BIRMINGHAM



Thank you for agreeing to complete this questionnaire. Your comments will help as part of my PhD research study.

Thank You



1. How old are you now? .....

2. Gender (Please circle).

boy / male

girl / female

Prefer not to say

0. No Opinion	1. Strongly Disagree	2. Disagree	3. Agree	4. Strongly Agree
Question		Answer		
		Please put a cross <b>X</b> for your response		
Optimism				
1. I can introduce myself to new people	0	1	2	3
2. I can identify skills I have or things I can do well	0	1	2	3
3. I can identify things I can't do and will practice them to improve my ability/ skill.	0	1	2	3
4. I can listen to and take advice from people.	0	1	2	3



5. I can talk about myself positively even things I find challenging due to eg a hearing loss, Dyslexia, etc.	0	1	2	3	4
6. I can tell people about my hearing loss and my hearing aids or other equipment I use.	0	1	2	3	4
Attitude to life					
7. I can plan things to do at weekends or during school holidays	0	1	2	3	4
8. I think of new things to do eg learn a new skills eg language, join a club	0	1	2	3	4
9. When I get home from school / school holidays I am bored and can't find anything to do	0	1	2	3	4
10.					
Emotional Awareness					
11. I know things that make me happy	0	1	2	3	4
12. I can tell family and friends things that make me happy.	0	1	2	3	4
13. I can identify the things that worry me	0	1	2	3	4
14. I can tell family and friends things that worry me.	0	1	2	3	4
15. I can identify things that upset me or make me sad	0	1	2	3	4
16. I can tell family and friends about things that make me sad.	0	1	2	3	4

17. I can recognise when someone is upset or sad and I know how to comfort them.	0	1	2	3	4
18. If I get something wrong I can cope with this and can deal with people talking to me about this	0	1	2	3	4
19. I can cope and deal with a person who has a different view to mine.	0	1	2	3	4
Control of self – your response to circumstances/organisational ability					
20. I cope well with change – lessons change/family can't do a certain activity	0	1	2	3	4
21. I can lead a team or group of friends to complete a task	0	1	2	3	4
22. I can work as part of a team taking directions from someone else.	0	1	2	3	4
23. I can cope and deal with losing eg a game, competition	0	1	2	3	4
24. I usually complete homework and tasks on time.	0	1	2	3	4
Social support – network of family or friends					
25. I talk to my family – parents / guardians, brothers / sisters, auntie / uncle about things that happen in my life	0	1	2	3	4
26. I enjoy holidays and activities with my family	0	1	2	3	4
27. I enjoy holidays and activities at the weekends with friends	0	1	2	3	4

28. I only have one or two close friends.	0	1	2	3	4
29. I have a large group of friends.	0	1	2	3	4
30. I prefer to make friends on Social Media – Facebook, Twitter, WhatsApp etc	0	1	2	3	4
31. I can think of things by myself (initiative) to help a friend or my family.	0	1	2	3	4
32. I am happy for my friends and family to help me	0	1	2	3	4
Sense of humour					
33. If I make a mistake I can laugh at it and find a way of putting it right	0	1	2	3	4
34. I don't mind when friends/family laugh at me or have a joke at my expense.	0	1	2	3	4
Self-belief and self esteem					
35. I know I am good at certain things and have skills	0	1	2	3	4
36. I can identify my good points and qualities.	0	1	2	3	4
37. I can identify the areas that I need to work on and improve my skills.	0	1	2	3	4
38. I believe I am a special person with unique skills and qualities.	0	1	2	3	4
39. I am proud of myself, of the things I can do and skills / knowledge I have learnt.	0	1	2	3	4
40. I am confident to give my opinion on things.	0	1	2	3	4

41. I am confident about my appearance.	0	1	2	3	4
42. I don't compare myself to other people.	0	1	2	3	4
43. If make a mistake or do something wrong I am confident to admit to it and own up.	0	1	2	3	4
44. I am not concerned about what others think of me	0	1	2	3	4
45. I am not hurt by the opinions and comments of others	0	1	2	3	4
46. I do not believe that other people are better than me.	0	1	2	3	4
47. I am not embarrassed by the actions of others such as my family, friends, brothers /sisters.	0	1	2	3	4
48. I don't let people persuade me to do things I don't want to do.	0	1	2	3	4
Communication Skills					
49. I listen to other people's views and opinions.	0	1	2	3	4
50. I can start a new conversation	0	1	2	3	4
51. I can start a conversation with people I don't know.	0	1	2	3	4
52. I am shy when I am with other people	0	1	2	3	4
53. I use appropriate greetings with different people – friends, family, teachers, visitors etc	0	1	2	3	4
54. I can maintain a conversation with people	0	1	2	3	4

