

Examining the impact of unilateral and mild
bilateral hearing loss on adolescent students
who do not have regular specialist support:
Experiences and perspectives in two
mainstream schools

A study submitted in partial fulfilment of the requirements for the
degree of Master of Science of the University of Hertfordshire

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Abbreviations

AAA	American Academy of Audiology
BAA	British Academy of Audiology
BSA	British Society of Audiology
CRIDE	Consortium for Research in Deaf Education
CYP	Children and Young People
ENT	Ear, Nose and Throat
FTE	Full Time Equivalent
GCSE	General Certificate of Secondary Education
GP	General Practitioner
HA	Hearing Aid
MBHL	Mild Bilateral Hearing Loss
NDCS	National Deaf Children's Society
NHS	National Health Service
NHSP	Newborn Hearing Screening Programme
P	Participant e.g. P4 = Participant 4
PCHI	Permanent Childhood Hearing Impairment
S	SENCo e.g. S1 = SENCo 1
SEN	Special Educational Needs
SENCo	Special Educational Needs Coordinator
SIFTER	Screening Instrument for Targeting Educational Risk
SSDC	Support Service for Deaf Children
ToD	Teacher of the Deaf
UHL	Unilateral Hearing Loss
UMBHL	Unilateral and Mild Bilateral Hearing Loss

Abstract

In general, children and young people with a unilateral or mild bilateral hearing loss receive very little support from specialist services. Perceptions that these students have few difficulties and needs lead to categorisation as low priority for support.

Schools are largely expected to manage the needs of these children. Secondary school places the student in an environment where it is far easier for one experiencing difficulties connected to their hearing loss to be overlooked.

A sample of five students was interviewed. Descriptions of experiences by the students offer candid insight into their opinions and feelings. Perspectives were also sought from parents, Special Educational Needs Coordinators and peripatetic Teachers of the Deaf for comparison.

Findings showed that the impact of hearing loss is different and greater for those with a mild bilateral hearing loss than for students with a unilateral hearing loss. The mild hearing loss group was more affected socio-emotionally and were expected to perform more poorly academically. The adolescents with unilateral hearing loss demonstrated very few difficulties.

Schools and services have capacity and funding constraints to consider, and a stalemate exists between what students need, what they want and what is available.

1. Introduction

1.1 Background

There is evidence that students with unilateral or mild bilateral hearing loss (UMBHL) demonstrate a number of difficulties as a result of hearing loss (Bess et al, 1998; Antia et al, 2009; Hicks and Tharpe, 2002, Holstrum, 2008, Kent, 2003). Despite this, this cohort of children is often treated as low priority for support by outreach services because they are viewed as having low level need (CRIDE, 2017). One-off assessment and advice to schools on referral (and transition to a new school) is often the process for support. Beyond this, schools are largely expected to monitor needs and outcomes and support the student within their own resources, but further support is available on request. The name given to this category of students by the local Support Service for Deaf Children (SSDC) is 'School Request'. In the local area, 348 'School Request' and 386 'Active' 0-19 year-old deaf children are served in 177 schools, alongside nurseries and homes, by 10 peripatetic ToDs (8.4FTE).

Difficulties in primary school children with UMBHL are more likely to be identified due to a more consistent relationship with a small number of teachers, in a relatively low school population. But secondary schools present a set of challenges for monitoring adolescent students. Multiple teachers, seen infrequently, and a far larger learning community mean that potential for students to be overlooked is increased.

This study will consider the impact of UMBHL hearing loss and the wishes of teenage students with UMBHL, and assess whether challenges faced are significant enough to justify a higher level of input from the SSDC or school.

I am an Educational Audiology Officer in a SSDC, and the parent of two deaf children who have been categorised as both 'Active' and 'School Request' during their mainstream education.

1.2 Outline of Chapters

This research examines the difficulties faced by teenage UMBHL students from social and academic viewpoints and relates this to current practice in supporting them. Chapter 2 reviews relevant literature in this area. As well as a focus on impact of hearing loss on learning and social aspects, it considers impact of late diagnosis and intervention, and parental involvement. Chapter 3 summarises the methodology used. It discusses recruitment process and ethical considerations, as well as the procedure for gathering and analysing data. Chapter 4 assembles and appraises the data and Chapter 5 discusses the findings, concluding with reflections about the research.

In this study, the term 'deaf' is used to denote any degree of hearing loss, and the terms 'adolescent', 'teenager' and 'youth' are used interchangeably to describe the students in the cohort, namely 12 to 16 year olds.

Names of parents have been changed to protect anonymity.

2. Literature Review

2.1 Identifying the cohort

Nationally, approximately 46% of Children and Young People (CYP) with an identified hearing loss have a unilateral or mild bilateral hearing loss (CRIDE, 2017). Mild hearing loss describes hearing thresholds which, when averaged according to descriptors defined by the British Society of Audiology (BSA, 2011) fall between 20-40dBHL. Whereas a bilateral hearing loss affects both ears, a unilateral loss can be of any degree, from mild to profound, but affects only one ear. In the contralateral ear, pure tone thresholds are within normal limits (up to 20dBHL).

The cohort of students falling within these descriptors traditionally receives little support, due in part to capacity in peripatetic services, and also because low level of hearing loss might logically imply lesser significance than a greater degree of hearing loss so that the perception is that there is little requirement for support (Borders et al, 2010). However, UMBHL may have an adverse impact on academic and social development and progress of children (Most, 2004; Marschark et al, 2015; Niclasen et al, 2016,). Children with UMBHL have diminished access to incidental speech and are susceptible to the effects of noise, whereby the signal (speech) becomes difficult to discriminate. For children with a unilateral hearing loss, difficulty in localising sound is an additional challenge (Rekkedal, 2015). These factors can affect acquisition of language and the development of vocabulary, which in turn can negatively impact academic achievement of UMBHL students. Listening requires extra effort and fatigue can exacerbate an already challenging situation. (Lewis et al, 2016,)

Published research at the end of the last century looked at prevalence and impact of UMBHL and began to draw attention to the difficulties experienced by this group of children, describing a gamut of developmental issues, both academically and socially. (Bess et al,1998; Tharpe, 1991; Davis et al,1986; Yoshinaga-Itano et al, 1998). Despite such research raising the profile of

UMBHL people, this deaf group is still inadequately researched and supported (Winiger et al, 2016).

2.2 Age of identification and clinical management

In the UK, the Newborn Hearing Screening Programme (NHSP) was rolled out nationally in 2006. This programme enabled much earlier identification of permanent childhood hearing impairment (PCHI) than previously, reducing the time to aiding and interventions for babies and young children. However, this did not include the children in the UMBHL cohort.

The NHSP policy recommends that eligible newborn infants are screened in order to identify bilateral moderate or worse PCHI (NHSP, 2013). Unilateral and mild bilateral hearing loss is not specifically targeted. However, it is now identified and reported, meaning that all children with PCHI have access to intervention and support much earlier, and that prevalence can be accurately recorded, an important factor given that UMBHL children are reported to make up almost half of all school children with PCHI (CRIDE, 2017).

Even now, 12 years after the introduction of NHSP, Early Assessment Guidelines (NHSP, 2013) state that the current evidence base does not support early intervention or aiding for UMBHL children, and advises that such intervention can be detrimental rather than beneficial, citing only one piece of evidence, Carr et al (2012), a presentation given at the annual British Academy of Audiology (BAA) conference. Internet searches and even directly contacting the author for a copy of the presentation proved fruitless. Given that these are standards by which audiologists nationally are operating, such a sweeping statement requires robust evidence to support it, and one inaccessible reference is insufficient to substantiate this guidance.

However, these same guidelines call on audiologists to use professional judgement and experience and offer the caveat that all such cases should be treated individually, a view shared by much other research (Lieu, 2015; Bagatto

& Tharpe, 2014; Bagatto et al, 2016). Fitzpatrick et al (2017) suggest this is because of the dearth of evidence to provide appropriate guidance.

Kuppler et al (2013) concur with the requirement to tailor management programs to the needs of individual children, but contrary to the Early Assessment Guidelines, state that it is likely that early intervention and appropriate access to auditory technology would be key to maximising benefit for this group of deaf children. This finding is in line with the protocol and guidelines of the American Academy of Audiology (AAA, 2013) and the Joint Committee on Infant Hearing (JCIH, 2007).

With no definitive consensus about clinical management of UMBHL children, it would seem that a cautionary approach to interventions may be the method of choice. Fitzpatrick et al (2014) conducted a 20 year study in Canada, of children identified with UMBHL before and after implementation of a newborn hearing screening program. They reported similar prevalence levels of UMBHL children to those described in the CRIDE data above, and other studies (Bess et al, 1998; Russ et al, 2003), and found that although the median age of diagnosis of UMBHL fell by 4-5 years following newborn hearing screening, for over half of these children, audiological intervention following diagnosis was significantly delayed. They suggested that this was due to substantial clinical ambiguity about these children's hearing difficulties.

Mildly deaf children receive audiological interventions at later ages than children with a moderate or severe hearing loss (Walker et al, 2015). This research states that this is in part due to a need to better educate professionals. Fitzpatrick et al (2017) echoed this conclusion, finding ambiguity in the message presented by audiology clinicians. However, it seems somewhat incongruous that in a survey discussing amplification decisions for this cohort of children, audiologists were not asked for their rationale in making them, particularly since the study acknowledges a great deal of variability in whether these professionals choose to monitor or amplify the hearing loss. Both of the above studies suggested that the lack of clarity in the message presented to families by audiologists translated into some confusion and ambivalence on the part of

parents as to the benefit of amplification, which in turn led to a further delay in hearing aid intervention. Such delays limit access to auditory input, essential in the development of speech and language (Walker et al, 2016).

As active participants in the decision making process, parents of children in this group should be made aware of the risks associated with minimal hearing loss and available options for their child (Winiger et al, 2016). But it may also be the terminology that is partly to blame for apparent lack of recognition of these risks. The use of the words 'mild' (and sometimes 'minimal') to describe these hearing losses understates the significance to parents and professionals alike (Holstrum, 2008).

Conflicting management protocols and strategies globally highlight inconsistent approaches to pathways of care following diagnosis for UMBHL children. Despite the ability to identify this cohort of students sooner, their management is far from clear cut, and could contribute to wider academic and socio-emotional issues faced by this group.

2.3 Language, listening and academic outcomes

UMBHL students are unable to adjust and catch-up to normally hearing peers by their teenage years, in terms of speech and language (Fischer and Lieu, 2014). Adolescent students with unilateral hearing loss were the subject of a study which tried to determine whether there was evidence of continued language delay that affected educational performance. Normally hearing siblings functioned as the control group to help diminish variance in socioeconomic and environmental factors. Despite accounting for the effects of race, family income, maternal education and other influences on the language of the teenagers, overall negative developmental impact on the target group continued, and in some cases, worsened. Similar results were seen in Delage and Tuller (2007).

External factors also failed to account for variability in language acquisition in UMBHL students in the later findings of Tuller and Delage (2013). In their subject group, language difficulty ranged from considerable and long lasting

through to normally developing. They suggested that demands placed on attention required of the student by their hearing loss, particularly following early auditory deprivation, left fewer resources available to the student for other processes, such as working memory, a finding echoed by Tharpe (2008) who described a loss of energy and capacity for processing what is heard.

These views correspond to some extent with those expressed by Wake et al (2006) who found that phonological discrimination ability and short term memory was worse in children with a slight or mild unaided hearing loss than in normally hearing peers, although in tests of reading and language, no significant difference was seen.

Attempts to measure cognitive demands on students with mild bilateral hearing loss (MBHL) have been conducted using dual task paradigms, involving a listening task and one that was not auditory, with the expectation that children would perform worse on the second non-auditory task as concentration on the first task required greater effort (Hicks and Tharpe, 2002; McFadden and Pitman, 2008). Not only do these students perform more poorly in these tests than normally hearing counterparts, but those with minimal hearing loss (MHL) performed worse on the primary task, not just the secondary one, suggesting that the ability to reallocate cognitive focus is very difficult for this cohort of students (McFadden and Pitman, 2008). This difficulty may increase as students reach more challenging educational levels (Winiger et al, 2016).

