



**BIRMINGHAM CITY
University**

Exploring the perceptions of people from South Asian
backgrounds about hearing loss and hearing services

by

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Statement of Declaration

I hereby declare that the thesis submitted is my own work, composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. All direct or indirect sources used are acknowledged as references.

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Abstract

Background and Purpose- The purpose of this study was to explore perceptions of people from south Asian ethnic backgrounds living in Birmingham about their hearing loss and hearing services. Hearing loss can have a significant impact on quality of life, causing anxiety, depression, and isolation. Despite the importance of hearing, there is a scarcity of research in the field of hearing loss among people from south Asian communities. The literature review identified a gap in the field of knowledge where perceptions of south Asian communities about hearing loss and hearing services have not been explored previously.

Methodology- This study was based on qualitative methodology, where constructivist grounded theory was used to address the research aim. Semi structured interviews were conducted with 19 participants belonging to south Asian backgrounds through purposeful sampling and later snowball sampling. Transcripts of the interviews were analysed developing categories and sub categories.

Results- Exploring the views of people from South Asian backgrounds resulted in three main categories: 'importance of family', 'dismissing hearing issue as a health concern' and 'subconsciously adapting to hearing loss'. These categories led to the emergence of a core category: 'Collective Me', which highlights the main concept of how hearing loss is perceived among people of South Asian backgrounds and their views on accessing hearing services. The research findings led to the development of '**The Explanatory Model of Hearing Health in South Asian Communities**' which illustrates and explains how hearing loss and hearing services are perceived and provides some insights into how access to hearing services can be improved.

Conclusion- The study found that in South Asian communities, the collectivist culture and opinions of family are given high priority when considering hearing loss and hearing services. In addition, people from South Asian backgrounds do not consider their hearing loss as a significant health concern and adapt to it whilst continuing with their daily lives. The explanatory model illustrates the concepts that can be used to understand why people belonging to a collectivist culture such as south Asian, may not be accessing hearing services. The model is designed to raise awareness among the

South Asian communities regarding hearing health and be used to encourage them to overcome the cultural and social barriers that prevent them from seeking hearing services. It can help health professionals understand the perceptions of people belonging to South Asian communities and to adapt the service provision to cater for their needs. The model can also be used as a tool for educating healthcare trainees with aim of raising cultural awareness and to improve health inequalities. The explanatory model crystalises key aspects of my original contribution to knowledge which explicates hearing loss in a way that it has not been considered before.

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Preface

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Chapter 1 - Introduction

1.1 Introduction and background to the research problem

Hearing loss of any degree tends to have a negative impact on a person's life. It affects people's quality of life with increased risk of anxiety, depression, isolation, and mortality (Action on Hearing Loss, 2023; Age UK, 2016; Basner et al. 2014). Early recognition of hearing loss is imperative, as timely intervention can help improve the quality of life. Hearing services offer hearing aids as the primary intervention for hearing loss. Hearing aids improve communication, self-confidence and listening in most environments (Picou, 2020; Ferguson et al., 2017). The use of hearing aids is associated with a positive effect on cognition and reduced stress levels (Dawes et al., 2015). Studies have encouraged and emphasised the benefits of acquiring hearing aids (Knoetze et al., 2023; McCormack and Fortnum, 2013), yet they appear to be underused (Yong et al., 2019) hence a general lack in the uptake of hearing services is observed (Maiké et al., 2018). Specifically, this disparity seems more prominent amongst ethnic minority groups even though these populations are at more risk of a hearing loss (Dawes, 2014). The extent of disparity and the reasons for the lack of uptake of hearing services by the ethnic minority people, especially south Asians are unknown. The current study sets to investigate this issue and contribute new information to the body of knowledge. In order to obtain that knowledge, the research aim for the study is:

Aim - To explore perceptions of people from South Asian ethnic minority communities about hearing loss and their views on uptake of hearing services.

The aim of this study is to understand how people from South Asian ethnic minority communities perceive hearing loss and what they think about accessing hearing services. It focuses on exploring their behaviours, knowledge and attitudes that influence how they perceive their hearing loss and uptake of hearing services.

1.2 Justification for current research

The justification of undertaking this research is related to a few aspects. It is important to note from the outset that much of the current policy and literature uses the term *ethnic minority* as a broad category to refer to all minority ethnic groups in the UK, often without specifying individual groups, and within these individual groups, the South Asian population represents the largest proportion (8.5%) (Census, 2021). The first justification for this research is the call from governmental and NHS health policies to increase research and clinical trials on people from ethnic minority backgrounds (Inclusive Britain, 2022). These policies have been initiated and discussed for many years, beginning from the Acheson report (1998), Marmot review (2008) and the more recent NHS Race and Health Observatory (2022). All aim to tackle health inequalities and to reduce the health disparities for people belonging to ethnic minority populations. The second rationale is the current situation of people from ethnic minority backgrounds and their lack of uptake of health services. There are various reasons including dissatisfaction, lack of awareness and long waiting times which contribute to the disparity in accessing healthcare services by the people belonging to ethnic minority groups. Another area which justifies the importance of my research is the health issue, specifically hearing loss which is already an understudied topic. People generally suffering from hearing loss tend not to seek advice until up to 10 years after it is first experienced (Knoetze et al., 2023). These last two aspects that combine underrepresented population and understudied health issue signify the importance of this study. The sections below provide a detailed discussion of each one of the above stated justifications.

1.2.1 Tackling Health Inequalities - Policies and Procedures

Health inequalities can be defined as a difference in health status of people belonging to different populations. The inequalities are generally analysed through four factors; socioeconomic status,

geography, individual characteristics (age, gender, ethnicity) and social exclusion (homelessness) (Williams et al., 2020). In 1997, the Secretary of State for Health in England urged an inquiry into identifying the areas of inequality in healthcare in order to develop policies to reduce them. The main reason for the existence of these inequalities was the 18 years rule of Conservative government beginning in 1979 (Lahelma et al., 2000). In those years the social inequalities increased, where rich became richer, and poor became poorer. This had a significant impact on the health of the disadvantaged people which included mostly those who belonged to an ethnic minority background. Considering the migration period for ethnic minority groups post WWII, and their efforts to settle in the UK, the Conservative policies profoundly affected them and their health.

In 1997, after the Government changed to Labour one of the main issues to be addressed was to tackle health inequalities and therefore Acheson was appointed to lead an inquiry in 1998, titled 'Independent Inquiry into Inequalities in Health Report'. The government had acknowledged the health disparity between the more affluent and the less privileged and Acheson's inquiry focused on the social determinants which contributed to the health inequalities between them. It is known that ethnic minority populations resided and still reside in the most deprived neighbourhoods and are subjected to even poorer health outcomes, contributing to health inequalities in society (Byrne et al., 2020).

After the Acheson report (1998), Marmot Review (2008) was produced and both reports focused on several developments to improve the socioeconomic determinants of all residents by alleviating the unemployment of those less privileged, increasing employment opportunities and benefits to families with children (Black et al., 1999). These initiatives directed towards the disadvantaged people were to improve the overall quality of their lives. Examples of such developments included flexibility in housing locations, reducing risks of falls, Healthy Start Vouchers for children and renovation of public areas (Chang et al., 2004; Anderson et al., 2003; Thomson et al., 2001). The strategy was to improve the socio-economic status of the deprived neighbourhoods which would

have had a direct impact on achieving better health outcomes. However, both Acheson and Marmot reports and the implemented policies did not improve the health of people from ethnic minority backgrounds. The policies did not address ways of seeking healthcare for specific treatments, rather the aims were to generally improve access to primary care by extending the hours of general practice (Mackenbach, 2011). In addition, although it was recognised that ethnic minority people predominantly lived in deprived neighbourhoods, no policies were specifically tailored towards people of different ethnicities (Ingleby, 2012). Moreover, none of the interventions (such as the flu vaccinations, smoking cessation and access to primary care) were designed with the purpose of including ethnic minority people (Main, 2008). For example, the nasal flu vaccines contained traces of porcine gelatine and were not suitable for vegans or vegetarians, which also meant that people from Islamic or Jewish religious backgrounds could not accept that vaccine (Greener, 2015). Generally, the population wide scalability of the policies was questionable and therefore the overall targets to reduce health inequalities between the well-off and the deprived communities were not met (Mackenbach, 2011).