55. I can end a conversation appropriately without appearing rude.	0	1	2	3	4
56. I can ask for help when I don't know something or didn't hear an instruction / information.	0	1	2	3	4
57. I am friendly and comfortable with new people	0	1	2	3	4
58. It doesn't bother me to talk in front of a group of people	0	1	2	3	4

1. Overall do you think that you have difficulties in one or more of the following areas:-

**Emotions, concentration, behaviour or being able to get on with other people?**

No

Yes – minor  
difficulties

Yes – definite  
difficulties

Yes - severe  
difficulties

☐
☐
☐
☐

If you have answered '**YES**', please answer the following questions about these difficulties.

2. How long have these difficulties been present?

Less than  
a month

1-5  
months

6-12  
months

Over  
a year

☐
☐
☐
☐

3. Do the difficulties upset or distress you?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Do the difficulties interfere with your everyday life in the following areas?

	Not at all	Only a little	Quite a lot	A great deal
HOMELIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASSROOM LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Do the difficulties make it harder for those around you (family, friends, teachers etc)?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Please briefly describe the work /job you would like to do when you finish school/ education.

.....

.....

***Thank you for your help by completing the questionnaire***



## **10.17 Appendix 17 – Interview Schedule**

### **Interview Schedule**

This schedule is constructed to show the questions that may be presented to the young people within the Interviews. The Interviews will be semi-structured and not all questions or vignettes will be presented to every young person participating in the Interviews.

- The 'Introduction' questions will be presented to settle the young people to the interview.
- Each of the themes identified in the questionnaire focussing on areas of resilience or ability to apply the social and emotional skills has been used in the Interview Schedule. There is a vignette created that will allow the young people to consider the skill without initially having to reflect on their own.
- Under each theme there are questions that will allow the researcher to ask the young person to reflect on the skill or consider if they do have the skills to address the situation.



## Interview Schedule

The Interviews will be semi-structured and not all questions or vignettes will be presented to every young person participating in the Interviews.


Theme / Topic	Questions / Vignette presented	Possible follow up questions	Probes
INTRODUCTION	<u>Questions</u> <ul style="list-style-type: none"> <li>• Thank you for agreeing to meet with me today. What lesson should you be in now?</li> <li>• Is this your favourite lesson?</li> <li>• What is your least favourite lesson?</li> <li>• On your questionnaire you identified ..... as a role / career you would like to do after leaving school – can you tell me about this role and why you would like to pursue a career as / in .....?</li> </ul>	<ul style="list-style-type: none"> <li>• Why?</li> <li>• What skills do you think you need to have / learn to do this job?</li> </ul>	<ul style="list-style-type: none"> <li>• Do you think they need to know about your HL?</li> <li>• How will you explain you HL to an employer?</li> <li>• What support do you think you may require to help you complete your job?</li> </ul>
1. Optimism – focus on strength	<u>Vignette</u> Isaac is 15 years old and lives at home with his Mum, Dad and his twin brother and sister who are 6 years old. Isaac has a mild hearing loss. Isaac's Dad works away from home during the week and on Sunday evening his Mum had a migraine and needed to go to bed – usually these can last for 24 hours so Isaac's Mum would	If you were Isaac how would you:- <ul style="list-style-type: none"> <li>• React to your Mum being unwell.</li> <li>• How would you help your family, Mum, Dad, brother and sister?</li> </ul>	<ul style="list-style-type: none"> <li>• Why?</li> <li>• Can you tell me more?</li> </ul>