An appropriate level of intelligible speech might seem to mask academic challenges of students with lesser degrees of hearing loss (Marschark et al, 2015). This study found that good speaking ability related positively in terms of achievement scores in tests used to predict academic outcomes for deaf students, but being mildly deaf was negatively linked with maths performance and bordered on significance for comprehension and social studies also. Further, achievement scores in mildly deaf students, when compared with students with a greater degree of hearing loss, were lower by some way.

Similarly, Antia et al (2009), who examined academic status and progress of deaf students in mainstream classrooms, compared to that of normally hearing

peers, found that students with mild hearing loss perform worse academically not only than their hearing classmates, but also than those with greater hearing loss. Their cohort of students in grades 2-9 were making “adequate” progress, but not sufficient to close the gap between them and their peers. It could be anticipated that as students grow older, and the demands on them increase, this gap may widen as students reach adolescence.

The expectation that poorer academic outcomes would correlate to a greater degree of hearing loss has been the starting point in research into effects of degree and type of hearing loss on class performance (Most, 2004). However, the results showed the opposite to be true, a finding that was attributed to a number of factors, including little or no specialist intervention for UMBHL students, and teacher ignorance of the impact of hearing loss on these children’s academic attainment. Most noted that teacher-only performance assessment may have led to leniently high scores being given to students with a recognised hearing loss. Whilst advocating the potential of the Screening Instrument for Targeting Education Risk (SIFTER) to identify struggling UMBHL students who may otherwise be overlooked, Most also accepted that her results were highly subjective and required corroboration via other methods of data collection. Additionally, she suggested that her cohort of 2nd grade students may have achieved high scores due to lower academic and social requirements of their educational level, and that a study of older children should be undertaken.

This study bears some resemblance to that carried out by Bess et al (1998), in that the earlier study also looked at students of a similar age group, and used the SIFTER to assess educational performance. However, Bess’ study also examined additional age groups as well as using other data to assess functional status, allowing comparison to determine if the impact of hearing loss changed as students got older. Analysis of academic performance found that minimal sensori-neural hearing loss 3rd grade students performed significantly lower educationally than hearing peers, but in the 6th and 9th grade groups, no significant difference was found, which would suggest that this cohort of students are, in fact, able to catch up with their peers academically. Despite this, there was still a high rate of students having to retake the year, and poor

communication scores were revealed by the SIFTER. The finding that children are able to catch up may not be accurate, certainly with regards to children in the UK, where re-taking an academic year happens only rarely and in exceptional circumstances. In Bess' study, ability to retake the year resulted in a range of ages for children in the 6th grade. Therefore a similar study in the UK would be unlikely to produce a similar result.

However, Eriks-Brophy et al (2006) suggest that there is over-emphasis on success for deaf students being measured by academic achievements. They propose that inclusive settings also ought to include the social development of the young person to prepare them for adulthood. Bashir et al (2014) examined social competence and behaviour in adolescents with different degrees of hearing loss and found that those with mild hearing loss scored more highly in these areas than their more deaf counterparts which might suggest that social development is not negatively impacted by hearing loss in UMBHL students.

2.4 Social and emotional development of adolescent deaf students

Teenagers, in general, do not like to be different from their peers. Adolescence, puberty and the onset of associated physiological, hormonal, and emotional changes can be challenging for many teenagers. (Dahl, 2003)

This phase is imperative in developing positive self-identity and good self-esteem (Cambra, 2005), and adolescents need to have a perception of acceptance and approval from their peers. Coupled with this greater focus on peer relationships, is a need to establish independence from the family group, and develop a wider social circle (Sumter et al, 2009). Through these actions, adolescents develop a social identity which is important to feelings of self-worth (Auty and Elliott, 2001). Whilst biological changes are likely to be similar for all teenagers, the way that normally hearing adolescents respond to their changing social and emotional outlook may be reflected differently by youths with a hearing loss.

The primary aim of adolescents and young adults with mild hearing loss is the ability to pass as "normal" (Dalton, 2013, p.132, Kent and Smith, 2006, p 464).

The subjects in these studies felt different to their peers, and held some sense of shame and embarrassment about their hearing loss and its associated challenges. Punch and Hyde (2005) reported similarly, but found little statistical difference between deaf and hearing students on scales of loneliness and participation. Remine et al (2009) described perception of the deaf student as being different *from* others and conversely, with being seen as different *by* others as influencing social integration. The adolescent group in Bess (1998) presented with high levels of dysfunction in the areas of stress, self-esteem and social support. Warner-Czyz (2018) found that teenagers with hearing loss are far more likely to be bullied than the general population, and said that lack of social competence was a factor in victimisation. Winiger et al (2016) reported that higher levels of behavioural issues are reported amongst deaf children, possibly as a result of internal angst. However, there are arguments to suggest that degree of deafness is insignificant on the effect of self-concept (Remine et al, 2009; Moeller, 2007).

Emotional and behavioural difficulties for adolescent deaf students may be linked to poor receptive language abilities (Stevenson et al, 2017a; Stevenson et al, 2017b). Communication difficulties caused by hearing loss negatively impact the opportunity for incidental learning and understanding of abstract concepts such as emotion which are necessary in order to develop empathy, a key aspect of forming and maintaining social relationships. Lower empathic abilities affect friendships, potentially resulting in less participation and in a greater sense of isolation for deaf students (Netten et al, 2015)

Wolters et al (2011) found that deaf girls in mainstream schools were more prosocial and more accepted than deaf boys. Besides differences in acceptance, deaf children generally were also less popular, especially those who did not participate and who isolated themselves. This was not only in comparison to hearing peers in mainstream schools, but also to deaf peers in special education. Withdrawn behaviour is the most important, and most negative, predictor of peer status in deaf students in mainstream schools (Wolters et al, 2014)

Adolescent relationships between hearing impaired and normally hearing students might appear to be tenuous and vulnerable (Rieffe, 2012) Given the reported importance of peer acceptance to the well-being and happiness of adolescent students (Nunes and Pretzlik, 2001), one might expect that the hearing impaired student might seek to normalise their social identity in order to avoid rejection, loneliness and bullying (Kent, 2003, Kent and Smith 2006).

One common way that some teenage UMBHL students attempt to fit in is by rejecting their hearing aids. Ellington and Lim (2013) linked perceptions of hearing loss and the visual appearance of the hearing device amongst adolescents with self-esteem. Whilst it may be the case that consistent use of hearing aids (HAs) helps to negate the consequences of a hearing loss (Walker et al, 2015) a survey of children who do not wear HAs by Kochkin et al (2007) described a number of reasons given for not using HAs that did not explicitly say that visibility was an issue, nor was functionality, unlike in the findings of Anmyr, (2011) and Cameron et al (2008). Common reasons given were minimising of the hearing loss, recommendation of the clinician and the degree or nature of the hearing loss. However, social pressure from a much younger age may have paved the way for adolescent students, harbouring perceived stigma and feelings of inferiority, partly associated with the cosmetic appearance of hearing aids, to reject the equipment (Elkayam and English, 2003).

Almost a quarter of the participants in an observational study of primary aged mild and moderately deaf children by Gustafson et al (2015) were found to be regular non-users of hearing aids, despite coming from highly motivated families who were actively participating in more than one study and receiving audiological services. It would seem reasonable to assume that this figure may increase as children reach adolescence, and where families are potentially less engaged. Kemmerly and Compton (2014) explored the role of family in perceptions of identity amongst students with hearing loss and found that parental involvement was a factor in helping students advocate for themselves, and develop self-identity.

2.5 Reflections of parents of UMBHL children

Parental experiences and reflections relating to teenage UMBHL students are seldom sought or offered, and a lack of results in the literature search would seem to support this assertion. Although parental views are collected in studies, they most often pertain to early intervention and support, targeting younger children in general, or are part of a wider study focusing on greater degrees of hearing loss. (Tattersall & Young, 2006, Walker et al, 2017, Grandpierre et al, 2017)

Following transition to secondary school of the UMBHL student, there is often little contact between parents, specialist services and schools, in relation to the management of the child's hearing loss. In the research by Bess et al (1998), the parental response rate for recruitment to the study fell sharply, from 65% at 3rd grade to 30% of 9th grade students. Although this was reported in the study, there was no theory offered as to why this happened. Perhaps the lack of family involvement in the study suggests a decline in parental engagement with the needs of this cohort of students as they grow older. However, Antia et al (2009) noted that there was a positive relationship to academic outcomes where parental participation was high, and highlighted the importance of parental involvement in deaf children's education.

Some parents may be less engaged with specialist services and schools in relation to their secondary school child's hearing loss, due to minimising of the impact of UMBHL. Professionals often present the loss in a dismissive way, hearing aids are treated as optional, and these students are low priority for intervention and support (Fitzpatrick et al, 2015). Walker et al (2017) suggest that parental attitudes surrounding the supposed impact and risks associated with their child's hearing loss may influence usage of hearing aids, particularly where benefit is uncertain. They also note that parents may be unaware of the challenges of auditory perception and discrimination in difficult listening environments, or of how much incidental speech is bypassing their child.

2.6 Teacher perceptions and common educational practices

Students with UMBHL are educated almost exclusively in mainstream settings. Some students are not even identified as having a hearing loss in schools. A statutory requirement on UK schools to provide data for the school census suggests that deafness in general was under reported compared with the data collected by the Consortium for Research in Deaf Education survey last year (CRIDE, 2017). It would seem logical that those with a lesser degree of hearing loss are likely to be most frequently overlooked and misreported, particularly where figures relate to support rather than audiological criteria.

Even where hearing loss is identified, Marschark and Hauser (2012) expressed concerns that these students may be overlooked because lesser hearing loss often equates to less support due to an assumption that the students perform effectively in class. In fact, their evidence suggested that students in this group performed worse than would have been expected given the mild degree of hearing loss.

The suggestion that the challenges faced by this cohort are under acknowledged and not moderated by teachers is a common one (Dalton, 2013; Antia et al, 2009; Moeller 2007). Avramidis & Norwich (2002) examined teacher attitudes towards inclusion and found that teachers with a more positive attitude were those who had received specific training in teaching students with additional needs. Eriks-Brophy & Whittingham (2013) said that alongside this, appropriate preparation and ability to respond to the needs of the student were essential in providing a successful learning environment for the hearing impaired student.

Variability in educational achievement of deaf students may be a direct result of practices of teachers, in particular, where the teacher has little experience of teaching hearing impaired students (Marschark et al, 2011). Collaboration with a specialist teacher of the deaf to provide advice, training and support can help to fill these knowledge gaps. However, in a survey of mainstream teachers, Eriks-Brophy & Whittingham (2013) received comments that both teacher

confidence and student performance was being undermined by the gradual reduction of this collaborative model due to financial constraints.

However, for UMBHL students, minimal support may be preferable. Consistent with the perceived stigma that students often associate with their deafness, similarly, they may seek to avoid situations which would identify them as different to their peers, such as additional classroom support or a visit from a teacher of the deaf, particularly where they are unique as a student with hearing loss (Remine et al, 2009). By the time they have established themselves in secondary school, many UMBHL students may have rejected their hearing technology, and utilise individually developed strategies on a daily basis, to cope with the academic and social demands of the environment.

Winiger et al (2016) comment that a favourable seating position is the chosen approach to monitoring as an alternative to active intervention and support. Further, they submit that it is not detrimental to the student, which is debateable, given that unless it is done so discreetly that even the student is unaware of its significance, this singles the students out as being different. It is likely that a student who had tried hard to fit in would not be happy about this. However Winiger suggests that as an option, it is simple and economical, when used alongside other management approaches. However, many teachers appear to view this as being sufficient as a standalone strategy, whilst a significant proportion appear to have no view on the matter at all (McCormick Richburg and Goldberg, 2005), suggesting a lack of awareness at best and a considerable degree of apathy amongst a section of the teaching population.