In a more recent report, Marmot (2020) claimed that socioeconomic status was not the leading cause of health inequalities between the ethnic minority and the majority White population in the UK. The issue seemed to be deeper than merely reducing economic complexities. Toleikyte and Salway, (2018) found that comparing groups from similar socioeconomic backgrounds, such as Gypsy or Irish Travellers with South Asian ethnicity, the latter still reported poorer health. A few of the factors contributing to the indicated poorer health were unsatisfactory primary care experiences, lack of support in management of long-term health issues and less self-confidence in dealing with health problems (Watkinson et al., 2021). These factors suggest that the NHS and the Public Health England need to play their part in addressing the social needs of patients from diverse ethnic backgrounds and this point was also recognised by Marmot (2020). The best way to understand the complexities regarding health and social issues embedded within ethnic minority groups, studies like mine are needed. I propose to explore what hearing loss means to people in their day to day lives

which will incorporate all aspects which matter to ethnic minority groups. I aim to provide an understanding of hearing loss and seeking hearing services through the eyes of people from one specific ethnic minority background called south Asian.

There has been an increase in recommendations from UK organisations such as the Runnymede Trust (2021) and south Asian Health Foundation (2021) to prioritise ethnic minority people's health. Especially since the health inequalities were highlighted and evident from the disproportionately high number of COVID-19 cases within people of ethnic minority backgrounds (Public Health England, 2020). Although most researchers attributed the higher cases of COVID-19 to low socioeconomic status (Martin et al., 2020), others acknowledged that it was due to lack of knowledge, language and cultural differences (Khunti et al., 2020). Cultural differences could be attributed to some people not believing that COVID-19 was a serious concern. To increase access to the COVID-19 testing and the vaccinations for ethnic minority people, the social and cultural barriers were addressed. There were linguistically and culturally competent outreach campaigns organised, and testing sites were erected within the heart of the communities (Mathur et al., 2020; Khunti et al., 2020a). A few influential people within diverse communities were used to spread the message about the dangers of COVID-19 virus. The adaptations implemented to ensure inclusion of people from all diverse backgrounds proved beneficial in the uptake of the COVID-19 services. These kinds of pragmatic changes and the instantaneous response to a health concern had not been reported previously. It is understandable, that the seriousness of the COVID-19 pandemic and the need to control its spread governed the responses from all health organisations. However, this experience ascertains that addressing the social and cultural barriers is likely to improve the uptake of the services. It is the views on hearing services which the current study aims to explore and hence reduce any barriers in accessing the hearing services by people belonging to south Asian ethnic backgrounds and contribute new knowledge to the field of research which will guide future policies and service provisions.

Only a few of the current health policies are explicitly targeted towards hearing impairment and of those some focused on the employment of people with a hearing disability, improving communication pathways and installing a hearing aid compatible loop system in public places (NHS England, 2017). There was a framework; 'commissioning services for people with hearing loss' which urged clinicians to pay proper attention to the cultural and ethnic differences of patients, but no guidelines were provided as to how the inclusion of all ethnic minority people was to be achieved. Similarly, none of the national policies were specifically tailored to improving healthcare in ethnic minority people (Becares et al., 2020). There is a need to develop healthcare models that focus on not just the biological interventions but that also explore the societal components (Orji, 2020; Smeeth, 2002). This research may contribute to improving policies and practices in not just audiology departments but other underused healthcare services such as mental health and sexual health services (Jimenez et al., 2012; McCuistian et al., 2021). Both Jimenez et al, (2012) and McCuistian et al., (2021) found that people belonging to ethnic minority backgrounds were not accessing mental and sexual health clinics as they should because of their lack of understanding of the health issue and the benefits of the services provided. The next section discusses the currently known barriers which prevent ethnic minority communities in general to make full use of the healthcare in place.

1.2.2 Current health policies catering to South Asian communities

South Asian populations in the UK face distinct health challenges, prompting the development of targeted health policies and initiatives. Currently there are no health policies catering to the needs of south Asian communities, but non-profitable charitable organisations such as South Asian Health Foundation (SAHF) and South Asian Health Action (SAHA) have developed guidelines tailored to this demographic, to improve health outcomes (Misra et al., 2020). The main health concerns which are being focused upon by these charities include Type 2 diabetes, cardiovascular diseases and mental

health services accessibility (Khan et al., 2022; Misra et al., 2020). SAHF emphasises culturally appropriate dietary advice and community engagement whilst SAHA highlights barriers such as institutional racism and cultural dissonance as factors limiting South Asians' access to effective mental health care. Their policies now advocate for culturally sensitive approaches that respect patients' identities and incorporate their conceptualisations of distress (Prajapati and Liebling, 2021).

Although there is a need for culturally informed health policies, these do not seem to be implemented widely which is continuing to cause a disparity in the access of health services by South Asian people. One of the reasons for these disparities was identified as the shift towards digital healthcare services in the recent years. South Asian patients were particularly found to be lacking in the uptake of these digital services due to language barriers and digital literacy challenges and implementation of a hybrid model (digital and in person appointments) is recommended (Patel et al., 2023).

Another reason for the existing disparity was found to be lack of accurate collection and recording of ethnicity data which contributes false under or over estimation of health outcomes (Razieh et al., 2025). Unless there is a clear picture of health seeking patterns among people belonging to different ethnicities, disparities cannot be fully investigated and neither addressed. The ethnicity data within health records for certain South Asian groups, such as Pakistanis and Indians is not representative of the population recorded in Census 2021 (Razieh et al., 2025). There is a need for standardised ethnicity data collection by healthcare organisations which aligns with the categories and subcategories reported in Census 2021.

In conclusion, while charitable organisations like SAHF and SAHA have made commendable progress in addressing the specific health needs of South Asian communities, a significant policy gap remains at the governmental level. Without the widespread implementation of culturally informed

strategies, disparities in healthcare access and outcomes are likely to persist. To ensure equitable healthcare provision, it is imperative to prioritise standardised ethnicity data collection aligned with national census categories.

1.2.3 Existing knowledge on accessing health services by Ethnic Minority Communities

While looking at accessing health services, there is some information directed towards generic ethnic minority groups without specifying the exact ethnicity. This section looks at the existing knowledge on accessing health services by general ethnic minority communities. Ethnic minority communities are said to face numerous challenges when accessing various health services which are linked with poor healthcare experiences (Gov.uk, 2019; Pinder et al., 2016; Denktas, 2011). A more recent survey by Magadi and Magadi (2022) found a strong negative association between patients from ethnic minority backgrounds and their satisfaction with the GP services. Some of the reasons identified by researchers for the dissatisfaction of ethnic minority patients included, lack of understanding, low trust level in the healthcare staff and a sense of disempowerment (Pinder et al., 2017; Sze et al., 2015). It is also suggested that ethnic minority people are hesitant in contacting their GPs because of their cultural and health beliefs, difficulty in obtaining appointments and long waiting times (NHS England, 2017). Although some of the logistical reasons such as getting GP appointments and long waiting times apply to people of all ethnicities, factors like low trust level and feeling of power imbalance may be more paramount for people of ethnic minority backgrounds. However, the deeper understanding of why these feelings exist are not explicitly studied by researchers. Or maybe they are attempted to be studied but not fully understood, especially if the researcher does not have in depth cultural knowledge of the certain population. Therefore, despite policies and studies aiming to reduce health inequalities and improve access to healthcare for ethnic minority communities, there does not seem to be much progress in this field. The dissatisfactory experiences of ethnic minority people with their healthcare providers may be a major barrier in accessing certain health services, thus health inequalities continue to exist. Some researchers have

acknowledged that hearing services are generally underused by people who have a hearing loss regardless of their ethnic background (Knoetze et al., 2023; Zhao et al., 2015). In order to fully comprehend the justification of this research it is important to get an insight into the prevalence of hearing impairment.