	probably be unwell until Monday evening.		
	<p><u>Vignette</u></p> <p>Jack is 15 years old he has a moderate hearing loss affecting both ears. He needs to wear hearing aids to hear conversations, listen to teachers in school and to correctly hear information, without the hearing aids he can miss information or get things wrong. Jack is very sporty and loves to play football and other sports; he is a bit worried about his new school accepting him in the football team because of his hearing aids. Jack has moved schools 3 times in the last 8 years due to his father's work. He is about to go to a new school and is thinking about introducing himself to his new school mates and teachers.</p>	<p>If you were Jack;</p> <ul style="list-style-type: none"> <li>• How would you introduce yourself?</li> <li>• What would you tell people about yourself?</li> <li>• Is there anything that you wouldn't tell people?</li> <li>• Would you tell people that you wore / wear hearing aids?</li> </ul>	<ul style="list-style-type: none"> <li>• Why?</li> <li>• Can you tell me why you would do that?</li> </ul>
	<p><u>Questions</u></p> <ul style="list-style-type: none"> <li>• You told me ..... was your favourite lesson. Why is ..... Your favourite lesson?</li> <li>• Are you good at .....?</li> <li>• What other skills do you think you have?</li> <li>• What are you good at doing?</li> </ul>		
<b>2. Attitude to life, focus on action</b>	<p><u>Vignette</u></p> <p>Emily is 15 years old and is about to finish school for the summer holidays. Emily enjoys having trips out with friends and family. She has a good group of friends who enjoy doing different activities and she has a younger sister who is 13 years old. Emily lives 10 minute car drive from the bus and train stations and the stations can take her to the countryside, to the seaside or to an out of town shopping centre (outlet village). There is a bus stop at the end of Emily's road</p>	<p>If you were Emily planning a trip out:-</p> <ul style="list-style-type: none"> <li>• Where would you go?</li> <li>• How would you get there?</li> <li>• What other things do you need to plan or think about when planning a trip out.</li> <li>• Are there any special things you consider</li> </ul>	<ul style="list-style-type: none"> <li>• Why would you need to do that?</li> </ul>

	that goes to the centre of town where the train and bus stations are. Emily has a moderate hearing loss and wears 2 hearing aids.	due to your hearing loss?	
	<u>Questions</u> <ul style="list-style-type: none"> <li>• Do you have a weekend job / summer job?</li> <li>• Do you go shopping / out with your friends by yourself / with friends without your family?</li> <li>• What would you like to do when you leave school / education</li> </ul>		
3. Emotional Awareness – key to good communication	<u>Vignette</u> Mike has a mild / moderate hearing loss. Mike went to the dentist last week and was told he needed to go to hospital for further treatment. Mike has never been to hospital, but he remembers going to see his granddad in hospital when he was younger and his granddad had died in hospital. He was particularly worried about the treatment and about going to hospital as it had been a scary place when he was young. Following the information about the dentist his behaviour changed in school with friends and teachers and at home with his family.	If you were Mike; <ul style="list-style-type: none"> <li>• Who would you ask or where would you get information from?</li> <li>• Who would you talk to about your concerns?</li> <li>• What advice would you give Mike to help him in this situation?</li> </ul>	<ul style="list-style-type: none"> <li>• Why would you do that?</li> <li>• Why would you feel like that?</li> <li>• Can you tell me more?</li> </ul>
	<u>Questions</u> <ul style="list-style-type: none"> <li>• What makes you happy?</li> <li>• What makes you sad?</li> <li>• Do you worry about things or are scared of doing somethings?</li> <li>• How do you behave when you are worried / scared?</li> <li>• Who do you ask for help from when you are worried / scared?</li> </ul>		