2.7 Conclusion of the literature review and aims of the research

Opinion surrounding early intervention for UMBHL children is conflicting. The current cohort of teenage children with a hearing loss was, by default, diagnosed late, since they were born before the introduction of NHSP, and in any case, are not part of the target group. It is unlikely that these children's deafness was identified before the age of 4 at the earliest. Clinical management for these children is not clearly defined and appears to be on an ad hoc basis.

This group of young people face maturational challenges beyond their control, notwithstanding a hearing impairment, that may or may not have been presented and accepted with some gravitas. Parents and professionals often do not recognise the significance of the hearing loss and its potential impact on speech and language, and academic, social and emotional outcomes.

This research aims to discover what the experiences and wishes of students are in relation to their hearing loss and to evaluate holistically the impact it has socially and academically. It seeks to discover what they want in terms of their hearing loss and support. Further, it is the intention of this research to identify why support to this group is low and whether or not the approach is balanced in light of the experiences described by the student, professionals and parents. In short, what are the needs and wishes of UMBHL students in secondary schools who do not meet criteria for active specialist support, and are they recognised and managed appropriately?

3. Methodology

The aim of this research is to qualitatively elicit the experiences of different groups of participants to understand strengths and difficulties faced, and management strategies of and for adolescent students with UMBHL. It asks: What are the needs of the students? How are they supported currently? How would they choose to be supported? Is the approach to support by school and the Support Service for Deaf Children adequate and justified?

3.1 Choosing a method to gather data

Consideration was given to different ways to generate the data to answer the research questions. A questionnaire or survey may be useful to yield quantifiable results, and is more comfortable for some respondents to interact with (thereby potentially yielding more results). However, Thomas (2013, p208) warns of the dangers of 'prestige bias' whereby a respondent answers with what is felt to be the 'correct' answer to a question. Closed ended questions may provide statistically analysable information, but do not lend themselves to discovering thoughts, opinions and experiences. Open ended questions give options for this whilst avoiding bias issues. Despite the greater level of analytical coding required due to greater diversity in response, Reja et al (2003) suggest that there is more missing data when open ended questions are used in questionnaires, compared with closed ended. Further, one might expect the loss of spontaneity that comes from a natural spoken response. Since the purpose of this research is to provoke detailed accounts of experiences, this approach was abandoned in favour of a more naturalistic, descriptive one.

4 groups of participants were chosen to participate in the study; UMBHL students, as it is their experiences and the impact of hearing loss on them that it is the main focus of the research; parents, to give background history for the students and corroborate some of the experiences shared by their child. Additionally, it helps to see how they are engaged with the hearing loss, and with the process of support in school. SENCOs and ToDs were invited as they

both have a role in supporting the student, to some degree, and because it is important to obtain their understanding of the needs of the student and their justification for how the student is supported.

3.2 Focus group/group interview with the students

Focus groups, using semi-structured interviews, were selected as the most appropriate way to gather data from the students in order to extract personal experiences and perspectives about hearing loss, school and relationships that other group members may be able to relate to, and which could be compared and contrasted to draw out common themes or inconsistencies between participants.

Participants in a focus group should have sufficient in common to allow for conversation to feel appropriate and natural, but also to have varying perspectives and experiences in order to stimulate discussion (Barbour, 2008). Rabiee (2004) concurs and states it is important that group members should feel comfortable with each other. She suggests that pre-existing groups are an advantage since there is already an element of trust, and participants that know each other may be more willing to offer views on personal issues.

In focus groups, the aim is to let the group lead the way, and the researcher's role is marginal, facilitating discussion between the participants (Thomas, 2013). However, where the researcher takes a more dominant role in the discussion, leading and guiding it, this is more commonly referred to as a group interview (although the two terms are often used interchangeably). Although this was not the intention, this is what happened during data collection with the students, possibly due to inexperience of the researcher, and possibly due to the ethos of the school environment, namely that adults conduct conversations and students respectfully wait to be spoken to. This was confirmed by one of the participants putting his hand up each time he spoke. Additionally, although most of the students knew each other and some were in the same classes, none of them were friends, which meant interaction was not as comfortable between them as had been hoped.

3.3 Semi-structured Group and Individual Interviews

Data for this study were collected via semi-structured interview, either face to face in one-to-one or group sessions or over the telephone. 5 students, 2 parents and 4 teaching professionals took part. 3 of the students have a unilateral hearing loss (UHL) and 2 have a mild bilateral hearing loss (MBHL). Interviews with the students were held in two groups in participating schools. Some audiological background and history of students was provided by participating parents. Audiological history for students whose parents did not participate was obtained later via journal records held by local NHS audiology departments and those held by SSDC.

Interviews afford personal interaction between researcher and participant. In order to put the students at ease and try to minimise any effect of power bias brought about by a perception of authority, casual clothes were worn for group interviews, respondents were told my first name, and specifically, that I am not a teacher. Students were advised that there were no restrictions or consequences in terms of what they wanted to say, positive or negative (although reminded that safeguarding issues would be reported in line with school procedures), and that there were no right or wrong answers. A basic structure of topics to be covered was listed in the Participation Information given to respondents. In 'Supporting the Achievement of Deaf Children in Secondary Schools' (NDCS, 2015), the National Deaf Children's Society identifies a number of factors which influence the impact of hearing impairment, including age of diagnosis and intervention, parental support, use and functioning of hearing technology, cognitive ability and personality traits. These factors, amongst others, were discussed with or observed in the participants in varying degrees, and shaped the coding for analysing the data.

However, the interview schedule was not rigid, and tangential topics were encouraged alongside those prescribed. Consequently, no two interviews followed the same pattern of questioning. Follow up questions and probes such as "how did you feel about that?", and "tell me more" were used to elicit greater

detail. SENCOs and ToDs had face-to-face interviews, and parents were interviewed via telephone using the same structure.

3.4 Triangulation

Discussing the same topics with multiple participants allows for some triangulation of data. Triangulation is traditionally associated with quantitative research methods to verify reliability and validity of results, but within the qualitative paradigm these terms are encompassed within findings that are credible, transferable and trustworthy (Golafshani, 2003). Cresswell and Miller (2000: p.126) describe triangulation as “a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study” . In using multiple participants for this study, analysis of the data from different interviewees using the same topics will illustrate common themes, and control any potential bias on the part of the researcher as a result of insider knowledge.

3.5 Ethics

The data collected from students was done as part of occasional work by the researcher in the role of Educational Audiology Officer with the SSDC, with a monitoring responsibility for ‘School Request’ students. Information regarding participation in the study was distributed to all participants in line with requirements of the Research Ethics Committee, University of Hertfordshire. Consent was sought from parents on behalf of student participants as well as on their own behalf. Verbal assent was given by students when consent forms were issued and again prior to the beginning of data collection. Audio recordings of the sessions were made, using a digital voice recorder, and these data were transcribed. Data collected was analysed to form the main body of this study. All participants were reminded of this method prior to interview, and of how data would be stored and used. As some of the discussed topics were potentially upsetting, procedures for managing distress amongst the participants were outlined in the Participant Information, and arranged with the schools prior

to interviews taking place with students. Copies of approved documentation are contained within the Appendix.

3.6 Design Framework

This research could be described as an illustrative case study, using a qualitative framework. It seeks to describe and interpret the situation of participants in relation to a specific set of circumstances, namely adolescent UMBHL students in two secondary schools. This approach allows flexible methods of gathering data such as unstructured interviews and focus groups, to elicit feelings and thoughts, and to observe and interact with the participants.

Centrality of the researcher in this type of data collection affords an active, subjective role in the research. Consequently, transparency surrounding the position of the researcher is essential. But insider knowledge of issues faced by the research subjects, as in my case (see introduction), may be advantageous in that it allows contextual insights into those experiences (Dwyer and Buckle, 2009). On the opposing side of this, Mills et al (2012, p39-40) warn of the dangers of 'perceptual blindness or hypersensitivity' as a result of accepted personal or professional situational familiarity, and Bell (2014) suggests that strong feelings around the researched topic can lead to bias, either deliberately or innocently. The interpretative challenge for analysis is to balance prior knowledge and expectations with the reality of the situation contained within the data, in order to come to a balanced conclusion.

3.7 The participants

Inclusion criteria for students:

1. Academic year groups 8-11 (reasons for this given below).
2. Unilateral or mild (average) bilateral hearing loss
3. 1 or 2 hearing aids issued
4. Classified as 'School Request' for support from SSDC (i.e. students who do not meet criteria for active specialist support)

Exclusion criteria:

1. Cognitive issues which might make it difficult to participate in the focus group.
2. Safeguarding issues where it is considered that the personal situation of the student might be sensitive.

The total number of students on the 'School Request' caseload with UMBHL between academic years 8-11 inclusive was 113. Of those, 41 students had no hearing aids issued; 1 was excluded because of safeguarding matters, and 10 were excluded owing to cognitive issues. Due to logistical considerations and in the hope of attracting a greater number of participants, schools with clusters of 3 or more eligible students were targeted. From these, a purposive sample of students was identified.

The maximum number of students required to participate in the focus groups was 8 in total, to encourage greater depth of individual comment and allow for manageable analysis. Rabiee (2004) recommends over-recruitment as a contingency to allow for non-attendance. Therefore, greater numbers of students than the maximum required were invited to participate, and whilst most indicated that they would be willing, not all returned signed consent forms.

Year 7 students were not included in the cohort because all deaf students with 'school request' status are treated as 'active' in terms of support from SSDC during transition from primary to secondary school. Although the amount of support may be variable during transition year, on completion of year 7, the entire cohort reverts to 'school request' status and minimal specialist support (barring those whose hearing has fluctuated or progressed to a moderate or greater loss).

It was felt that students without HAs issued would be less likely to engage with the study or SSDC, since previous contact, if any, is likely to have been nominal. Anecdotally, many of these students do not wish to acknowledge their hearing impairment or be associated with SSDC, and a low response rate was

anticipated. Similarly, post-16 students were not included in the target cohort due to likelihood of not engaging.

6 students in 2 schools agreed to participate, with consent from their parent/carer. Absence on the day of the interview meant that a student for whom consent had been obtained did not partake in the focus group, reducing the number of participating students to 5. See Table 1.

SENCOs/Inclusion Managers at the two participating schools were also asked to take part, alongside the peripatetic teacher of the deaf assigned to each school.

Parents/carers of all the participating pupils were invited to take part, with the expectation that one parent from each family would represent both parents/carers where applicable. Telephone interviews were offered at the convenience of the parents. Of 6 eligible parents, 3 agreed to take part. One of these was the mother of the student absent from the first focus group, thus was not interviewed. In total, 11 students, professionals and parents participated in the study.

Table 1: Demographic of participants - audiological information and age at referral to specialist support team

Participant ID	Gender	Age	Type of hearing loss	Age of referral to specialist support team	Hearing Aid(s)	Last recorded hospital visit
P1	F	16y 5m	MBHL	12y 5m	Nathos S+ Micro	01/2018
P2	F	16y 3m	MBHL	10y 11m	Nathos S+ Micro	10/2017
P3	M	15y 0m	UHL	5y 5m	Nathos Micro	02/2018
P4	F	15y 2m	UHL	8y 9m	Nathos Micro	03/2015
P5	F	13y 2m	UHL	6y 6m	Nathos Micro	06/2016

3.8 Data Analysis

Analysis of data used a thick description approach, useful for applying context to situations observed to get a fuller picture of what is happening. Transcribed data were coded and labelled. They were then cross-referenced with each other and with informal observations made before, during and after the interviews, and examined to reveal the following common perspectives, issues and recurring themes.

4. Findings

4.1 Introduction

The aim of the interviews was to elicit experiences of students and parents in relation to the students' hearing loss, in order to extract the difficulties and strengths of this cohort, and understand the processes for support.

Two schools took part in the study. Differing circumstances and approaches to support for UMBHL students allowed for comparison and contrasts to be drawn. Coincidentally and conveniently, the students were divided by type of hearing loss also. School 1 had only MBHL students taking part, whilst School 2 had only students with UHL participating, meaning that alongside the overview of the entire cohort, comparisons and contrasts could be drawn between the individual groups within it.