1.3 Prevalence of Hearing Impairment

The global percentage prevalence of hearing loss since 1985 has increased from 0.9% to 2.1% in 2005 and up to 5.3% in 2010 (WHO, 2014) and 6.1% in 2018 (WHO, 2018). The reasons for this increase include the growing population of older people and the greater noise exposure (WHO, 2018). Hearing loss is ranked the third largest cause of disability in the Global Burden of Disease in the world, after back pain and migraine (Haile et al., 2021). There are over 1.5 billion people globally who have some degree of hearing loss (Haile et al., 2021). A higher prevalence of hearing impairment is reported for adults living in developing countries compared to high-income regions (Gretchen Stevens, 2013). The average statistics show 4.9% for high-income countries such as the UK, USA, Norway, Australia, Sweden in comparison to 15.7% for developing countries (Davis, 1995). The highest percentage was observed in the south Asian region increasing up to 19.2% of the total population. One of the reasons for why the prevalence of hearing loss was higher in the developing countries was seen to be due to high rates of pre and post-natal infections such as measles, rubella and meningitis (Freeland et al., 2010).

1.3.1 Prevalence of Hearing Impairment in UK

Hearing loss is the second largest disability within the UK, affecting over 10 million adults and 45,000 children, meaning 1 in every 6 people have some degree of hearing impairment (NHS England, 2015). This figure increased to an estimated 12 million which is equivalent to 1 in 5 people in 2018 (RNID, 2018). Eight million people are said to be above the age of 60, indicating an age-related

hearing deterioration (Hearinglink, 2018). By 2035 it is forecasted that 14.2 million people may have some degree of hearing loss (Office of National Statistics, 2018). These projected figures for the future show the increasing population that can be impacted by hearing loss and without proper interventions, the quality of life of these people will significantly be affected.

The focus of this study is on ethnic minority groups (EMG) who reside within Birmingham and the surrounding areas; therefore, the prevalence within the West Midlands is presented. 17.2% of the total population (5,713,284) are said to have a hearing impairment accounting for 985, 500 people (England, 2016). Prevalence regarding different types of hearing loss, 90% of hearing impairment is diagnosed as sensorineural hearing loss compared to 0.8% for conductive loss in the US and similar figures are observed for Europe and UK (Hain, 2018). Sensorineural hearing loss is mostly a non-reversible loss and can only be treated through audiological interventions, such as hearing aids. Conductive hearing loss is generally caused by an obstruction in the auditory pathway and in most cases can be resolved (Sooriyamoorthy and Jesus, 2020). The percentage incident for conductive loss may be underrepresented due to the temporary resolvable nature, where individuals suffering from it may not access hearing healthcare, and allow the blockage to resolve itself over time, hence the prevalence would be affected. The different types and degrees of hearing impairment impact individuals differently in their lives and therefore self-perception of hearing impairment plays a major role (Meyer et al., 2014). Also, as stated earlier, it takes up to 10 years on average for an individual suffering from a hearing loss to the point of seeking hearing services (Knoetze et al., 2023). Both of the above mentioned aspects point towards the subjective choices of people which may be a contributing factor to lack of uptake of hearing services, and hence the prevalence recorded may not be a true representation of the actual number of people experiencing hearing difficulty. However, people who do acknowledge their hearing issue and seek hearing services may come across barriers in the access pathway. These pathways currently in place for accessing services are reviewed below.

1.4 Current Hearing Services Access Pathway

The care pathway for accessing hearing services is initiated with a GP consultation. People experiencing any type of hearing problems can contact their GP, who would assess the patient and decide on a referral to the audiology or the ENT clinic at one of the NHS Trust hospitals. There is a clear referral criterion that provides guidelines to GPs on patients' eligibility for audiology or an ENT referral (British Academy of Audiology, 2016). The referral criteria underwent amendments in 2016, where the 'direct referral' from a GP to Audiology was previously restricted to referring people above the age of 60 years. That restriction was lifted, and people of all ages could be referred, who did not present with any other complications such as pain, sudden hearing loss, ear trauma and discharge (British Academy of Audiology, 2016). Those who did not fit the direct referral criteria were referred to the ENT department to seek further advice. The new referral criteria, inclusive of all ages meant an easier direct access to hearing services, but the extensive exclusion criteria which lists the possible hearing related complexities makes it very difficult to meet the direct referral criteria for anyone other than those suffering from an age-related hearing deterioration (Jeffery et al., 2021).

Most patients were referred to hospital-based clinics, but since 2012 the NHS began a scheme where any qualified providers were able to provide hearing care to eligible NHS patients (Bennet, 2016). GPs were then able to refer to any high street hearing service providers and were not obliged to send patients to NHS audiology departments. This allowed patients to have a choice of where they wanted to be seen and the convenience of accessing hearing services in local high street shops. However, in order to keep the costs to a minimum, the hearing aids offered to all NHS patients were basic behind the ear (BTE) devices, whilst the private patients were offered many different types of hearing aids. The option of paying towards different styles of hearing aid was not open to the NHS patients resulting in lack of choice available to them (Moss, 2013). The difference in the range of

hearing aids offered to the private clients compared to the NHS funded patients became more apparent from visiting these high street hearing service providers. The segregation in the types of hearing aids provided to the private client in comparison to the NHS patients shows the impact of governmental health policies affecting the disempowered people. In this case the more discreet and aesthetically pleasing hearing aids available to private clients may have instilled negativity and possible dissatisfaction with the NHS funded hearing aids and the audiology services (Monitor, 2015). These differences in the services given to private patients may contribute to negativity towards hearing services and hence affect the uptake. This study will explore views about hearing services where the access pathway may be perceived as a barrier by people of ethnic minority backgrounds. However, it is important to understand why it is important to access hearing services for people suffering from hearing loss, which is discussed in the section below.

1.5 Significance of accessing hearing services

Disabling hearing loss has a considerable bearing on people's lives and wellbeing. There are many factors which are negatively impacted by hearing loss, including family and friends, social life and employment status. Unaddressed hearing loss not only affects the individual suffering from it, but also the family and friends. Vas et al. (2017) found that people with whom the hearing-impaired person frequently communicates, reported that hearing loss increased their responsibility of listening and decreased their enjoyment of social activities. There is a sense of burden on the communication partner to be the ears for their hard of hearing relative in most situations. Close relationships are also impacted due to communication breakdown and the constant need to repeat instructions which can have a detrimental effect on those relationships (Wallhagen et al., 2004; Vas et al., 2017). In the absence of communication partners, people lose interest in conversations and tend to avoid social events due to the reduced ability to hear (Manchaiah and Stephens, 2012). This can gradually cause disconnection and isolation from family and friends leading to depression

(Baguley, 2013). Therefore, accessing hearing services will not just benefit the people suffering from the hearing loss but also the family around. Better hearing improves the quality of life, increases self-confidence and provides more independence (Aciton on Hearing Loss, 2023).

Hearing impaired people are also said to obtain lower levels of education and end up in low paid jobs or remain unemployed compared to the people with clinically normal hearing (Emmett and Francis, 2015). The World Health Organisation estimates an annual global cost of 750 billion dollars for unaddressed hearing loss including costs associated with the health sector, educational support, loss of productivity and societal costs (WHO 2018). The indirect negative impact on society and the economy through lower paid jobs and unemployment (Tsimpida et al. (2019) further highlights the importance of understanding hearing health seeking behaviour especially of ethnic minority people who are more likely to reside in poorer neighbourhoods. The findings of my study may contribute to improving the current audiology practice and enhancing ways in which people from ethnic minority communities can access it. This aligns with the department of health policies to tackle health inequalities some of which are summarised by Coffey, (2022). As discussed previously, none of these policies were catered towards the ethnic minority communities, which presents an issue due to the increasing diversity of the ethnic minority populations.

1.5.1 Ethnic minority population demographics

To provide further context to the research proposal targeted at the ethnic minority communities, the population demographics in Birmingham were reviewed. The city of Birmingham is the largest within the West Midlands, and when considering ethnically diverse areas, this region is the second most ethnically diverse area (28.2%) in the UK after London (63.2%) (Census, 2021). The population of ethnic minority people in Birmingham is the second highest after London (51.4%). Breakdown of the different ethnicities in Birmingham shows the largest ethnic minority group is Pakistani (17%) followed by Indian (5.8%) and Black African (5.8%) (Birmingham City Council, 2023).

These demographics show the largest ethnic groups belonging to the south Asian communities and highlight the importance of research specifically focused on them.