<p><b>4. Control of self – your response to circumstances/organisational ability</b></p>	<p><u>Vignette</u> Bethan loved singing and was a member of a choir. She had a bilateral mild / moderate hearing loss. During a practice for a big production she made a mistake and sang a wrong note. The choir had a laugh about it as she had made the whole choir sing out of key, for the rest of the practice she was nicknamed ‘wobbly note’.</p>	<p>If you were Bethan;</p> <ul style="list-style-type: none"> <li>• How would you feel in this situation?</li> <li>• How would you respond?</li> <li>• How would you cope with the nickname?</li> <li>• What are your feelings about the other people in the choir?</li> </ul>	<ul style="list-style-type: none"> <li>• Go on ....</li> <li>• Can you give me more information?</li> </ul>
	<p><u>Vignette</u> In school Chris has been asked to work as part of a team to design a poster for the Sports Day. The teachers asked the different groups to choose a Team Leader. Chris was keen to be Team Leader and presented reasons to the group why he would be a good leader, but his best friend was chosen instead. During the task Chris suggested several ideas that he thought were really good and eye catching, but the group initially didn’t want to listen to his ideas. Chris did manage to present his ideas, but the group and the Team Leader chose not to use them and went with a different design.</p>	<ul style="list-style-type: none"> <li>• Has this ever happened to you?</li> <li>• Have you ever wanted to take a lead in a play, be team captain or group leader?</li> <li>• How would you feel if your best friend was chosen as Team Leader instead of you?</li> <li>• How would you respond to the group not using your ideas?</li> </ul>	<ul style="list-style-type: none"> <li>• Can you explain further...?</li> <li>• Can you go on...?</li> </ul>
	<p><u>Questions</u></p> <ul style="list-style-type: none"> <li>• When you have a lot of homework to do, are you good at planning?</li> <li>• When something goes wrong what do you do?</li> <li>• When your friends / family don’t listen to your ideas how do you behave / react?</li> <li>• If you are upset or worried about something in school who would go, to speak to? Would you speak to them?</li> </ul>		

<b>5. Social support – network of family or friends</b>	<u>Vignettes</u> Isaac is 15 years old and lives at home with his Mum, Dad and his twin brother and sister who are 6 years old. Isaac has a mild hearing loss. Isaac's Dad works away from home during the week and on Sunday evening his Mum had a migraine and needed to go to bed – usually these can last for 24 hours so Isaac's Mum would probably be unwell until Monday evening.	If you were Isaac how would you:- <ul style="list-style-type: none"> <li>• React to your Mum being unwell.</li> <li>• How would you help your family, Mum, Dad, brother and sister?</li> </ul>	<ul style="list-style-type: none"> <li>• Why?</li> <li>• Can you tell me more?</li> </ul>
	<u>Vignettes</u> Kira is 15 years old and has just started in Year 11 and is due to take her GCSE's next summer. Kira is going to a family wedding at the weekend. At the wedding will be relatives who have not seen Kira for a few years – cousins, auntie's and uncles and they will be keen to know what Kira is doing in school and what she wants to do when she finishes school next year. Kira has a moderate hearing loss and many of her relatives do not know she now wears hearing aids.	If you were Kira how would you: - <ul style="list-style-type: none"> <li>• answer all the questions about what you want to do when you finish your GCSE's?</li> <li>• What do you think Kira should tell her family about her hearing loss?</li> <li>• Would you be confident to tell people about your hearing aids?</li> </ul>	<ul style="list-style-type: none"> <li>• Why?</li> <li>• Can you expand that answer?</li> <li>• Why would you feel like that?</li> </ul>
	<u>Questions</u> <ul style="list-style-type: none"> <li>• Who is your best friend?</li> <li>• Why are they your best friend?</li> <li>• Do you have one/two close friends or a large group of friends?</li> <li>• Do you talk to your family when you need advice or worried about things? (Mum, Dad, Grandparents, Aunts, Uncles, brothers/sisters etc)</li> </ul>		
<b>6. Ability to problem solve - willing to</b>	<u>Vignettes</u>	<ul style="list-style-type: none"> <li>• What do you think Connor will do?</li> </ul>	