4.2 Age of Identification of Hearing Loss

None of the students' hearing loss was identified below the age of 4 years and some were significantly older.

Table 2: Referral, diagnosis and first fitting of hearing aids for the students

Participant	Reason/route for referral	Age at diagnosis	Time to first fit of hearing aid(s)
P1	Via ENT. Reason unknown.	12y 3m	19 months
P2	Via School Nurse due to concerns	10y 8m	4 months
P3	Failed Reception age screen	5y 0m	2 years
P4	Via GP due to parental concerns	8y 7m	6 months
P5	Via GP due to parental concerns	4y 1m	3 years

The mean age of hearing impairment diagnosis of the participants was 8 years 1 month, and the average amount of time following diagnosis before hearing aids were issued was 1 year 5 months.

Although most students were referred to the SSDC within a relatively short time of diagnosis, one student, the youngest at diagnosis, was not referred for 2 years 5 months post-diagnosis. This same student also went the longest before being aided, and has been the least regular user.

The reason for the delay between diagnosis and aiding was not clear to either parent, although both parents suggested that their child was unenthusiastic about having a hearing aid. Contrasting parental attitudes towards aiding were also somewhat revealed by responses to questioning about first hearing aid fitting.

Table 3: Parental response to questions about their child being fitted with a hearing aid.

Ann*	<i>I have a background of working at a primary school with a Hearing Impaired unit. That's why I was keen for [P3] to get a hearing aid, and I wasn't against it at all. I was quite happy. He wasn't really keen on it, even at that age, 7 or 8. I think he was a bit worried about what people at school would say, and his dad wasn't always the most supportive of it. He was also concerned that he might get picked on because of it, but when we went to have it fitted, [P3] came running out of the room – I let my husband go in with him to have it fitted – and he came out and he ran over to me and he said "Mum, I can hear EVERYTHING!"</i>
Julie*	<i>She didn't want one, and because she was doing fine at school, and they made adjustments to make sure the teacher was always talking to her right side, we didn't feel that she needed one at that point.</i>

4.3 Personal Understanding of Deafness

Most students and parents had a basic understanding of their loss, and had seen an audiogram, although explanation by the audiologist of what it meant appeared to be limited.

Table 4: Parents and students understanding of the hearing loss

P3	<i>My type is something to do with nerve endings by the drum I think...the audiologist got a big model ear, and just said it's the nerve that's not working properly.</i>
Ann	<i>It's certain frequencies. Its high-frequency hearing loss and I think they said he was struggling to drown out background noise.</i>
P5	<i>It's just partial in my left ear...they said it could be something called cross hearing, and it's basically where...my right ear has tried to make up for the hearing loss in my left ear, so I'm getting more hearing into my right ear. So then it's made my brain a bit confused with what's going on, so that's why I can't concentrate properly.</i>
Julie	<i>We used to go to the audiologist quite a lot. I'd sit and watch whilst they were doing the test with her, and they said it was mild in terms of the fact that her right ear was so good that it didn't affect her massively, but in the left ear, it was quite significant.</i>
P4	<i>I'm just affected in one ear. I don't know what my...</i>
P1	<i>It's a really mild one. They say that without the hearing aids I can't hear the t's and the p's and s's properly.</i>
P2	<i>I think my hearing loss is about 70...70 or 74%. It's, erm...I think it's, erm...not as worse as those who have 100% hearing loss</i>

4.4 Use of hearing aids

None of the students were consistent hearing aid users. Three attended audiology appointments in the past 6 months, but two had not been to an appointment for 2-3 years. Whilst one of the participating parents was ambivalent about the benefits of the hearing aid, and had sanctioned not wearing it, or attending regular reviews, the other was concerned about long term effects of non-usage, and was keen for her child to wear the aid consistently.

Ann: *'the audiologist was really good at explaining the benefits, not just for hearing, but for protecting the hearing that he's got further down the line when his hearing does start to deteriorate...so I've been trying to get him to wear it at home but I have to keep on top of it. I'm having to remind him constantly, and he doesn't really like it.'*

Students and parents offered varying reasons for not using HAs, or for using them selectively.

Table 5: Reasons given by students and parents for none/selective use of hearing aids.

P1	<i>I don't [wear them]. Not much. The hearing aids are really loud, and I think they're going to distract me so I just take them out. Science, I wear them 'coz I sit at the back, and then I take them off when we're working, but then I can't really take them off because she talks at the same time. They do help, but they're annoying, because they're too loud.</i>
P2	<i>The first time I had them I didn't really get along with them 'coz every time I put my hand here [gestures towards her face and ear] it makes a sound. Sometimes the mould would give me some sort of ear infection and all that. Sometimes I wasn't allowed to wear my earrings as well. [I wear the hearing aids] when I need to, like when it's exams or when we're doing more of a talking lesson. I think that's it. I take them off when I go home...Same thing, they're really loud. I'm not really wearing them now. I didn't wear them yesterday or the day before or following past days. Last time I wore them was probably before the December mocks, coz I was doing revision and all that.</i>
P3	<i>[I last wore it] end of year 6, start of year 7. I kind of got used to the hearing loss and felt I didn't need it anymore.</i>
Ann	<i>We keep asking him and it seems more to do with the fact that he thinks he doesn't need it. He always says I don't need it I can hear fine. So what can you say to that? It's just so hard all the time, even though we keep going back to the audiologist. He does get very defensive when he talks, you know, he was very defensive when we</i>

	<i>got to the audiologist and he was explaining, and he thinks he knows better and he will argue until he's blue in the face, and he never gives up. He's adamant that he doesn't need hearing aids.</i>
P4	<i>Like [P3] said, primary. A bit in year 7, but then I just didn't wear it coz I didn't need it. Well, I did, but like, I didn't feel like I needed it. I can hear fine. So that's it. I don't really need it, so I just don't wear it.</i>
P5	<i>I used to wear it, but then it broke and they said that there was a fault in the system and they gave me a new one and that one broke, and they gave me another, which is the one that I've got at home now... I stopped wearing mine because of what people used to say 'coz people used to call me names and stuff like that</i>
Julie:	<i>I think a lot of people made fun of her at school. I did speak with school about it and in the end I think we just agreed, because it didn't stop, the name calling, and that was affecting her more than not wearing the hearing aid.</i>

Whilst perceived lack of benefit, dissatisfaction with quality of sound or reliability were key reasons given for non-usage of HAs, perception by others and bullying was a factor for only one student, despite most having experienced negativity previously.

Table 6: Reactions from friends to the student's hearing aids

P1	<i>When I first told them, one of them came up screaming in my ear, like "[P1], can you hear me?" She's screaming like that and I was wearing hearing aids and it was so loud.</i>
P2	<i>I wasn't wearing my headscarf in year 6 so people saw hearing aids and they started whispering and blowing in them and initially I kept reacting to them...they found it fun. I didn't really like it that much, but I was ok with it and I got used to it.</i>
P5	<i>My friends used to make jokes about it in lessons and stuff like that. But that was in year 7, and they've stopped doing it now, 'coz I'm not really frie...I've got an entirely different friendship group since then.</i>

P3	<i>It's just jokes. They just call me hearing aid. It doesn't bother me at all.</i>
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Cosmetic appearance or visibility was not suggested as a trigger to reject HAs. P1 and P2 were able to conceal the wearing of them, since a headscarf was part of the school uniform. Both students confirmed that being able to 'hide' them made no difference and that they did not wear them simply because they did not like them. However, visibility of the aids had been more of an issue for P2 when she was younger (see Table 6)

Whilst none of the UHL students acknowledged any benefit from the hearing aids, both of the MBHL students, despite their reluctance to wear them, were aware of benefit, to varying degrees.

Table 7: Benefit of hearing aids for some students

P1	<i>I went on work experience and I was wearing my hearing aids for the full week and it really helped. I could hear things. You weren't really allowed to stand at the front of the class. You had to stand at the back, so I could hear the teachers talk, and when they would give me instructions, it was easier to do.</i>
P2	<i>They do help with the sound volume but it doesn't really help with when people speak coz sometimes I will just misunderstand what they say.</i>

P2 attributed this difficulty less to school, and more to unfamiliar environments outside her comfort zone, possibly suggesting a processing difficulty that might be linked to social anxiety, rather than a problem with the equipment.

The ToDs and SENCOs were aware of inconsistent or non-use of HAs amongst the students. However, the approach taken by the SENCOs to encourage wear was quite different. The SENCO at the first school (S1) said:

S1: *'[P1] has a tendency not to be wearing her hearing aids, so I drop in and do spot checks. I've tailed off a little bit because I don't want her to be singled out, but every so often I'll just pass her in the corridor and go*

[gestures to ear] and she'll go [nods head]....so we have a way of just checking'.

S2 had responded to a request from the mother of P3 to ensure that teachers were aware that he should be wearing a hearing aid, and to remind him to do so, but this had been a one-off reminder, since she was aware that he did not want to wear them, and did not want attention drawn to him. Instead, she suggested that had concerns been raised as a result of him not wearing his HA, support may have been offered in a different way. Ann commented about difficulty ensuring her son wore his hearing aid consistently.

Ann *'When he was at primary school, it was easier for me to keep on top of it because I could go in and speak to the teachers, but since he's gone to high school, he's worn it less and less and I haven't got that access, and it just becomes a bit of a battle really. I emailed school ...so he wore it for a little while, but over time, teachers either forget or they change, and without me being on top of it constantly, it's really difficult because he really doesn't want to wear it now, and as he's getting older, he's becoming more determined'.*

4.5 Psychosocial Development

None of the students reported friendship difficulties, or having any pastoral intervention in school for any other social issue. All students described current friendships positively, in terms of closeness, or groups. Parents described their children as 'confident' or 'laid-back', as having large groups of friends, and being comfortable with strangers. Whilst most students described incidences of negativity surrounding their hearing loss in the past, all 5 said that there had not been any recent occurrences.

Group discussions revealed that the UHL group seemed more willing than the MBHL students to try new things and put themselves in spotlight situations. P3 was teaching himself Russian, and took part in javelin competitions for school; P4 had a part time job where she took food orders from the general public, and P5 was studying a high grade of ballet with other dance students much older

than her, with a view to making it her career. Additionally, she said that she spoke to the SENCo regarding seating plans, as she was inappropriately seated for most lessons.

Conversely, the students with MBHL seemed more introverted and less inclined to advocate for themselves or put themselves in any sort of uncomfortable situation.

P1: *'I don't really go out without anyone...I went to the Open Evening and I didn't go on my own, I went with my mum. I told them to do all the talking and I was just listening... 'coz I don't know what to say. I don't know. I'm just really scared. I can't talk to people I don't know...what if they say stuff and I don't hear and just answer them?'*

Also discussing Open Evening, P2 explained that despite making arrangements to meet friends, when she couldn't see anyone she knew at the school entrance, and without mum for support, she felt too anxious to go inside and returned home. When asked what had triggered the anxiety she said:

P2: *'I was worried that I wouldn't be able to hear anybody since there were a lot of people, plus I wasn't with anyone I knew.'*

Lack of participation amongst the MBHL pair was also evident in classroom situations.