1.5.2 Diversity of Birmingham

Birmingham was chosen as the city of interest for this research due its rich cultural and ethnic diversity. As stated above, Birmingham is the second most diverse city in Birmingham and one of the reasons for this is the Industrial Revolution which began in the 1700s (Murie et al., 2002). Birmingham became known for various metal industries which only expanded and created many job opportunities over the years. It was the existence of these factories which required manpower resulting in the post WWII mass immigration period. This was the time when people from many countries migrated to Birmingham to work in the factories (Messina, 2001). Since then, the ethnic diversity of Birmingham has only increased due to families joining from their home countries and settling in Birmingham. Another contributing factor is the traditional values of inter community marriages which meant more people migrated as spouses. This tradition is still existent in certain communities, especially within the South Asian groups. Despite the fact that recent generations are more accultured to the British values, people continue to seek proposals from their land of ethnic origin (Ballard, 2003). However, a more recent survey has seen a downward trend in transnational marriages (Charsley et al., 2020). The reason for this shift may be that there were smaller communities and limited choices 20-30 years ago which has changed with the increasing ethnic minority population. The diverse ethnic population of Birmingham seems to be a result of a snowball effect which continues to grow. This makes Birmingham an ideal place for the proposed study where ethnic minority communities, especially south Asian are accessible.

Reasons other than population demographics of Birmingham include, the researchers own city of residence and better logistics of carrying out the study within close proximity. This also meant potentially less travel time for both the researcher and the participants. The chosen methodology

with a qualitative part was more likely suited to Birmingham with its vibrant and diverse communities, where there would be a higher chance of collecting data from participants embedded within these communities.

1.6 Introduction to the Methodology of this study

This study adopts a qualitative approach which explores views of people from ethnic minority backgrounds, specifically from south Asian backgrounds. Qualitative data is gathered from people belonging to south Asian backgrounds through conducting semi-structured interviews. The focus of the study is to obtain information from those people who have some degree of self-reported hearing issue but are not seeking hearing services. These included people who have or have not approached their GPs regarding their hearing problem but do not go further to seek audiology services. The aim is to gain an insight into the south Asian ethnic minority people's perceptions on hearing issues and their views on the uptake of hearing services. Approaching south Asian ethnic minority communities with a self-reported hearing problem gives an opportunity to explore views and any barriers which may have prevented uptake of hearing services, consequently using that data to inform and improve the access pathway. As a professional audiologist, I entered this field of research with extensive professional experience and was able to ask relevant questions to ensure the aims of the research are met.

1.6.1 My Positionality in this research

There are multiple factors of positionality which may impact the undertaking of this research project. Positionality is defined by the researcher's world view and where the researcher comes from (Savin-Baden and Major, 2013). I have worked as an audiologist for the past fifteen years and acknowledge that my experiences and previous knowledge of the field shapes my views and pre-

conceptions. In this section my positionality is highlighted whilst through the course of my PhD I learnt and later clarify my ontological and epistemological position.

In this study, I am personally involved, subjectively analysing participants' responses, reasoning and logic through my interpretations. The interview questions are to some extent influenced by my professional knowledge. The skill set I had acquired over the years such as interacting with patients of diverse ethnic backgrounds, gender and age guides how the research interviews are conducted. The ways in which I develop a rapport and established a trustworthy relationship with the participants are based on my training as a healthcare professional.

Another aspect worth considering, as part of my positionality is my south Asian ethnic background which may influence the responses of my participants who belonged to the same ethnicity. I consider myself an insider who knows about the cultural and traditional values as well as an outsider who is able to understand people's individual beliefs. Labaree, (2002) advocates for the researcher to hold an insider position as it provides deeper understanding of participants' data. Insiders have cultural familiarity and are better suited to interpret, critique and draw appropriate conclusions (Labaree, 2002). My ethnic background gives me awareness of social norms, cultural terminologies, and understanding the context in which certain things may be said. An outsider would need to learn all these factors through the research and verify the information through research which can lose the essence of the phenomena being studied. a grasp of four languages other than English. My positionality as a south Asian individual may contribute to how I understand and interpret the participants' data.

1.7 Structure of the thesis

This thesis comprises nine chapters, with the first chapter postulating the initial emergence of the research proposal and justification for conducting the study. The research aims are presented,

highlighting the two parts of the mixed methods adopted. The current policies and procedures for hearing issues are reviewed, putting into context the crucial reasons for undertaking this project. An introduction to my chosen methodology is provided and my positionality as a researcher. The summary of all the chapters presents an overview of the investigation, the research process and subsequent outcomes.

Chapter 2

This chapter reviews the relevant literature using systematic review with thematic analysis proposed by Aveyard (2016). The initial literature search on south Asian populations yielded no relevant results and so the search was broadened to ethnic minority populations. The literature review follows a very structured design which includes using the PICO format to develop a review question, inclusion and exclusion criteria, search terms used, study selection process, PRISMA flowchart, data extraction process and the synthesis and analysis of data. The findings are presented as concepts and illustrated using diagrams.

Chapter 3

The methodology chapter presents the aim and the objectives of my research, followed by exploring different paradigms whilst evaluating the most relevant for my study. In order to adequately address the research aim, a constructivist grounded theory methodology was considered the most appropriate and the rationale for the choice is stipulated. An outline of all the potential qualitative research approaches is specified and evaluated to select the one that best suits my study. The chapter concludes by explaining my critical reflexivity and introducing the reflexivity journals which are an essential part of this methodology.

Chapter 4

This chapter offers a detailed and comprehensive description of the research methods used to conduct my study. The tools adopted for collecting qualitative data using the constructivist grounded theory approach. The inclusion and exclusion criteria for the participants is clarified and the strategies for recruiting and sampling are outlined. The chapter discusses the ethical considerations for recruitment and how it adopted theoretical sampling in adherence to constructivist grounded theory. The plan and structure for the interviews are described by explaining how the interview questions evolved through the research process. Finally, the ethical considerations and rigour in the study are discussed.

Chapter 5

In this chapter, the qualitative data analysis is detailed through a six-stage process. The progression of each stage is justified in accordance with the chosen constructivist grounded theory (CGT) methodology. Memos and diagrams are used throughout the chapter to explain and illustrate the analysis process. The final stage introduces the resulting three main categories and their sub-categories. Theoretical sampling is introduced at this stage and the chapter is concluded, identifying a need to recruit further participants to achieve data saturation and establish the findings of my study.

Chapter 6

This chapter provides a detailed account of the resulting three categories which were established after recruiting three further participants achieving data saturation. This chapter establishes the findings resulting from the constructivist grounded theory. Three main categories resulted from the data analysis with further subcategories which are explained with reference to the last three participants' quotes to demonstrate the process of data saturation.

Chapter 7

Aligning with the CGT approach the proposes engaging with the extant literature, the three main categories are further refined and the core category is developed. This chapter presents the resulting explanatory model and the core category which is an illustrated representation of the main findings. The model is compared with other existing models and contextualised within the field of hearing healthcare. The findings and the model is situated in the broader academic discourse.

Chapter 8

This chapter discusses the findings of the study within the context of the wider literature, the strengths and limitations of the thesis are presented and recommendations for practice and future research are provided. The quality of my research is assessed according to the recommended criteria by Charmaz (2006) which includes four main categories: credibility, originality, resonance, and usefulness.

Chapter 2 – Literature Review

2.1 - Introduction

This chapter provides a thematic synthesis of the existing literature aiming to address the question ‘what are the perceptions and experiences of hearing impaired people about hearing loss and hearing services?’. The initial intention was to address the question ‘what are the perceptions and experiences of ethnic minority groups about hearing loss and hearing services?’ However extensive literature searching on ethnic minority populations identified only 436 articles, none of which met the inclusion criteria. This in itself is a key finding demonstrating a clear gap in current knowledge.

This review is structured and reported according to six stages: i) the review question, ii) the methods used to search relevant literature, iii) data extraction strategies, iv) quality appraisal of the identified literature, v) thematic analysis of the findings, vi) discussing the findings (Aveyard, 2014).

2.2 Stage 1: The Review Question

The review question for this research was designed to focus on hearing loss and hearing services whilst ensuring that it was not too narrow and was achievable in the time scale of this research (Aveyard, 2014). The PEO framework was used to develop the research question and the process followed for that is detailed below (Bettany-Saltikov, 2016). The different components of the question are clarified and presented in a table format according to the PEO framework.