<p><b>adapt/ be flexible.</b></p>	<p>Connor enjoys dance and drama and is part of a Dance group in school and outside of school. Connor and his friends have decided to enter a competition and have arranged to practice their routine at lunchtime in the school's drama studio. Connor and his friends were well organised and booked the room 2 months ago. On Friday they had an e-mail from the Arts Department to say the room had been double booked as another group had booked the room last week, but the person booking the room hadn't seen that it was already booked for Connor and his friends.</p>	<ul style="list-style-type: none"> <li>• Who should use the room?</li> <li>• How could Connor sort out the problem?</li> <li>• What would you do to sort the problem out if this happened to you.</li> </ul>	
	<p><u>Vignettes</u></p> <p>Connor is on two weeks Work Experience at an office in the City Centre. He sorted out his transport and this meant – catching a train and then a bus home. On the second day going to work he catches the bus to the train station, but the train he was due to get has been cancelled?</p>	<ul style="list-style-type: none"> <li>• If you were Connor what would you do?</li> <li>• How can Connor sort this problem out?</li> <li>• Should Connor go home today and try again tomorrow?</li> <li>• If this happened to you, what would you do?</li> </ul>	<ul style="list-style-type: none"> <li>• Can you give me more details?</li> <li>• How would you feel? / How would Connor feel?</li> </ul>
	<p><u>Vignette</u> (added following the focus group feedback).</p> <p>Emily arranged to meet up with friends in town / city centre, but they didn't arrive at the agreed meeting time. The bus home that Emily's parents asked her to get home was due, what should she do?</p>	<ul style="list-style-type: none"> <li>• If you were Emily what would you do?</li> <li>• How should Emily solve the problem?</li> <li>• Should Emily go home without her friends?</li> <li>• Should Emily wait for her friends?</li> </ul>	<ul style="list-style-type: none"> <li>• Can you give me more details?</li> <li>• How would Emily's friends feel if she left them in town / city centre?</li> <li>• How would Emily's parent's feel?</li> </ul>



	<p><u>Questions</u></p> <ul style="list-style-type: none"> <li>You said you would like to ..... when you finish school / education, tell me how you will plan this and who you will have to get in contact with?</li> <li>If you were out with your friends, but you got split up or missed the last bus home, what would you do?</li> </ul>		
7. Communication Skills.	<p><u>Vignettes</u></p> <p>Grace is 15 years old and all Year 10 students are asked to complete a work experience placement that they must investigate and find themselves. Grace knows she is a caring person and is good at working with people, talking to different people and likes animals. Grace has a moderate hearing loss and wears two behind the ear hearing aids.</p>	<ul style="list-style-type: none"> <li>What jobs do you think Grace could try as part of her work experience?</li> <li>If you were Grace who do you think she could contact to help her organise the work experience?</li> <li>Have you ever had to have organise something like this by yourself?</li> </ul>	<ul style="list-style-type: none"> <li>Can you tell me more?</li> </ul>
	<p><u>Vignettes</u></p> <p>Grace is 16 years old and has applied for a summer job. Grace has been asked to have lunch and to meet the managers and other workers who will be her colleagues. After lunch Grace will have an interview. Grace is excited about the job and being invited for lunch, but she doesn't eat meat as she is vegetarian and doesn't drink any hot drinks such as tea or coffee. Grace has two behind the ear hearing aids.</p>	<p>If you were Grace how would you: -</p> <ul style="list-style-type: none"> <li>Prepare for the meeting with the managers and the new colleagues?</li> <li>How would you introduce yourself to new people?</li> <li>What information about yourself would you give new people?</li> </ul>	<ul style="list-style-type: none"> <li>Can you tell me more?</li> <li>Can you expand upon that?</li> </ul>

		<ul style="list-style-type: none"> <li>• What questions would you ask while at the interview?</li> <li>• When Grace first arrives at the office she is welcomed in and is offered a hot drink from the posh coffee machine – the manager is very proud of the machine and the different drinks it makes. Grace doesn't drink hot drinks. What would you do if you were Grace?</li> </ul>	
	<p><u>Questions</u></p> <ul style="list-style-type: none"> <li>• When you meet new people are you confident to introduce yourself?</li> <li>• What do you tell people about your hearing loss?</li> <li>• Do you understand your hearing loss? Can you tell me about your hearing loss?</li> <li>• Do you tell people that you wear hearing aids?</li> <li>• If you went out with friends / families and became lost can you tell me how you would ask for help and work out a way to get home or find your friends?</li> <li>• If you are asked to be a spokesperson in a class activity how would you feel? Would you volunteer?</li> <li>• Have you ever had to do a presentation in front of a group of people – can you tell me about it?</li> </ul>		



## Vignettes

### 8. Optimism – focus on strength

Jack is 15 years old he has a moderate hearing loss affecting both ears. He needs to wear hearing aids to hear conversations, listen to teachers in school and to correctly hear information, without the hearing aids he can miss information or get things wrong. Jack is very sporty and loves to play football and other sports; he is a bit worried about his new school accepting him in the football team because of his hearing aids. Jack has moved schools 3 times in the last 8 years due to his father's work. He is about to go to a new school and is thinking about introducing himself to his new school mates and teachers.