Table 8: Students describe why they do not participate in class

P1	<i>Once I thought she was asking a question, and she wasn't, so I answered – I answered the wrong question basically, and everyone started laughing. It was embarrassing, so I don't really answer much questions.</i>
P2	<i>I'm not really the talkative type when it comes to not being with my friends. I think it was worse in year 8 because I was in a class where I didn't know anybody. When it came to group work, I just wanted to sit on my own, because sometimes the teacher would end up putting me with a group that I might not get along with so I just tend to keep quiet</i>

	<i>and whenever they say something, my mind takes a long time to process what they are saying coz I was extremely nervous, and coz I was nervous I... my hearing tends to...I think it drops when I get anxious and nervous.</i>
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Many hearing impaired students employ coping or avoidance strategies to enable them to manage challenging situations. For these girls, this included tactics to try to be less visible. P1 commented that sitting at the back of a class was only allowed if she was wearing her hearing aids but that she was not required to prove it. Consequently, she answered in the affirmative if asked, but did not wear them. P2 stated that she avoids SEN staff in general *‘because [they] will make me go to [the inclusion office], and I don’t want that!’*

4.6 Self-identity and perception of impact of the hearing loss

The students with MBHL were more accepting of hearing loss as part of their identity than the students with UHL, one of whom in particular was quite sensitive about it. At a preliminary meeting S2 had been reluctant to sanction a joint meeting and requested that the pupils be interviewed separately based on previous experience with this student. However, all the students did eventually meet together. P3 and P4 were in the same academic year. P4 commented that she didn’t know P3 was deaf, who tersely retorted “I’m not!” He reiterated a number of times during the interview that his hearing loss did not affect him, as did P4. He was unhappy about the term ‘deaf’ in relation to his hearing loss, and when asked if being referred to as deaf annoyed him, said

P3: *‘Yeah, a little bit, yeah. It’s a common misconception that we’re deaf. I’m not. It’s just slightly. I just say I can’t really hear as well in that ear.’*

Whilst the other students were accepting of unwanted attention and composed in their handling of it, P3 was the most extreme in his response.

Table 9: Contrasting feelings about attention being brought to the hearing loss

P3	<i>I think I was quite rude to her. I was kind of arrogant answering and</i>
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	<i>stuff. That time was mostly the time when I was getting asked about it. So I was kind of irritated with people always asking me. It didn't really get on my nerves. It just happened a lot.</i>
S2	<i>When he first came, I had a meeting with [P3]. He was upset that he'd had to have a meeting with me, and he never wanted to see me again.</i>
P4	<i>There's just "I didn't realise you couldn't hear" and I went "yeah" and the conversation just changes... Yeah, I'd go through it and no-one said anything.</i>

None of the UHL students felt that their hearing loss had an impact academically or socially, and none saw it as a barrier to achievement in the future, whereas the MBHL students acknowledged that their hearing loss presented difficulties which would affect them in the future, but were accepting of it.

Both MBHL students lacked confidence to be proactive in tackling social barriers. However, none of the students were averse to employing strategies to cope with classroom difficulties such as mishearing instructions. All of the students asked friends for repetition or explanation, and some used friends work to catch up when falling behind due to mishearing or misunderstanding.

4.7 Academic Progress

All of the students were able to reasonably assess their own current academic progress and describe their targets, and these were corroborated in general by the SENCos. The students were happy with their progress overall but all expressed difficulty with Science. Parents were also satisfied with their child's progress and had no concerns about eventual academic outcomes.

Table 10: Academic progress from the point of view of SENCos and parents

S1	<i>I've got [P1] as causing concern in English, Maths and Science, but the rest of her grades are fine...and English Maths, Science and RS for</i>
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	<i>[P2]. Target grades for her, apart from Maths, which is a 4, everything else is 5, 6 and 7s, and she's currently doing 1s and 2s apart from RS, which is a 5-, but she's predicted a 7 in that. But I'd say these two are progressing at a similar rate. Everybody is showing as 2 or 3 grades weaker in everything at the moment.</i>
S2	<i>He is quite a high achiever, so he's expected to do well at school. He is underperforming at the moment, but according to SEN guidance he's NOT underperforming, but with other children he is slightly underperforming, and therefore we would...he's not doing bad actually. He's probably on target to do OK, from his predicted targets. He's still in year 10, and he's got about one and a half grades to go to hit his targets for the end of year 11. He's gonna be ok.</i>
Ann	<i>He's just done his mocks, coz this is the other thing. I was always saying to him, well, you need to make sure, coz if you miss any kind of information when it's been given to you about instructions for an exam or something, it's just really important that you're hearing everything that everybody's saying. But he's always done quite well academically. This is again why they didn't pick it up. We didn't think there was anything wrong because his speech has developed perfectly. They were quite surprised that he's got this hearing loss because his speech had developed really, really well, and he was doing well academically. But yeah, he's had one of his results back. He's had his English result back for his mocks and he's got an A so he's doing really well academically.</i>
S2	<i>She was doing very, very well, but we've just had a data collection input, yesterday actually, and her grades are just slipping ever so slightly.</i>
Julie	<i>The end of year targets for [P5] are level 4s and she's a 3+ - whatever it's called – across all her core subjects now, so she's on target.</i>

All of the students had some difficulty in maintaining attention and concentration. This was acknowledged by the students themselves, mentioned by parents or teachers as a recurring issue and was also observed on occasion during the interviews.

4.8 Supporting UMBHL students – what schools get and what they give

The schools had individual approaches to support for this cohort of students. However, the schools' population demographic may account, at least in part, for some differences. Each was diverse, particularly in respect of the Special Educational Needs (SEN) population. Table 9 shows that approximately 20% of the total school population is on the SEN register at School 2. Only 1 student with hearing loss is on the SEN register there, a negligible 0.5% of the SEN population. Whereas at School 1 only approximately 8% of the smaller school population is on the SEN register. Of the 65 students at School 1 with special educational needs, a massive 15.38% have hearing loss, with the majority having a moderate or greater loss, meaning that the school is actively involved in supporting multiple students with hearing loss, and also that time and staffing resources available to support the students at School 1 is relatively greater.

Table 11: Showing the general population and SEN demographic at 2 participating schools.

	School 1	School 2
No. of students on roll	800	998
No. of students on SEN register	65	200
No. of students with diagnosed hearing loss (any degree)	10	3
No. of students with HI on SEN register	10	1
SSDC 'School Request' / Range 2 for support.	4	3

The SENCo at School 2 accounted for only one of the hearing impaired students being on the SEN register:

S2 *'If a child has a diagnosis and school has not been made aware, or has not been made aware that it's an SEN issue ...we have to respect. If [parents] don't want their child on the SEN register and we don't think that it is a safeguarding issue - and by that we look at safeguarding*

educationally as well as physical safeguarding - it's parental choice. If they're not on my SEN register, I'm not that concerned about them.'

Julie confirmed that she had specifically requested that P5 was not added to the SEN register at primary school but the reason for this was not given.

In year 7, all students are treated as 'Active' for SSDC, and therefore work is done by the ToD to support transition, regardless of SEN status, type or degree of hearing loss. See Table 12.

Table 12: ToDs describe the process for support at transition in year 7.

ToD1	<i>I would meet them [students] within a few weeks of them starting school. Generally if I can I would meet the group of them if there's more than one so they can get to see who else is there with a hearing loss. That would be Active and School Request. That's part of the universal package that I think the whole team offers. We treat them as Active in year 7, but that actually just means one visit in effect, in September, or early October.</i>
ToD2	<i>I would arrange to make a visit early on in the September term. So I may have spoken to the ToD from primary school but to be fair, probably not likely, because they are in that School Request category, and so the focus will be the children with a bilateral moderate or worse loss. So I would go in and speak to the SENCo early on in the term during September I would hope and on that occasion, speak to the SENCo, meet the students, and that would be all students, so that would be Active and any new School Request going into year 7, and that would be it then. From that, would follow any advice that had come from my conversation with the student usually. Yeah, and just making sure that the SENCO was aware who they were.</i>

In addition to this initial visit, an annual mailshot detailing students known to the SSDC, and generic classroom strategies advice is sent to the school.

Whilst ToD1 said that she would meet with the SENCo annually for an update of the students, ToD2 said that the written advice would be the only action in relation to students with UMBHL, unless a specific issue was raised. ToDs do not generally offer any training to schools in terms of deaf awareness or maintenance of hearing aids for this cohort of students.

Table 13: Training offered to schools for students with UMBHL

ToD1	<i>To be honest, it's hard to do any training in secondary schools. It's not an easy thing to arrange when schools say they don't have the capacity or the time. If I do do training, it's usually for the higher need children.</i>
ToD2	<i>You can't get out there. If you have a caseload of primary and secondary and come September there are some children who've appeared in your primary school and some who've appeared in your secondary school, they are active, they're moderate or more significant loss, so in a way they are a clear priority...I'm afraid that's how you use your capacity.</i>

All professionals involved concurred that support to this cohort of students as a general rule was low level. Students not on the SEN register receive standard monitoring and interventions as for all other students in school, but no support related to hearing loss. For students at the lowest ranges for support on the SEN register, of which P3 is one, interventions are the same as for those in the general school population, namely a class led graduated approach, suggesting that there is little advantage to being on the SEN register from an academic perspective. S2 commented that as P3's academic progress was stable, she would look to remove him from the SEN register.

All students have an individual pupil profile which teachers can access. In the case of those on the SEN register, alongside general pupil data, including academic progress levels, the profile states the special educational need of the pupil, and the classroom strategies required for these students to access the curriculum. Invariably, the key element of this is appropriately positioning the

hearing impaired student, although lighting and acoustics and close proximity to the teacher may also be mentioned, in accordance with advice from SSDC.

SEN students are monitored via their individual profile. For both schools, monitoring consists of scrutinising academic levels. This means that if students are achieving relatively low academic grades, as long as they are maintained and are not vastly below target grades, specific interventions, including access to SSDC, do not kick in. However, other concerns, including those raised by audiology clinicians or parents, would trigger intervention from SSDC.

Whilst ToD2 had been given no cause to escalate support to any of the UHL students in School 2, ToD1 had been involved with both MBHL students at School 1. Identification of additional issues was recognised as being difficult by both ToDs and SENCOs, particularly in the case of socio-emotional issues. Table 13 shows comments from the participating professionals about difficulties identifying and managing issues in UMBHL students

Table 14: Difficulty in identifying issues amongst the UMBHL cohort

S1	<p><i>Those that are of the lower ranges with their loss, can slip by unnoticed, because they're reticent to mention it, they're reticent for it to be something that's known... and plus, there's a huge cultural aspect in this school that does mean that the students can go by unnoticed if it's not really flagged up.</i></p> <p><i>No, they don't really open up, and to be honest, particularly in this school, we have a serious cultural issue with difficulties, so they tend to be very reticent to even acknowledge that there is an issue, and that's not just with hearing loss. That's any kind of impairment that some of our students have, so they kind of just get on with it, because they're so used to doing that, in family situations as well, because it's not really spoken about, so they don't really talk about it very much. Some of the higher range ones that come in on a regular basis will talk to us and say if things aren't right... but those that are of the lower ranges and don't have the specific support, don't tend to come to us and talk to us about</i></p>
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	<i>it...I'd like to think that we maintain an open house here. The students are welcome through those doors at any time as far as I'm concerned.</i>
ToD1	<i>I think they're the same issues [as students with a more significant loss]. I think that because they don't have that regular contact with a teacher of the deaf, those issues aren't, perhaps, dealt with as quickly or flagged up or seen or ...whereas I don't think it's the hearing loss that causes it, I do think that it's perhaps another factor on top of normal teenage growing up, and perhaps not having the understanding of how their hearing loss affects them, because although it's not a huge effect, it's still an effect.</i>
ToD2	<i>Well, I don't feel confident to do that at all [identify a socio-emotional issue] I would never do it without the school, because the school can always provide the context, so it's very much a cooperative endeavour ...it's good that they know to call us in, and we can bring up to date audiology records and stuff like that so we are for example, has the hearing deteriorated at all or are there any other issues? But then, the school can provide the rest of the context, like 'oh we're really worried, there's been a real dip in progress' or academically, we're not that worried, because there hasn't been a dip in progress but socially, there's something going on. Yeah, so I would not feel confident to diagnose an issue.</i>

4.9 Summary of psychosocial differences between UHL and MBHL students

As a result of having the two groups divided by hearing loss between the two schools, it has been possible to draw a number of contrasts between the ways each group functions socially. Table 15 summarises these. Whilst it could be argued that how the students present themselves may be influenced by other members of the group, description of specific incidents and experiences would seem to negate this.

Table 15: Summary of psychosocial differences between the two groups of students.