Table 1 - showing the PEO framework for developing the review question

P- population	E- exposure	O-outcomes
Hearing impaired people	Hearing loss Hearing services	Perceptions Experiences

The three aspects are defined in detail to ensure that the reader fully understands what is meant by each one of them in the context of this literature review, a practice advocated by Aveyard (2017).

The population in this case was chosen to be hearing impaired people, which included those who had any degree of hearing loss whether self-reported or medically diagnosed. The term hearing impaired was chosen as the key search term as Trudi Pledger, the librarian at Birmingham City University suggested that using a broad terms such as 'hearing impaired' should identify all people with any hearing problem.

Exposure was based on two factors, one having any type of self-reported acquired hearing loss and the other having any knowledge about hearing services. The term hearing loss was chosen which incorporates any type or degree of hearing impairment. It is also the most common and simple term used when referring to a hearing problem. Some types of hearing losses were excluded from the search such as those caused by genetic disorders, ototoxicity and noise exposure. A detailed section of inclusion and exclusion criteria is presented later in section 2.4.

Outcomes are the perceptions or experiences of the selected population. In this context, perceptions encompass individuals' attitudes, views, ideas and beliefs about hearing loss and hearing services. Exploring the experiences with hearing loss meant the day to day situations faced by hearing impaired people whilst experiences with hearing services include any interactions with hearing services.

Considering the PEO framework, the resulting review question was:

'What are the perceptions and experiences of hearing-impaired people with hearing loss and hearing services?'

2.3 Stage 2: Methods used to search the relevant literature

The search strategy was developed with the guidance of a subject expert librarian and four electronic databases were searched, CINAHL, MEDLINE, Science Direct and ASSIA. These databases were selected as they provided access to a broad range of health literature. CINAHL is a leading database for nursing, allied health, and healthcare-related research. It provides access to peer-reviewed articles, clinical studies, and systematic reviews, making it ideal for exploring healthcare practices and patient experiences (EBSCOhost, 2021). MEDLINE, maintained by the National Library of Medicine, is one of the most comprehensive biomedical databases. It covers topics such as public health, medicine, and healthcare management, ensuring access to robust medical and health science literature (National Library of Medicine, 2021). ScienceDirect provides access to multidisciplinary research, with a strong emphasis on scientific, technical, and medical publications. It is especially useful for exploring studies with rigorous methodologies and interdisciplinary relevance (Elsevier, 2021). ASSIA is a key resource for social science research, focusing on topics like sociology, psychology, and public health. It complements medical databases by offering insights into societal, behavioural, and policy-related aspects of hearing loss and healthcare (ProQuest, 2021). Each database was searched individually using a bespoke strategy designed to identify relevant literature (see appendix 1). The MeSH headings were used in CINAHL, MEDLINE and ASSIA and were chosen with assistance from the research librarian. Boolean operators were employed in Science Direct. Due to the high number of articles identified, some built in filters were used at the outset which included 'journal article only', 'English' and 'open access'. The search of the literature according to the above mentioned methods yielded 1829 articles which were then manually reviewed according to the inclusion and exclusion criteria.

2.3.1 The inclusion and exclusion criteria

The studies resulting from the search were all compiled in an excel sheet and duplicates were removed. Following the de-duplication, two reviewers manually screened the titles and selected the studies which met the inclusion criteria. The inclusion criteria included:

- acquired hearing loss (diagnosed or self-reported)
- adult population aged 18 years and above
- primary qualitative study

The studies which were excluded at the selection stage were based on the following conditions:

- hereditary and syndromic deafness
- complex acquired hearing loss
- sign language users
- children/infants/paediatric
- Deaf (capital D) society/culture (people who are born deaf or prelingually deaf)
- Users of cochlear implants (those who are eligible for or are current users of implants)

Hereditary and syndromic deafness is usually presented at birth with or without other abnormalities (Gorlin, 1995). It is detected earlier in infancy through the NHS hearing screening programme the hearing rehabilitation process for paediatric patients is different from the adults who acquire a hearing loss later in their lives. In this study, the focus is to explore hearing loss acquired by people in their adult years and those who use spoken language as their first form of communication. Studies based on complex hearing losses were also excluded. These complex losses include sudden hearing losses, those caused by trauma, losses linked to other illnesses (e.g. brain tumour) and ototoxic hearing losses. In all these cases the hearing services offered follow a different patient pathway. The complex hearing losses are usually referred to the ENT consultants for further medical investigation rather than being directly referred to the hearing services. For this reason, the complex acquired hearing losses are excluded. Paediatric studies were excluded for the same reason, as they follow a

very different path of hearing services from a very early age. People who use sign language are excluded, due to their use of non-verbal communication strategies. Sign language users closely relate to Deaf communities who follow a distinct culture which is designed for people who identify as Deaf (Deaf with a capital D) (Leigh et al., 2020).

The last exclusion criterion was users of cochlear implants. These hearing devices are fitted for people who have profound or complete deafness. The access to the care pathway for cochlear implants is not the same as general hearing services. Cochlear implants are highly sophisticated hearing devices which are only fitted for people who fall under a strict eligibility criterion (Haynes et al., 2020). Table 2 presents the inclusion and exclusion criteria with the rationales in a more simple, easy to read format.

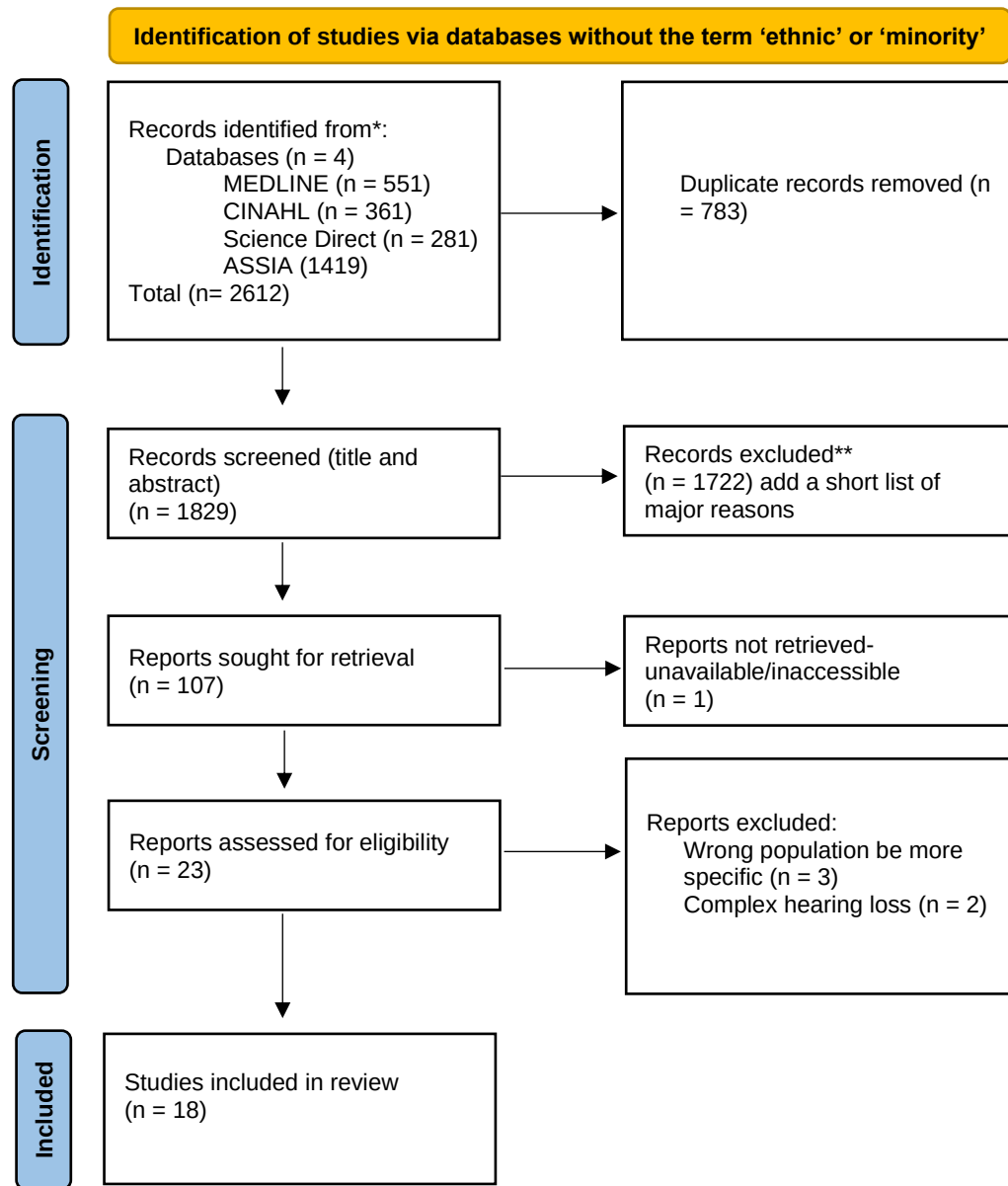
Table 2 - showing the inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria	Rationale
Acquired hearing loss (diagnosed or self-reported)		Acquired hearing loss in adult years generally means use of spoken language as their first form of communication. Their care pathway and experiences are different from other types of hearing losses. Self reported hearing loss is included to ensure those who suffer from hearing loss, without having being diagnosed are also included.
Adult population aged 18+		Adult population experience hearing loss differently to children and tend to have a different care pathway. Adults with the onset of hearing loss after age 18+ years are included.
Primary qualitative study		To explore first hand qualitative data from those who have a hearing loss.
	Hereditary and syndromic deafness	Hereditary or syndromic deafness is presented at birth which means prelingual