- How should he introduce himself?
- What should he tell people and is there anything that he shouldn't tell them?
- Should Jack let people know about his hearing aids?

#### 9. Attitude to life, focus on action

Emily is 15 years old and is about to finish school for the summer holidays. Emily enjoys having trips out with friends and family. She has a younger sister who is 13 years old and has a good group of friends who enjoy different activities. Emily lives 10-minute car drive from the bus and train stations and the stations can take her to the countryside, to the seaside or to an out of town shopping centre (outlet village). There is a bus stop at the end of Emily's road that goes to the centre of town where the train and bus stations are.

- If you were Emily plan a trip out:-
  - Where would you go
  - How would you get there
  - What things should Emily think about when planning this trip out

#### 10. Emotional Awareness – key to good communication

Mike went to the dentist last week and was told he needed to go to hospital for further treatment. Mike has never been to hospital, but he remembers going to see his granddad in hospital when he was younger, and his granddad had died in hospital. He was particularly worried about the treatment and about going to hospital as it had been a scary place when he was young. Following the information about the dentist his behaviour changed in school with friends and teachers and at home with his family

- What should Mike do to get information?
- What advice would you give Mike to help him in this situation?
- Who should Mike talk to?

### 11. Control of self – your response to circumstances/organisational ability

Bethan loved singing and was a member of a choir. During a practice for a big production she made a mistake and sang a wrong note. The choir had a laugh about it as she had made the whole choir sing out of key, for the rest of the practice she was nicknamed 'wobbly note'.

- How do you think Bethan feels about the situation and how will she respond?
- How do you think Bethan will cope with the nickname?
- What do you think the other members of the choir think about?

In school Chris has been asked to work as part of a team to design a poster for the Sports Day. The teachers asked the different groups to choose a Team Leader. Chris was keen to be Team Leader and presented reasons to the group why he would be a good leader, but his best friend was chosen instead. During the task Chris suggested several ideas that he thought were really good and eye catching, but the group initially didn't want to listen to his ideas. Chris did manage to present his ideas, but the group and the Team Leader chose not to use them and went with a different design.

- How do you think Chris feels about his best friend being the Team Leader?
- How do you think Chris will respond to the group not using his ideas?

## 12. Social support – network of family or friends

Isaac is 15 years old and lives at home with his Mum, Dad and his twin brother and sister who are 6 years old. Isaac's Dad works away from home during the week and on Sunday evening his Mum had a migraine and needed to go to bed – usually these can last for 24 hours so Isaac's Mum would probably be unwell until Monday evening.

- How will Isaac react to his Mum being unwell?
- How can Isaac help his family, Mum, Dad, brother and sister?

Kira is 15 years old and has just started in Year 11 and is due to take her GCSE's next summer. Kira is going to a family wedding at the weekend. At the wedding will be relatives who have not seen Kira for a few years – cousins, auntie's and uncles and they will be keen to know what Kira is doing in school and what she wants to do when she finishes school next year.

- How will Kira react to all the questions about her?
- What do you think Kira will tell her family?

### 13.Ability to problem solve - willing to adapt/ be flexible.

Connor enjoys dance and drama and is part of a Dance group in school and outside of school. Connor and his friends have decided to enter a competition and have arranged to practice their routine at lunchtime in the school's drama studio. Connor and his friends were well organised and booked the room 2 months ago. On Friday they had an e-mail from the Arts Department to say the room had been double booked as another group had booked the room last week, but the person booking the room hadn't seen that it was already booked for Connor and his friends.

- What do you think Connor will do?
- Who should use the room?
- How could Connor sort out the problem?

Connor is on two weeks Work Experience at an office in the City Centre. He had sorted out his transport – catching a train and then a bus home. On the second day going to work he catches the bus to the train station, but the train he was due to get has been cancelled.

- What will Connor do?
- How can Connor sort this out?
- Should Connor go home today and try again tomorrow?
- What would you do?

#### 14. Communication Skills

Grace is 15 years old and all Year 10 students are asked to complete a work experience placement that they must investigate and find themselves. Grace knows she is a caring person and is good at working with people, talking to different people and likes animals. Grace has a moderate hearing loss and wears two behind the ear hearing aids.

- What jobs do you think Grace could try as part of her work experience?
- How will Grace organise and plan her 2 weeks Work Experience – who should she contact?