UHL Group	MBHL Group
More independent	Dependent on others to help them negotiate the world at large
More outgoing and resilient.	More introverted, less willing to participate, self-isolating behaviours
Confident in large groups, with strangers and in unfamiliar settings	Confident only in their immediate circle of friends and family
More willing to try new things and put themselves in potentially challenging situations	Fearful of being outside their comfort zone

5. Discussion

5.1 Introduction

The research for this study was designed to qualitatively elicit the perspectives of secondary aged students with UMBHL in terms of the challenges and impact of their hearing loss, and of how they might wish to be supported. The experiences of the students were reinforced with views from some of the parents of the group. Similarly, opinions about the needs of the cohort were sought from peripatetic ToDs from the SSDC and SENCoS in the secondary schools the students attended, alongside a representation of how these needs are managed according to SSDC guidance, and within the infrastructure of each school.

Whilst both the UHL and MBHL group are ranged similarly for support from SSDC, findings from interviews with the students would seem to define them into two discrete groups, with seemingly differing needs and outcomes. Nevertheless, the wishes of the students regarding support are very similar. Protocols for support in the two schools correspond with each other although the approaches to this varied.

The findings of the interviews are discussed here in three sections: Academic Progress and Expectations, Psychosocial Issues, and Support for UMBHL students.

5.2 Academic Progress and Expectations for UMBHL students

Whilst hearing loss is recognised as a potential indicator of social difficulties such as poor self-esteem, it inevitably also presents academic challenges, including deficits in attention and concentration, loss of incidental learning, increased processing time and poor working memory amongst other things (NDCS, 2012). The cohort displayed or described issues with attention and concentration, and this alone could have a negative effect on academic achievement, even without the detriment of other hearing-related barriers to learning.

The extent to which academic achievement is affected by hearing loss has been the subject of much research, including reports that students with a mild hearing loss often perform worse academically than those with a greater level of hearing loss. (Most, 2004, Antia, 2009) Much research has recorded the impact of increased listening effort negatively affecting cognitive resources for children with mild hearing loss. (Hicks and Tharpe, 2002; Tuller and Delage, 2013; Lewis et al, 2016, Howard et al, 2010) Additionally there is evidence to suggest that students with unilateral or mild bilateral hearing loss make adequate progress, but that a gap remains between their academic achievement and that of hearing peers. (Antia et al, 2009)

All the pupils in this study were described as under-performing or working below target, but the point was made at both schools that this was the case for most of the students, not just those with hearing loss, which may be indicative of similar rates of progress as hearing peers. This would corroborate research which suggests that despite academic difficulties at a younger age, children with lesser degrees of hearing loss are able to catch up to their normally hearing peers academically (Lieu et al, 2012) or at least suggest that there is no widening gap in progress.

GCSE target grades for the entire cohort ranged between 4 and 7, with the majority of targets being at the lower end of this range, and higher targets generally relating to the UHL group. None of the students were targeted aspirational grades at the highest levels of 9 and 8, and only a few of the target grades were set at 6 or 7.

It may be the case that the UHL students are at the pinnacle of what they could hope to achieve with or without the hearing loss, since it is not the case that every child without a hearing loss achieves the highest grades. Academic ability is influenced by a number of things for all children, including parental engagement, maternal education level, socio-economic or cultural background and other factors. (Marschark et al, 2015) Mid-range targets may also be indicative of low academic expectations for students with hearing loss, which would seem to be borne out by the comment from S2 about P3 underperforming

in line with his peers but not according to SEN guidance. Do schools have reduced academic expectations for all students with an identified SEN, regardless of the need or level of severity?

5.3 Psychosocial Issues

For students in secondary school, adapting socially to the new environment can be tough. The addition of a hearing loss and its associated difficulties often results in hearing impaired students doing their utmost to blend in (Kent, 2003, Kent and Smith, 2006). Peer acceptance is positively correlated with happiness and good self-esteem in deaf adolescents (Cambra, 2005, Theunissen et al, 2014, Rieffe, 2012). To establish a social footing, UMBHL adolescents may seek to minimise the outward indication of the hearing loss by not using HAs. Sometimes they are able to assimilate with their peers, and the hearing loss has no obvious impact. For others, low self-esteem, lack of confidence, and an unwillingness to participate and risk being seen as lacking may be the cost.

Findings for the cohort in this study indicated both scenarios to be true. For the UHL students, there was no suggestion of any social difficulty from the students themselves, or their parents, and the professionals involved had had such limited association with the students as to be unable to comment to the contrary. Whilst one of the students felt annoyance and had been mildly hostile as a result of attention being drawn to his hearing loss, there was no other negative socio-emotional aspect identified, and the group in general might be described as well-adjusted. But sensitivity and hostility may be an early indicator of psychological distress in adulthood leading to avoidance of socially difficult situations (Monzani et al, 2007).

For the MBHL girls, there was evidence of socio-emotional effects that limited experiences both in and out of school, which could be attributed to their hearing loss, at least in part. Wolters et al (2012) observed deaf adolescent girls well-being decrease during transition to secondary school. 'Quality of life' investigations might substantiate whether this continues, but no significant differences were seen in research measuring quality of life in children with

MBHL compared to those with normal hearing in Wake et al (2006) suggesting that diminished well-being is not peculiar to the deaf population.

Social anxiety and lack of confidence outside their comfort zone was evident amongst the MBHL girls in the current study, and these girls may suffer from poor self-esteem, although no specific research was conducted to prove this. However, much research associates hearing loss with low levels of self-esteem, (Warner-Czyz, 2015, Van Gent et al, 2011) which may be communicated as unwillingness to participate, and active withdrawal from social situations. The MBHL students were the oldest of the 5 in the group to be diagnosed with hearing loss, and perhaps their social difficulties may be linked in part to difficulty in personal adjustment to their deafness.

Poor language ability is linked to emotional and behavioural problems for deaf adolescents (Stevenson et al, 2018, Stevenson et al, 2017, Hogan et al, 2011) but none of the students had an identified language disorder. However, despite having been described as 'articulate' by both the ToD and S1, a transcript of the group interview including P2 indicated her difficulty with correctly using tenses and identifying appropriate language, such as the phrase 'following past days' to denote 'previous'. As one of the latest to be diagnosed with hearing loss and receive interventions, this observation may connect with research which suggests that age at intervention is significant in predicting language outcomes (Yoshinaga-Itano , 2003; Moeller, 2000; Yoshinaga-Itano et al, 1998, Walker et al, 2017)

Although attempting to normalise their social image was a common theme between the UMBHL group, none of the students defined themselves as hearing, a tactic that Kent and Smith (2006) suggest as a possible gateway to integration. However, they did not identify themselves as deaf explicitly either, regardless of the level to which they acknowledged the deafness and its impact. Kemmery and Compton (2014) suggest that fluidity of self-identity helps others understand needs relating to hearing loss and gives deaf students resilience, two things which would be very helpful to the MBHL girls. Despite potentially accessing a deaf peer group at School 1, with a number of students having

PCHI, the MBHL girls avoided being connected with this group, further evidence of seeking to eliminate any visible association with hearing loss.

It is debatable whether the close friendships the students described had been formed as a result of normalising behaviour, since there was a common suggestion that these friendships had formed following disassociation with the hearing technology. Certainly it would appear that the students presenting themselves as 'normal' was of greater value than any advantage the use of HAs may have afforded. Whilst not wearing HAs would inevitably present challenges for the students, on balance, drawbacks were outweighed by advantages. All of the students had been prey to negative comments and teasing during primary school, or early on in secondary school, and it may not be too dramatic to suggest that removing visible indicators of the hearing loss was an act of subconscious self-preservation. Fellingner et al (2008) concluded that mental health disorders were far more likely in deaf students who had been teased and isolated. However, the findings of the current study suggested that visual issues of HAs were not of major importance, corresponding with the findings of Ellington and Lim (2013). Poor functionality was cited as one of the main reasons for rejection of the hearing aids.

A seemingly positive socio-emotional effect in the students interviewed for this study was a largely phlegmatic and adaptable approach to school life, particularly amongst the UHL group. The MBHL group demonstrated passive acceptance of their hearing loss, although they revealed more resulting negative effects than the UHL group. It might be argued that what appears to be resilience in the UHL group is more akin to resignation in the MBHL girls who displayed significant social anxiety linked to their hearing loss, and an inability to be proactive in confronting it.

However, it is difficult to qualify which effects are directly attributable to the hearing loss, when other factors are certainly at play. The two groups were from different demographic backgrounds, and S1 was certain that cultural stigma was an important factor in the attitude to hearing loss for the MBHL group. This stigma would affect not just the girls, but others in the same cultural circle,

including family and friends. Stigma could certainly contribute to a wish to conceal visible signs of hearing loss, as well as ensuring that the girls did nothing to draw attention to it such as participating in class discussions. Michael and Attias (2016) found that perceived social support, particularly from family, was important for psychosocial development of adolescents with hearing loss. If a sense of shame about the hearing loss had been absorbed by the affected students, it is unsurprising that they might harbour stress and anxiety linked with it. However, Warner-Czyz et al (2015) found that there was no significant correlation between demographic factors and self-esteem which may suggest that social stigma has less impact on the deaf student than perceived.

Conversely, the more confident and higher achieving UHL students came from families which had either embraced the hearing loss or at least rationalised its impact, and were sufficiently engaged with their child's deafness to complete the research for this study. Demographic information was requested from parents at the end of the interviews. Both were mothers who described themselves as white, middle class, well-educated and both employed within the education sector. Michael et al (2015) found that parental occupation status was correlated to expectations of success for a deaf family member in occupations with elevated communication requirements. It could be suggested that familial attitude has an influence on psychosocial outcomes of deaf students that rivals that of the hearing loss itself, but this would require additional investigation.

Nonetheless, the more skilled the UMBHL students become at disguising and minimising the impact of the hearing loss, the greater the challenges for supporting this cohort. Given potentially deep-rooted psychosocial issues, alongside being treated as low priority, it would seem likely that there is a possibility of these students 'flying below the radar' and developing problems that may be entirely overlooked, or not discovered until the impact of them is significant in terms of mental health issues.

Isolating social, emotional or behavioural issues as hearing related in hormonal teenagers may be complex, especially for a SENCo or ToD who may not have a relationship with the student. ToDs in this study were uncomfortable with

making judgements surrounding socio-emotional issues in UMBHL students. Whilst there are tools such as the SIFTER to help identify students who may be at risk of these kinds of issues, ToDs and SENCoS are not qualified to carry out psychological assessments (although concerns can be escalated to professionals who are). In any case, it is debatable whether a SENCo, and possibly even a ToD, would make a connection between social, emotional and behavioural issues and UMBHL, especially where the hearing loss has been minimised to such an extent by the student as to present little or no impact on the surface. Anecdotally, stereotyping is usually applied to issues of this kind in teenagers. Poor behaviour in boys is often seen as 'a touch of rebellion' or 'getting in with the wrong crowd'; friendship issues in girls are often met with comments about raging hormones. Rarely are behavioural, emotional and social issues seen as being hearing related.

5.4 Support for UMBHL students

Under current SSDC support guidance for 'School Request' students (i.e. those that do not receive support beyond transition unless an issue is flagged up by school, health services or parents), SENCoS have the option, at any time, of seeking advice from ToDs to help with academic (or other) issues, such as access to the curriculum, acoustic problems in classrooms, appropriate seating, establishing use of hearing technology etc. With a cooperative approach to support, there is no practical reason that academic gains cannot be made for the UMBHL student who has fallen behind. Much of this support can happen 'behind the scenes', but anything that requires a student's cooperation, may pose an obstacle.

The students in this study were clear that they did not feel that support was necessary, nor would it be welcomed. Parents were in agreement that no support was needed, even the mother of P3 who had been vociferous in her desire for her son to wear his HA. Equally, the ToDs felt they could add little value beyond discussing coping strategies with the student, and that there was little more they could offer that the student would be willing to accept.

The question remains then, are we already doing enough for our students with UMBHL? Is appropriate seating sufficient if this is the chosen method of support? Is a fire-fighting approach, which employs specialist intervention once the student displays difficulties, adequate? Or should students be continuously monitored, particularly in respect of areas such as socio-emotional well-being?