		deafness. The care pathway for this type of deafness is very different.
	Complex acquired hearing loss	Complex losses include sudden hearing losses, losses caused by trauma, losses linked to other illnesses (e.g. brain tumour) and ototoxic hearing losses. In all these cases the hearing services offered follow a different patient pathway.
	Sign language users	Sign language users have non-verbal communication strategies and relate closely with the Deaf culture.
	Deaf (capital D) society/culture (people who are born deaf or prelingually deaf)	This is a distinct culture where sign language users interact in close knit communities. Are prelingually deaf and only use sign language to communicate.
	Children/infants/paediatric	Children's experience and care pathway usually include a strong involvement from parents and most decisions are made by parents or guardians.
	Users of cochlear implants	Cochlear implants are fitted for profoundly deaf individuals and are only fitted for very specific cases. Cochlear implants are expensive devices and not readily available.

The PRISMA flowchart was used to inform the process through which the relevant research studies were identified (see figure 1). Out of the identified 1829 studies, 1722 were excluded after manually reviewing the titles. Full reports of 107 articles were retrieved for further reviewing according to the eligibility criteria.

Figure 1- PRISMA flow diagram for the literature search



** Titles of these records were screened, and the irrelevant records were excluded. For example those study titles which included the terms 'child', 'children', 'paediatric', 'genetic', 'gene' and 'cochlear implants'.

2.4 Stages 3 and 4: Data extraction strategies and Quality appraisal

Data were extracted according to author, year, country, objectives, participants, method, findings and strength and limitations (quality appraisal will be discussed in the next section). This stage was important in providing an organised visual representation of the eligible articles. Figure 1 was created by the primary researcher and subsequently checked by a second reviewer for any errors.

The 18 selected studies were manually assessed by the researcher and a proportion of it was checked by a second more experienced reviewer to ensure rigour. The full text of each article was appraised using Joanna Briggs' Checklist for Qualitative Research (2017) (all article appraisals can be provided on request). A 10-point checklist was used to assess the quality of the studies resulting in a score which was recorded on the data charting table. The scoring was given by one reviewer and a proportion of these articles was checked and confirmed by the second reviewer. None of the studies were excluded following the quality appraisal process.

Table 3 - Data Extraction Table showing the 18 identified articles charted with relevant information and the quality appraisal score

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
1	Smith (2024) UK	'The burden is very much on yourself': A qualitative study to understand the illness and treatment burden of hearing loss across the life course	To understand how people described living with hearing loss and the steps they took to reduce the burden of it	A qualitative design with semi-structured interviews An abductive thematic analysis via burden of treatment theory was applied.	Participants recruited from audiology and non-clinical services (n=46, 29 females, 17 males) aged between 16-96 years	The main aspects identified when trying to make sense of hearing were emotional engagement to adjust to hearing loss, social interactions and coping strategies adopted when communicating. A need to widen the hearing rehabilitation approaches to 'lifeworld-led and 'family centred care'.	Patient and public involvement was used to refine the aims and the process of the study. People from South Asian background were also involved. However, the ethnicity of the participants recruited was not disclosed. Four researchers were involved in the study process to ensure credibility Participants' interview place or schedule was not clarified, although the patient public involvement allowed development of the interview schedule according to the feedback. The data was analysed according to a pre-existing model which may have risked losing other data that may also have been relevant	9/10 The influence of the researchers on the study process was not clarified

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
2	Gaeta (2023) USA	Identification of barriers to hearing healthcare access among Hmong older adults in the United States	To explore the barriers in accessing hearing healthcare among Hmong population in USA.	Qualitative methodology with semi-structured interviews conducted in Hmong language Deductive analysis was performed using the Health Care Access Barriers (HCAB) Model	Adult participants from the Hmong community were recruited (n= 7, 4 females, 3 males) aged 65-80 years. All participants were monolingual Hmong speakers and non-users of hearing aids.	The HCAB model highlighted the cognitive, structural and financial barriers. The finding indicated the importance of cultural values that affect the uptake of hearing services among the Hmong population. Lack of awareness, shame, embarrassment, denial as well as logistical issues such as transport, language and cost all contributed to the barriers in accessing hearing healthcare	Participants were recruited from the community rather than a pre-existing database, allowing views from those who had not yet accessed hearing services gathering responses from a hard to reach population A pilot interview was conducted to identify any improvements. Two authors conducted the interviews, where the second author spoke fluent Hmong. The study only includes older adults, and the views of younger more acculturated Hmong people may be different	8/10 The researchers influence on the study was not acknowledged There was no statement of ethical approval
3	Holman (2023) (UK)	A qualitative investigation of the hearing and hearing-aid related emotional states experienced by adults with hearing loss	To investigate hearing related emotions among people who experience hearing loss and are hearing aid users	A phenomenological qualitative methodology. Semi structured interviews via telephone, video call or written questions. Inductive reflexive thematic analysis using NVivo	Stratified purposeful sample of participants, recruited from NHS audiology database (n=17), aged 44-70 years	Four main themes were identified, 'self image', 'autonomy and control', 'situational cost/benefit analysis' and 'personality and dominant emotions'. People experience various emotions related to hearing loss. A multitude of negative emotions were reported.	Stratified sampling was beneficial in recruiting a balanced number of males and females across different ages. Two researchers independently analysed the qualitative data and agreed on the themes. No clarity was given regarding how the semi structured interview method was maintained in	9/10 Unclear about how the data was collected via the written questions and how that aligned with the semi-structured interview process.

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
						Hearing aid use was associated negative and positive emotional impact. Frustration, anxiety and isolation were the three prominent emotions detected amongst most participants.	the written questions method.	
4	Bennett 2022 Australia	Coping with the social challenges and emotional distress associated with hearing loss: a qualitative investigation using Leventhal's self-regulation theory.	To explore the lived experience of social challenges and emotional distress in relation to hearing loss and the coping mechanisms employed to manage them.	“pragmatic paradigm” informed approach Two focus groups (group 1 n=17, group 2 n=11) and face to face semi-structured interviews (n=2) Inductive and deductive data analysis using Leventhal’s self-regulatory model	Purposive sample of participants with self-reported hearing loss and emotional distress (n=21, 13 females, 8 males). Aged 60 - 88 years. Significant others (n=9, 8 males, 1 female). Aged 19-80 years.	Negative consequence of hearing loss included “social overwhelm, fatigue and loss”. Emotional distress was felt as “frustration, grief, anxiety, loneliness”. Coping strategies included “controlling listening environment, humour, acceptance”. Avoidance could be both helpful and unhelpful.	The research team included two people with prior audiology knowledge and two who did not. This reduced any subjective interpretations by the researchers and improved rigour in the analysis. Random selection from a large group and limited inclusion criteria resulted in a diverse sample but limited demographic detail provided Recruitment from one centre only limits transferability Reflexivity and transparently described research process	10/10