Grace is 16 years old and has applied for a summer job. Grace has been asked to have lunch and to meet the managers and other workers who will be her colleagues. After lunch Grace will have an interview. Grace is excited about the job and being invited for lunch, but she doesn't eat meat as she is vegetarian and doesn't drink any hot drinks such as tea or coffee

- How can Grace prepare for the meeting with the managers and her new colleagues?
- How will Grace introduce herself to people?
- What questions could Grace ask while she is at her interview?
- When Grace first arrives at the office she is welcomed in and is offered a hot drink from the posh coffee machine – the manager is very proud of the machine and the different drinks it makes – what should Grace do?

## 10.19 Appendix 19 – Inter-Rater Reliability Results

<b><u>Inter-rater reliability results</u></b>				
	<b>Mary</b>	<b>Anna</b>	<b>Andrew</b>	<b>TOTAL</b>
<b>Communication Skills</b>	85%	83%	100%	89%
<b>Aspiration</b>	99%	99%	94%	97%
<b>School / In class Support</b>	87%	78%	67%	77%
<b>Knowledge of Deafness</b>	96%	91%	74%	87%
<b>Teacher of the deaf support</b>	93%	88%	74%	85%
<b>Social skills</b>	92%	76%	92%	86%
<b>Self Confidence</b>	79%	68%	79%	75%
<b>Leading a Team</b>	96%	85%	100%	93%
<b>Independence skills</b>	88%	84%	81%	84%
<b>Friendship</b>	95%	93%	98%	95%
<b>Resilience</b>	94%	87%	79%	86%
<b>TOTAL (per participant)</b>	91%	84%	85%	



## **Focus Group**

(Prompt sheet)

- Introductions
- Lovely to meet you all and introduced myself.  
'I work at Birmingham University, and I am about to start a research project associated with the theme of social and emotional resilience skills.'
- Thank participants for their willingness to participate in the Focus Group

We have all just introduced ourselves. As a group I think we should all agree on some rules for this group.

### **GROUND RULES**

- One person talking at once
- No talking over each other
- As a teacher I must share any information with Mrs/Mr. ... if I feel that you have said something that has put you or others at risk or there is a safeguarding issue. Is that clear?
- We all must feel free to express an opinion without being judged.
- What is discussed as part of the Focus Group (relating to the research), stays with the group.

### **TASK FOR THE FOCUS GROUP**

1. Views on key words associated with my research theme:

- Social Skills
- Emotional Skills
- Friendship
- Independence



- Leadership Skills
- Resilience skills

2. Language Assessments :-

- Receptive One Word Picture Vocabulary Test (ROWPT) (Martin and Brownell, 2011)
- Expressive One Word Picture Vocabulary Test (EOWPVT) (Martin and Brownell, 2010).

3. Questionnaire – pilot the questionnaire and provide feedback.

# Focus Group- Feedback

Hearing Levels	Participants N=8
Hearing – no identified HL	4
MMHL	3
SPHL	1

Word/Theme	Comments	Actions
<b><i>Social Skills</i></b>	<p>'It is like being confident, and planning things'</p> <p>'Polite, kind, caring'</p> <p>'You need them when you need help on the bus or in a shop because you have to talk to people.'</p> <p>'I don't think I am very good at these things, I am quite shy...'</p>	<p><u>Researcher</u></p> <p>Do you think it relates to the theme of resilience?</p> <p><u>Group</u></p> <p>8/8 - agreed</p>

	<p>'You have to have them to get a job, because you have to work with people.'</p> <p>'Like being social not anti-social'</p>	
<b><i>Emotional Skills</i></b>	<p>'Knowing things like being happy, sad, cross and being able to manage your feelings'</p> <p>'You can get angry in the middle of class because your pen broke, you have to learn how to be calm'</p> <p>'I use to get really angry when I wan in Primary, this boy would push me over in the playground. My Nan was really good and taught me to things so I could keep calm.'</p> <p>'Yes, my Mum and auntie go to yoga, I have as well and it really does make you feel calm.'</p> <p>'They talk about mindfulness and my sister is doing her GCSEs soon and she has this colouring book it</p>	<p><u>Researcher</u></p> <p>Do you think it relates to the theme of resilience?</p> <p><u>Group</u></p> <p>8/8 - agreed</p>