It is unfortunately the case that need must be reconciled with available resources. Across the UK, funding for SEN is being cut, putting further pressure on schools and services to prioritise spending for those with the highest needs. Therefore, time and capacity must be used effectively for all professionals. It is highly unlikely that UMBHL students will ever be perceived as high priority, and it will therefore be incumbent upon schools to monitor and manage this cohort, since spending on low need students will not be deemed justifiable.

Such monitoring should be inclusive of social, emotional and behavioural factors (Winiger et al, 2016). Slipping grades may be an indicator of other issues, and it is inappropriate to seek only to address academic outcomes. In order to create well-adjusted, productive individuals, schools must approach monitoring and managing the needs of students with UMBHL holistically.

Conclusion

This study contributes to existing research that aims to identify the challenges of UMBHL in teenagers, and to consider whether professional support to these students is appropriate.

The original intention of this study was to look at a whole group of students with two differing hearing losses to determine collective needs for support, and to produce recommendations for the entire cohort. However, the research has highlighted that whilst this group is considered low priority and low need, a clear division exists within it, and that what is appropriate for one section may disregard the challenges faced by the other.

The findings of this research revealed that:

- Secondary school students with MBHL are more prone to social anxiety, lack confidence and actively withdraw participation in class.
- Secondary school students with UHL adapt well to their hearing loss and display minimal negative effects. They are resilient, adaptable and phlegmatic.
- Expected academic outcomes for UHL students are higher than for students with MBHL in core subjects.
- 2 of the 5 students exhibited socio-emotional difficulties, but only one of those student's difficulties had been identified by school.
- School based monitoring of students relies largely on academic progress for students on the SEN register, giving the opportunity for students to 'fly below the radar' in terms of other hearing-related issues.
- Students with UMBHL are not necessarily considered to have a special educational need.
- Students with UMBHL are not routinely monitored by SSDC.
- Regardless of difficulties faced by UMBHL students, those in this study do not want support, or any attention drawn to their hearing loss.

Caution should be exercised in generalising the findings of this research. The sample size was small, and demographic information indicated a cultural skew for both groups. Therefore, a replicated study amongst another sample of students from different backgrounds may produce entirely different results.

Additionally, it would have strengthened the research to measure the impact of hearing loss for all students, particularly in relation to non-usage of the hearing aids, which would have allowed for quantitative comparison of the effects on listening.

However, strength of the research lies in collecting pupil voice to elicit experiences and opinions that might not otherwise be heard. This has shown that even in a very small sample of students, there may be issues to be addressed.

This research demonstrates a point made early on in this study, namely that all these students are individuals, with differing challenges and difficulties, and those who work with them should monitor and support them on that basis, preferably in a pre-emptive way. However, finding a cost and time effective method of achieving this remains a challenge.

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Appendix

SOCIAL SCIENCES, ARTS AND HUMANITIES ECDA

ETHICS APPROVAL NOTIFICATION

TO: Melissa Crewe

CC: Dr Jackie Salter

FROM: Dr Timothy H Parke, Social Sciences, Arts and Humanities ECDA Chairman

DATE: 19/05/17

Protocol number: EDU/PGT/CP/03028

Title of study: How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist deaf service support?

Your application for ethics approval has been accepted and approved by the ECDA for your School and includes work undertaken for this study by the named additional workers below. This approval is valid:

From: 19/05/17

To: 02/05/18

Additional workers: no additional workers

Please note:

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1. Should you amend any aspect of your research, or wish to apply for an extension to your study, you will need your supervisor's approval and must complete and submit form EC2. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1 may need to be completed prior to the study being undertaken.

Should adverse circumstances arise during this study such as physical reaction/harm, mental/emotional harm, intrusion of privacy or breach of confidentiality this must be reported to the approving Committee immediately. Failure to report adverse circumstance/s would be considered misconduct.

Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)

FORM EC6: PARTICIPANT INFORMATION SHEET - STUDENT

1 Title of study

How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist support?

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the research that is being done and what your involvement will include. Please take the time to read the following information carefully and discuss it with your parents. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University’s regulations governing the conduct of studies involving human participants can be accessed via this link:

<http://sitem.herts.ac.uk/secreg/upr/RE01.htm>

Thank you for reading this.

3 What is the purpose of this study?

This study is being carried out as the subject of a master’s degree dissertation. It aims to discover how students with a mild or single-sided hearing loss are supported in school. It will look at the experiences and opinions of students, parents, and teaching staff to find out what works well, and what can be improved so that students enjoy school life and achieve as well as they are able to. It is hoped that the information gathered will help to improve future support from the Support Team for Deaf Children.

4 Do I have to take part?

It is completely up to you whether or not you take part in this study. If you do decide to take part you will be given this information sheet to keep and your parents will be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not affect any support that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

The students participating in this study must:

Be in academic year groups 8, 9, 10 or 11

Have been diagnosed with a hearing loss by an audiologist
Have 1 or 2 hearing aids although it is not important for this study that they are used regularly

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in a group discussion in school with some other students with a hearing loss. It is hoped that this can be arranged before the end of October 2017. The discussion is expected to take around 40 minutes. It should be the only time I need to see you or speak to you in relation to this study. However, if the group discussion is interrupted for any reason and I need further information, I may ask to speak to you again. If you decide you do not wish to take part at this or any time, you can pull out of the group without having to tell me why. The study should be completed by May 2018.

7 What will happen to me if I take part?

You will form part of a group of three or four people who will join me for a conversation about what it is like to be a student with a hearing loss in secondary school. We will talk about:

What you and other people in school know about hearing loss and how you feel about it.

Your hearing aids – how you feel about them; how much you use them (it doesn't matter if you don't); what is good and bad about them; any other equipment you might use (or want to use) to help you hear.

How you're doing at school academically; what is more difficult for you because of your hearing loss, if anything; what your friends know about your hearing loss; how people at school treat you.

What help you get at school (if any) because of your hearing loss, or for some other reason.

Although I will ask some questions about these topics, I would like you and the other participants to chat freely in the session. It is not a test, and there are no right or wrong answers or comments. I am looking for your honest thoughts and opinions.

I would like to record the conversation we have as a group on a digital voice recorder. This is so that the conversation can flow freely, and I don't have to keep stopping people talking so I can write things down. Once I have converted the conversation into text, I will delete the recordings. You will not be identified in the text or in the study I write later.

If you agree to be involved I will ask other people who know you if they are willing to be involved in the study. I would like to speak to one of your parents, to the SENCo/Inclusion Manager at school, and to a specialist teacher of the deaf who will have met you in year 7, though you may not remember them or have seen them since. The purpose of this is so that I can get a wide viewpoint about what it is like for students with a hearing loss at secondary school, and about what help is available.

8 What are the possible disadvantages, risks or side effects of taking part?

The focus of the study for students will be positive aspects of school life and support, and therefore none are anticipated. However, it is possible that we may talk about

something that you find upsetting. If this happens, you will be provided with the care and support you need from me or a member of staff, if this is appropriate. If you do not wish to continue with the session, or with the study, that is ok.

9 What are the possible benefits of taking part?

The study will highlight what the school is doing well to support this group of students and should help to provide reassurance and improved support to schools, students and families in the future.

10 How will my taking part in this study be kept confidential?

All information collected will be made anonymous prior to being used in the dissertation. The tutor supervising the study will be the only other person who may need to access the information. This will be kept only until the study is completed and then it will be destroyed.

11 Audio material

To enable the free flow of conversation in the focus groups the researcher intends to make audio recordings via digital voice recorder. These recordings will be transcribed and then destroyed. No student will be identified by their real name in the transcriptions.

12 What will happen to the data collected within this study?

Data will be anonymised and stored in accordance with the data protection procedures of Bradford MDC. All materials will be kept on a computer with security password or within a locked cupboard.

The data will be anonymised prior to storage.

Parts of the interview may be included exactly as they are spoken within the dissertation to describe thoughts, feelings and opinions. No contributor will be identifiable from any quote used.

13 Will the data be required for use in further studies?

The data will not be used in any further studies.

14 Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is EDU/PGT/CP/03028

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, in writing, by phone or by email:

Melissa Crewe
Educational Audiology Officer
Support Team for Deaf Children
Children's Services
Margaret McMillan Tower
1 Princes Way
Bradford
BD1 1NN
01274 439500
melissa.crewe@bradford.gov.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar.

Thank you very much for reading this information and giving consideration to taking part in this study.

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)

FORM EC6: PARTICIPANT INFORMATION SHEET - PARENT

1 Title of study

How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist support?

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the research that is being done and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University’s regulations governing the conduct of studies involving human participants can be accessed via this link:

<http://sitem.herts.ac.uk/secreg/upr/RE01.htm>

Thank you for reading this.

3 What is the purpose of this study?

This study is being conducted as the subject of a master’s degree dissertation. It aims to identify the nature and extent of support for students with a mild or single-sided hearing loss after the Support Team for Deaf Children has taken a step back following transition to secondary school (Year 8 onwards). It will look at the experiences and opinions of students, parents, and teaching staff to establish what works well, and what can be improved to ensure that students are participating well academically and socially in school life, and to inform future support packages.

4 Do I have to take part?

It is completely up to you whether or not you take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not affect any support that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

No. As the parent of a child who may participate in the study you are automatically eligible to take part.

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in it for the time required to collect information for inclusion in the study. You will be interviewed once in the near future by telephone. I should not need to contact you in relation to the study again. However, if the interview is interrupted, I may ask to speak to you again later to complete the survey. You are not obliged to continue with the interview should you so wish, and may withdraw at any time. The study should be completed by May 2018.

7 What will happen to me if I take part?

You will be asked to participate in a telephone interview. This is expected to take not more than 20 minutes. If you would like to be involved but it is not possible for you to participate in the telephone interview, you will be asked to complete a questionnaire via email or post.

The aim of the interview will be to have a relaxed discussion about your child's school experiences and your relationship and communication with the school, relating to:

Understanding of hearing loss – yours, your child's and the school in general.
How your child uses their hearing aids and other technology and what coping strategies they use to manage their hearing loss in school.
How you feel your child is doing in school, academically and socially.
How school monitors your child's progress, what support is offered, how you are involved in that process and what improvements could be made, if any.

I will also be asking the SENCo/Inclusion Manager and a specialist Teacher of the Deaf who is assigned to the school (but who may not have had contact with your child since year 7) if they would be willing to participate in the study and give their viewpoint on some of the topics above. However, I will not be asking about individual student's achievements or difficulties, but about the particular challenges this group of students as a whole face and about the ways those challenges are met.

8 What are the possible disadvantages, risks or side effects of taking part?

The focus of the study will be positive aspects of school life and support, and therefore none are anticipated. However, if you are upset by any aspect relating to your child's school life, it will be possible to arrange a meeting to discuss this with an appropriate member of school staff or the specialist Teacher of the Deaf, should you so wish.

9 What are the possible benefits of taking part?

The study will highlight what the school is doing well to support this group of students and should help to provide reassurance and improved support to schools, students and families in the future.

10 How will my taking part in this study be kept confidential?

All data collected will be anonymised prior to being used in the dissertation. The supervising tutor will be the only other person besides the researcher who may need to access the data. Data will be kept for the duration of the study and destroyed upon completion.

11 Audio material

To enable the free flow of conversation in the focus groups and individual interviews the researcher intends to make audio recordings via digital voice recorder. These recordings will be transcribed and then destroyed. No participant will be identified by their real name in the transcriptions.

12 What will happen to the data collected within this study?

Data will be anonymised and stored in accordance with the data protection procedures of Bradford MDC. All materials will be kept on a computer with security password or within a locked cupboard.

The data will be anonymised prior to storage.

Excerpts from the data may be quoted verbatim within the dissertation to describe thoughts, feelings and opinions. No contributor will be identifiable from any quote used.

13 Will the data be required for use in further studies?

The data will not be used in any further studies.

14 Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is EDU/PGT/CP/03028

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, in writing, by phone or by email:

Melissa Crewe
Educational Audiology Officer
Support Team for Deaf Children
Children's Services
Margaret McMillan Tower
1 Princes Way
Bradford
BD1 1NN
01274 439500
melissa.crewe@bradford.gov.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar.