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
							The quotes were given but no direct perspectives of significant others were included which poses representation questions of all participants. Data were analysed using a regulatory model which may have excluded other data that did not fit.	
5	Barker (2020) USA	Narratives of identity: understanding the experiences of adults with hearing loss who use hearing aids	The aim was to explore the self-perceived identities that people developed as a result of their experiences of hearing loss and hearing services	A qualitative narrative approach with some principles of semi structured interviews Thematic narrative analysis used.	Participants recruited from university's hearing clinic (where this study was based) (n=30, 20 females, 10, males) aged between 20-90 years. All participants self identified themselves as hearing aid users	Five identity categories were identified when use of hearing aids was questioned; 1- The satisfied user 2- The overcomer 3- The dispassionate user 4- The resigned user 5- The griever Understanding the individual's identity Is important in determining the most appropriate healthcare approach for different people.	Five verification procedures were followed to ensure validity of the research Two researchers analysed the data independently before reaching a consensus All participants (apart from 1) were identified as 'not Latino or Hispanic', however the ethnicity of the participants was declared.	8/10 No information was provided on the researchers' background and neither was there any acknowledgement for the researchers' influence on the study
6	Ritter (2020) USA	Using attribution theory to explore the reasons adults	The aim was to gather 'stories from	Semi structured interviews with thematic analysis	Participants with self-reported hearing loss	The main findings were split in internal and external reasons	Two authors conducted the interviews independently following the same	9/10

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
		with hearing loss do not use their hearing aids	people' with hearing loss and understand why they do not use hearing aids	Attribution Theory framework was used to deduct the narratives of participants	(n=20, 10 females, 10 males) aged between 27-91 years. All were non-users of hearing aids and belonged to White ethnicity (except 1 who did not report any ethnicity)	for non-use of hearing aids. The internal reasons revolved around denial and stigmatisation whilst the external were more attributed to the hearing device and hearing service provisions.	interview script without deviation. This may have restricted the scope of semi-structured interviews which allow some flexibility. Interviews lasted an average of 20 minutes which may not be enough time to fully explore the topic 10\$ cash or gift card was given to participants for their involvement, which could introduce recruitment bias. No details of the interview venue or schedule were provided.	Researchers' influence was not reported
7	Holman (2019) (UK)	Hearing impairment and daily-life fatigue: a qualitative study	To investigate the impact of hearing impairment on fatigue in everyday life	Face to face semi structured interviews. Thematic analysis	Adult hearing impaired participants (n=14, 10 females, 4 males) aged 44-70 years. Stratified purposive sampling, through NHS audiology database.	Five main themes identified: Fatigue, effort, relationships and emotions, coping strategies and hearing aid impact. Participants experienced different degrees of fatigue related to hearing impairment, but not experienced by all. Hearing aid use was not found to have an	A second researcher was appointed to check the developed codes and an additional stage of deductive analysis was included to assess the reliability and validity of the study. Participants were recruited from a pre-recorded database where they had previously agreed to be participants for another study. This may have limited recruitment to only	10/10

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
						impact on hearing-related fatigue.	those who had previously been study participants. The study does not specify fatigue related to different degrees of hearing loss.	
8	Powell (2019) USA	Rural Adult Perspectives on Impact of Hearing Loss and Barriers to Care	The aim was to examine attitudes of rural primary care patients and investigate disparities towards hearing healthcare	Explorative qualitative study using semi structured phone interviews Thematic qualitative analysis was performed	Stratified purposive sample. Participants recruited from rural primary care centres (n=40) aged 50-78 years People who had or had not sought hearing services	Participants reported hearing loss to be linked with ‘communication barriers’, ‘employment’ ‘personal safety’. People living in rural areas highlighted the exposure to noise (due to heavy machinery) being one of the main concerns when considering hearing loss Disparity in accessing hearing services was attributed to financial constraints as these services were not covered within most insurance policies	Data analysis and coding process was checked by a senior researcher to ensure consistency No details of the interview process are provided Participant recruitment criteria was not limited to those who experienced hearing loss themselves, therefore some of the data collected was based on generic views about hearing loss and hearing services	6/10 No research objectives or questions Lack of information regarding the researcher. No ethical approval statement
9	Gallagher (2018) (UK)	Factors Affecting Hearing Aid Adoption and Use: A Qualitative Study	To understand reasons associated with hearing	Face to face semi-structured interviews. Qualitative thematic analysis using	Three groups of participants were recruited: Group 1 -regular hearing aid users	Findings showed similar themes among all three groups of participants.	The researcher recruited participants from a various platforms related to hearing loss which ensured diversity in the sample.	6/10 There was no introduction or clarification of the

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
			aid adoption and use. To explore views of hearing aid non-users on experiences of hearing loss	grounded theory principles.	(n= 12), Group 2-irregular hearing aid users (n = 10), Group 3 - hearing aid nonowners (n = 10). Aged above 47. All with self-reported hearing loss	These themes highlighted the inadequacy of hearing services, complexities related to hearing aids and attitudes towards hearing loss and hearing services.	However there is no information about the people's ethnic or cultural background. A detailed account of the research process shows ethical conduct of the research. Researcher acknowledges self involvement and researcher's subjective immersion during interviews. To reduce this subjective immersion a second researcher was involved at the analysis stage to reach a consensus on the resulting themes. The study includes a quantitative aspect within the data analysis but there is no clarification as to if the study was mixed methods design.	quantitative aspect of the study in the methodology or the aims. There was some ambiguity regarding how the quantitative part aligned with the qualitative study methodology.
10	Heffernan (2016) UK	Understanding the psychosocial experiences of adults with mild-moderate hearing loss: An application of Leventhal's self-regulatory model	To investigate the psychosocial experiences of people with hearing impairment	Semi-structured interviews Thematic analysis was performed using Leventhal's self-regulatory model	Two groups of participants: a) hearing impaired people (n=25, 11 females, 14 males) aged 20-91 years) hearing healthcare	The study findings highlight that there are negative consequences and connotations linked to hearing loss. Main findings showed 'emotional representations' which were mostly negative and use of various	First two participants were interviewed as part of piloting the study, but no improvements were indicated which showed rigour in the research process Participants were reimbursed in monetary means as inconvenience allowance and travel,	6/10 The aim of the study was to explore the experiences of people with hearing loss, but inclusion of views of hearing health professionals was unclear as they

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
					professionals (n=9, 7 females, 2 males) living in UK, USA and Canada	copng strategies by the hearing impaired	which could have attracted a certain type of population.	did not experience hearing loss themselves. No information about the researcher's cultural background was given
11	Rolfe (2016) UK	Experiences of hearing loss and views towards interventions to promote uptake of rehabilitation support among UK adults	To describe experiences of people with Hearing loss and to discern strategies to promote uptake of hearing services	Qualitative design Face to face, semi-structured interviews with thematic analysis	Participants with hearing loss were recruited (n=22, 13 females, 9 males) aged 66-88 years. Identified through a hearing loss charity	Some contending views were gathered where some stated making hearing aids less visible to avoid stigmatisation while others suggested interventions to be implemented to destigmatise hearing loss and hearing aid use Three main themes were identified in relation to the barriers in accessing hearing services; 'journey from realisation to readiness', 'social stigma' and 'accessing appropriate services'	A second author assessed the coding at random to ensure consistency Ethnicity of participants was disclosed which clarified the ethnic diversity of the sample. However, only 4 people were non- White ethnicity and so how much of the resulting themes represent the non-White ethnic people is questionable	9/10 The ethical approval body was not disclosed.
12	Dawes (2014) UK	'Getting used to' hearing aids from the perspective of adult hearing-aid users	To understand the perspective of hearing aid users on 'getting used	Qualitative study using focus groups (n= 3) Qualitative content data analysis	Adult hearing aid users were recruited from a patient database (n=16, 7 females,	'Getting used to hearing aids is complex'. Challenges included: in 'getting used to	A pilot study with audiologists to refine focus group topic guide. Focus groups adapted to meet needs of participants	8/10 Information on cultural background or the influence of the