	is meant to take your mind off things.'	
<b>Friendship</b>	<p>'I think friends are really important, they look after you when you are sad or need a bit of help.' (all 8 agreed)</p> <p>'It can be hard when you 'fall out' with someone in the group though can't it? I use to be friends with this girl in my street and we fell out, but we had known each other since we were in Nursery!'</p> <p>'I can't be bothered with all the arguing I just like to be friends with everyone, boys and girls'</p>	<p><u>Researcher</u></p> <p>Do you think it relates to the theme of resilience?</p> <p><u>Group</u></p> <p>8/8 – agreed</p> <p><u>Comment from group</u></p> <p>Having friends is important and people may find it hard to discuss friendships if they struggle to make friends.</p>
<b>Independence</b>	<p>'Doing things by yourself, without your Mum or Dad.'</p> <p>'Planning things like days out, trips, holidays.'</p> <p>'Not having to ask permission to do things.'</p>	<p><u>Researcher</u></p> <p>Do you think it relates to the theme of resilience?</p> <p><u>Group</u></p> <p>8/8 – agreed</p> <p>The identified that independence and learning to be independent was very important to all of them.</p>

	<p>'Owning your own house or car.</p> <p>Having a job to get money to pay for them.'</p>	
Leadership Skills	<p>'Team Captain, House Captain.'</p> <p>'You have to be bossy and shout so people listen to you otherwise they will ignore you.'</p>	<p><u>Researcher</u></p> <p>Do you think it relates to the theme of resilience?</p> <p><u>Group</u></p> <p>The group were unsure, because they felt only certain people get to be a Team Captain etc.</p>
Resilience skills	<p>'Not sure, teachers keep saying we will learn resilience skills.'</p> <p>'I think it is being confident and being able to do what you want.'</p> <p>'Is it like when you are learning to ride a bike when you are little and you fall off but you get back on and learn to ride the bike.'</p>	<p><u>Researcher</u></p> <p>Do you think it is important to discuss resilience?</p> <p><u>Group</u></p> <p>8/8 – agreed, but said they didn't really know what it meant or how you would show that you were resilient</p>

# Language Assessment

Assessment	Positive	Negative
<p><b>1. Receptive One Word</b></p> <p><b>Picture Vocabulary</b></p> <p><b>Test (ROWPT)</b></p> <p><b>2. Expressive One</b></p> <p><b>Word Picture</b></p> <p><b>Vocabulary Test</b></p> <p><b>(EOWPVT).</b></p>	<ul style="list-style-type: none"> <li>• Very easy to complete.</li> <li>• Never completed tests like this before, but they were ok.</li> <li>• I thought they were fun really. I don't think people in your research will have problems with them,</li> <li>• If you have 4 pictures how do you know people are guessing?</li> </ul>	<ul style="list-style-type: none"> <li>• I would like to know the results.!</li> </ul>

# Questionnaire

Assessment	Positive	Negative
<p><b>1. Questionnaire</b></p> <p><i>(Questionnaire devised specifically for the research project).</i></p>	<ul style="list-style-type: none"> <li>• Very easy to complete.</li> <li>• There are a lot of questions, but you have put them in sections, so it wasn't too bad to fill in.</li> <li>• I understood all the questions, but some people may want you to explain some of the questions.'</li> <li>• The words are easy to understand and I like that you have different options to choose from.</li> <li>• I quite liked the questions they were interesting.</li> <li>• It was good that you didn't have to put your name on top – I think people will like that.</li> <li>• The question at the back is good (have you</li> </ul>	<ul style="list-style-type: none"> <li>• The scale (Marking Scale) is only on the top of the front page.</li> </ul> <p>-Researcher asked would people like the marking scale on the top of every page?</p> <p>-Focus Group suggested a card that was loose and, on the table, would be better because people could use it to slide down the page. This would mean it could act as a page marker as well.</p>

	<p>experienced any problems and how long have you experienced them?) I liked this because you can answer yes the teacher in school would know that you want or need a bit of help.</p>	
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## 10.21 Appendix 21 - Model of Resilience used within the study

### Research Question - How resilient are CYP with MMHL and how do they feel they would demonstrate resilience skills in everyday activities?