Thank you very much for reading this information and giving consideration to taking part in this study.

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)

FORM EC6: PARTICIPANT INFORMATION SHEET – SENCo/INCLUSION MANAGER

1 Title of study

How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist support?

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the research that is being done and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University’s regulations governing the conduct of studies involving human participants can be accessed via this link:

<http://sitem.herts.ac.uk/secreg/upr/RE01.htm>

Thank you for reading this.

3 What is the purpose of this study?

This study is being conducted as the subject of a master’s degree dissertation. It aims to identify the nature and extent of support for students with a mild or unilateral hearing loss after the Support Team for Deaf Children has taken a step back following transition to secondary school (Year 8 onwards). It will look at the experiences and opinions of students, parents, and teaching staff to establish what works well, and what can be improved to ensure that students are participating well academically and socially in school life, and to inform future support packages. The emphasis will be positive and will not involve making judgments about any individual participating in the study.

4 Do I have to take part?

It is completely up to you whether or not you take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not affect any support that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

No. As the SENCo/Inclusion Manager at a school where students meeting the criteria for the study may be participating in the study, you are automatically eligible.

The criteria for inclusion for the students are:

Academic year groups 8-11

Mild (average) or unilateral (single-sided) hearing loss

1 or 2 hearing aids issued (nb: it is not important for this study that they are used regularly)

Parents of participating students will also be asked if they are willing to be involved, as will the specialist Teacher of the Deaf assigned to your school.

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in it for the time required to collect data for inclusion in the study. It is anticipated that all data collection will be completed by the end of December 2017. Participants will be surveyed only once, although may be contacted later if the interview is interrupted or if clarification on any point is required when the data is being analysed. The study should be completed by May.

7 What will happen to me if I take part?

You will be asked to participate in a face to face interview to discuss the below topics in general terms. The aim will be to have a relaxed discussion about the cohort of students meeting the participation criteria, particularly relating to:

Deaf awareness – student's understanding and school wide

Use of hearing technology and coping strategies

Academic/social engagement and achievement in school – identifying the strengths and particular challenges faced by these students

Understanding the process for monitoring and support of this cohort of students

The interview is expected to last between 30-40 minutes.

8 What are the possible disadvantages, risks or side effects of taking part?

The focus of the study will be on positive aspects of school life and support, and therefore none are anticipated.

9 What are the possible benefits of taking part?

The study will highlight what the school is doing well to support this group of students and should help to provide reassurance and improved support to schools, students and families in the future.

10 How will my taking part in this study be kept confidential?

All data collected will be anonymised prior to being used in the dissertation. Only the supervising tutor may have access to the data, other than the researcher. Data will be kept for the duration of the study and destroyed upon completion.

11 Audio material

To enable the free flow of conversation in the focus groups and individual interviews the researcher intends to make audio recordings via digital voice recorder. These recordings will be transcribed and then destroyed. No participant will be identified by their real name in the transcriptions.

12 What will happen to the data collected within this study?

Data will be anonymised and stored in accordance with the data protection procedures of Bradford MDC. All materials will be kept on a computer with security password or within a locked cupboard.

The data will be anonymised prior to storage.

Excerpts from the data may be quoted verbatim within the dissertation to describe thoughts, feelings and opinions. No contributor will be identifiable from any quote used.

13 Will the data be required for use in further studies?

The data will not be used in any further studies.

14 Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is EDU/PGT/CP/03028

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, in writing, by phone or by email:

Melissa Crewe
Educational Audiology Officer
Support Team for Deaf Children
Children's Services
Margaret McMillan Tower

1 Princes Way
Bradford
BD1 1NN
01274 439500
melissa.crewe@bradford.gov.uk

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar.

Thank you very much for reading this information and giving consideration to taking part in this study.

UNIVERSITY OF HERTFORDSHIRE

ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)

FORM EC6: PARTICIPANT INFORMATION SHEET - TEACHER OF THE DEAF

1 Title of study

How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist support?

2 Introduction

You are being invited to take part in a study. Before you decide whether to do so, it is important that you understand the research that is being done and what your involvement will include. Please take the time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask us anything that is not clear or for any further information you would like to help you make your decision. Please do take your time to decide whether or not you wish to take part. The University’s regulations governing the conduct of studies involving human participants can be accessed via this link:

<http://sitem.herts.ac.uk/secreg/upr/RE01.htm>

Thank you for reading this.

3 What is the purpose of this study?

This study is being conducted as the subject of a master’s degree dissertation. It aims to identify best practice in supporting students with a mild or unilateral hearing loss after the Support Team for Deaf Children has taken a step back following transition to secondary school (Year 8 onwards). It will look at the experiences and opinions of students, parents, and teaching/support staff to establish what works well, and what can be improved to ensure that students are participating well academically and socially in school life, and to inform future support packages.

4 Do I have to take part?

It is completely up to you whether or not you take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. Agreeing to join the study does not mean that you have to complete it. You are free to withdraw at any stage without giving a reason. A decision to withdraw at any time, or a decision not to take part at all, will not affect any support that you may receive (should this be relevant).

5 Are there any age or other restrictions that may prevent me from participating?

No. As the specialist Teacher of the Deaf assigned to a participating school, you are automatically eligible.

The criteria for inclusion for the students are:

Academic year groups 8-11

Mild (average) or unilateral (single-sided) hearing loss

1 or 2 hearing aids issued (nb: it is not essential for this study that they are used regularly)

Parents of, and staff working with the students are automatically eligible for inclusion in the study.

6 How long will my part in the study take?

If you decide to take part in this study, you will be involved in it for the time required to collect data for inclusion in the study. It is anticipated that all data collection will be completed by the end of December 2017. Participants will be interviewed or surveyed only once. The study should be completed by May 2018.

7 What will happen to me if I take part?

You will be asked to give a summary of your support to the students, families and school following transition. This will include the nature of the support, how long it was for, and professional opinions on the below topics in relation to the school in general and this cohort of students.

Deaf awareness – students and staff

Use of hearing technology and coping strategies utilized.

Academic/social engagement and achievement in school – describing the particular challenges and strengths of this cohort of students.

Monitoring and support – involvement following transition year; knowledge of school processes

8 What are the possible disadvantages, risks or side effects of taking part?

The focus of the study will be positive aspects of school life and support, and therefore none are anticipated.

9 What are the possible benefits of taking part?

The study will highlight what the school is doing well to support this group of students and should help to provide reassurance and improved support to schools, students and families in the future.

10 How will my taking part in this study be kept confidential?

All data collected will be anonymised prior to being used in the dissertation. Only the supervising tutor may have access to the data, other than the researcher. Data will be kept for the duration of the study and destroyed upon completion.

11 Audio material

To enable the free flow of conversation in the focus groups and individual interviews the researcher intends to make audio recordings via digital voice recorder. These recordings will be transcribed and then destroyed. No participant will be identified by their real name in the transcriptions.

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The data will be anonymised prior to storage.

Excerpts from the data may be quoted verbatim within the dissertation to describe thoughts, feelings and opinions. No contributor will be identifiable from any quote used.

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The data will not be used in any further studies.

14 Who has reviewed this study?

This study has been reviewed by:

The University of Hertfordshire Social Sciences, Arts and Humanities Ethics Committee with Delegated Authority

The UH protocol number is EDU/PGT/CP/03028

15 Factors that might put others at risk

Please note that if, during the study, any medical conditions or non-medical circumstances such as unlawful activity become apparent that might or had put others at risk, the University may refer the matter to the appropriate authorities.

16 Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me, in writing, by phone or by email:

Melissa Crewe
Educational Audiology Officer
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Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar.

Thank you very much for reading this information and giving consideration to taking part in this study.

UNIVERSITY OF HERTFORDSHIRE
ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)

FORM EC3
CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS

I, the undersigned *[please give your name here, in BLOCK CAPITALS]*

.....
...
of *[please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]*

.....
.....
hereby freely agree to take part in the study entitled

How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist deaf service support?

.....
.....
(UH Protocol number ...EDU/PGT/CP/03028..)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of my involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent to participate in it.

2 I have been assured that I may withdraw from the study at any time without disadvantage or having to give a reason.

3 In giving my consent to participate in this study, I understand that voice recording will take place and I have been informed that this data will be transcribed and then the recording will be destroyed.

4 I have been given information about the potential risks of my suffering harm or adverse effects. I have been told about the aftercare and support that will be offered to me in the event of this happening, and I have been assured that all such aftercare or support would be provided at no cost to myself.

5 I have been told how information relating to me (data obtained in the course of the study, and data provided by me about myself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used.

6 I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.

8 I have been told that I may at some time in the future be contacted again in connection with this study.

Signature of participant.....Date.....

Signature of (principal)
investigator.....Date.....

Name of (principal) investigator [*in BLOCK CAPITALS please*]
MELISSA CREWE.....
UNIVERSITY OF HERTFORDSHIRE
ETHICS COMMITTEE FOR STUDIES INVOLVING THE USE OF HUMAN PARTICIPANTS
(‘ETHICS COMMITTEE’)

FORM EC4
CONSENT FORM FOR STUDIES INVOLVING HUMAN PARTICIPANTS
FOR USE WHERE THE PROPOSED PARTICIPANTS ARE MINORS, OR ARE OTHERWISE
UNABLE TO GIVE INFORMED CONSENT ON THEIR OWN BEHALF

I, the undersigned *[please give your name here, in BLOCK CAPITALS]*

.....
of *[please give contact details here, sufficient to enable the investigator to get in touch with you, such as a postal or email address]*

.....
hereby freely give approval for *[please give name of participant here, in BLOCK CAPITALS]*

.....
to take part in the study entitled

How do two mainstream secondary schools in Bradford meet the needs of students with a hearing loss who do not meet the criteria for automatic specialist deaf service support?

.....
(UH Protocol number ...EDU/PGT/CP/03028...)

1 I confirm that I have been given a Participant Information Sheet (a copy of which is attached to this form) giving particulars of the study, including its aim(s), methods and design, the names and contact details of key people and, as appropriate, the risks and potential benefits, how the information collected will be stored and for how long, and any plans for follow-up studies that might involve further approaches to participants. I have also been informed of how my personal information on this form will be stored and for how long. I have been given details of his/her involvement in the study. I have been told that in the event of any significant change to the aim(s) or design of the study I will be informed, and asked to renew my consent for him/her to participate in it.

2 I have been assured that he/she may withdraw from the study, and that I may withdraw my permission for him/her to continue to be involved in the study, at any time without disadvantage to him/her or to myself, or having to give a reason.

3 In giving my consent to participate in this study, I understand that voice recording will take place and I have been informed that this data will be transcribed and then the recording will be destroyed.

4 I have been given information about the potential risks of his/her suffering harm or adverse effects. I have been told about the aftercare and support that will be offered to him/her in the event of this happening, and I have been assured that all such aftercare or support would be provided at no cost to him/her, or to myself.

5 I have been told how information relating to him/her (data obtained in the course of the study, and data provided by me, or by him/her, about him/herself) will be handled: how it will be kept secure, who will have access to it, and how it will or may be used.

6 I understand that in the event that his/her participation in this study may reveal findings that could indicate that he/she might require medical advice, I will be informed and advised to consult his/her GP. If, during the study, evidence comes to light that he/she may have a pre-existing medical condition that may put others at risk, I understand that the University will refer him/her to the appropriate authorities and that he/she will not be allowed to take any further part in the study.

7 I understand that if there is any revelation of unlawful activity or any indication of non-medical circumstances that would or has put others at risk, the University may refer the matter to the appropriate authorities.

8 I have been told that I may at some time in the future be contacted again in connection with this or another study.

9 I declare that I am an appropriate person to give consent on his/her behalf, and that I am aware of my responsibility for protecting his/her interests.

Signature of person giving consentDate.....
Relationship to participant
.....

Signature of (principal) investigator
.....Date.....

Name of (principal) investigator *[in BLOCK CAPITALS please]*
MELISSA CREWE.....