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
			to the hearing aids'		9 males) aged 60-89 years	hearing aids' were identified, unfamiliar sensory input, practical issues, determining benefits/limitations and discerning the impact on self-image	Maximum variation to gain a broad range of views Detailed explanation of data analysis process completed by two researchers, third reviewed 20% and discrepancies were resolved	researcher were not provided
13	Grenness (2014) Australia	Patient-centred audiological rehabilitation: perspectives of older adults who own hearing aids	To derive the definition of patient-centred hearing rehabilitation from people who had been in contact with the hearing services	Descriptive qualitative study with semi-structured interviews Content analysis was applied	Participants were recruited from medical clinic databases (n=10, 5 females, 5 males) aged 60+ years Experienced users of hearing aids and had seen more than two audiologists	Three categories were found, therapeutic relationship, the players (patient and audiologist) and clinical processes. 'Individualised care' was derived as a the main overarching theme which highlights the need for flexibility in the care provided.	Maximum variation was sought for a diverse sample Three authors reviewed the analysis process, increasing rigour Participants were given a choice for where they wanted to be interviewed (home or clinic)	8/10 Information on cultural background or the influence of the researcher were not provided
14	Bennion (2013) UK	Insights from the experiences of older people with hearing impairment in the United Kingdom: recommendations for nurse-led rehabilitation	To explore and understand the lived experiences of people with age related hearing impairment	Semi structured interviews. Descriptive qualitative method with thematic analysis.	Participants with self-reported hearing loss (n=9, 3 males, 6 females) aged 61-93. All hearing aid users.	The resulting themes included acknowledgement of hearing loss, difficulty in communication, preference for digital hearing aids, feeling isolated and coping strategies.	Participants were recruited from within the communities through public advertising and not through a pre-existing database which increases the recruitment pool and possibility of recruiting from a wider more diverse population. Non generalisable aspect of the study was acknowledged.	8/10 No information about the researcher bias or influence on the study was provided.

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
							No information about the interview logistics was given (face to face or via telephone).	
15	Linssen (2013) Netherlands	Qualitative interviews on the beliefs and feelings of adults towards their ownership, but non-use of hearing aids.	To understand the reasons why people who own hearing aids, do not use them, especially focusing on their beliefs and feelings	Qualitative study with face to face semi structured interviews. Analysed through inductive thematic analysis	Purposive sample of adult hearing aid owners but non-users (n= 11, 6 females and 5 males) aged 50-80 years.	A variety of feelings were found to be related to non use of hearing aids. The participants were divided in 3 groups based on their feelings and beliefs. Those who believe use of hearing aids to be inadequate. Those who feel 'self-annoyance, self-disappointment and self-blame. And those who feel 'frustration, anger and powerlessness.	Maximum variation in the sample was sought by advertising, through GPs and via emails. This allowed recruiting from different avenues The study allowed presence of significant others, which may have limited the response of the participants themselves.	8/10 There was no information on researcher's influence on the research process. No clarity of the ethical approval was provided.
16	Claesen (2012) UK	An exploration of the perspectives of help-seekers prescribed hearing aids.	To explore patient's perspectives regarding hearing help seeking	A pilot study using qualitative approach. Face to face interviews in the form of 'conversation with purpose' were conducted. Thematic analysis was performed	A purposive sample of adults recruited from the referrals received by an audiology department (n=6, 3 females, 3 males) aged between 65-77 years	Seeking hearing services was considered as solution for communication difficulties but not seen as a pathway to acquire hearing aids Help seeking was also influenced by the need to appease their significant others and	Participants were visited at their place of convenience to allow complete comfort for the participants Participants were given a copy of their recorded audio to allow reflection on their responses and a follow up telephone call was made to confirm the participants were happy with their responses. This	8/10 Researchers cultural background and influence on the study were not acknowledged.

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
						improving hearing for better communication	shows complete consideration and confirmation from participants Limited details were provided for the data analysis so the process was not very clear	
17	Laplanche-Levesque (2012) UK, USA, Australia and Denmark	Hearing help-seeking and rehabilitation: Perspectives of adults with hearing impairment	To explore the perspectives of people with hearing loss on hearing help-seeking and rehabilitation	Descriptive qualitative study with semi-structured interviews Inductive content analysis was employed	Participants with self-reported hearing loss (n=34, 19 females, 15 males) aged 50-80 years Participants recruited from UK (n=8), USA (n=9), Australia (n=8) and Denmark (n=9)	Four main themes were identified, where 3 focused on actions of participants and 1 on general attitudes.	Hearing loss was verified though either participants previous hearing test results or conducting the test with the interview. This verifies the self-reported loss. Data was collected from 4 countries, increasing its transferability. However, all countries follow a Western culture and may not apply to other cultures Hearing service provision is different in all selected countries and obtaining data from all may have risked diluting any rich specific perspectives	9/10 Researchers' influence on the study was not addressed
18	Barlow 2007 UK	Living with late deafness: insight from between worlds.	To examine the views of people with experience of late	Semi-structured face to face interviews, Framework analysis according to existing late deafness literature	Convenience sample (n=8, 6 male, 2 female). Aged 33-60 years.	Participants described deafness as "devastating" with significant impact on psychosocial	Flexible interview to ensure participants were not restricted	7/10 There was no information provided about the

	First author Date Country	Title	Aims	Research method	Participants	Main findings	Strengths and limitations	Quality appraisal score and exceptions
			deafness		All had attended LINK rehabilitation course	wellbeing and employment opportunities. The newly deafened people reported a positive response towards receiving support and training from other deafened people in an “intensive rehabilitation programme”	Researcher learnt about how best to interview people with deafness (for example ensuring optimum lip-reading conditions). Data analysis conducted by two researchers independently, third researcher checked a sample to ensure consistency Data analysed using a set framework which may have excluded any data that did not fit the framework.	theoretical and cultural background of the researchers. No acknowledgment of any influence the researchers may have had. No ethical approval statement provided.

2.5 Thematic analysis

A thematic analysis was conducted on the data extracted from 18 studies that were identified using a systematic approach. Ten of these studies were based in the UK whilst the others were from USA, Australia, Netherlands and Denmark. The study participants' ages ranged from 18 years up to 93 years old. A thematic analysis was performed on the data which followed a process of proposed by Aveyard (2017) which included familiarisation with the data, coding, developing theme, reviewing/refining themes and finally presenting the results.

The process began with a thorough reading and re-reading of the selected studies, ensuring familiarity with the data (Aveyard, 2019). Key concepts and ideas were highlighted and coded systematically, allowing for the extraction of meaningful insights while keeping the review question at the forefront. At this stage of coding, it was identified that separating the review question for the analysis of the data would allow a more clear representation of the themes. The review question was reviewed in two parts:

What are the perceptions and experiences of hearing impaired people about hearing loss?’

What are the perceptions and experiences of hearing impaired people about hearing services?’

Some themes were specifically related to hearing loss and others provided insight about hearing services. Therefore, the emerging themes were divided into two groups, one which addressed the question on ‘perceptions and experiences about hearing loss’ while the other focused on ‘perceptions and experiences about hearing services’. The codes were analysed separately for the two main topics of ‘hearing loss’ and ‘hearing services’. All resulting codes were grouped into broader categories, which were refined through an iterative process of comparison and analysis, finally resulting in the overarching themes.

The coding was carried out using word tables and manually as spider diagrams. Examples of both strategies are provided in table 4 and figures 2 and 3.

Table 4 - showing how the excerpts from the data were coded

Code	Description/Quote
Impact on life	'unable to hear doorbell' 'unable to have phone conversation' 'need support from family'
Frustration	<i>"people, they give up or they think you're stupid. So that's the side that's frustrating"</i>
Fatigue	'listening fatigue' 'fatigue in relation to having to be responsible for organising events' 'Fatigue through needing to ensure equitable access to the conversation'

Similar codes were coloured into groups to provide visual clarity of the analysis process. The initial themes emerged from interpreting the meaning behind the codes and what they represented. This resulted in a list of themes of which some were similar and represented the same concept. For example, 'fatigue' and 'frustration' (as shown in table 4) were both eventually merged under the theme of 'negative emotions'. Spider diagrams were drawn to all the visual representation of the codes and the overarching themes that were identified (see figures 2 and 3).

Figure 2 - Spider diagram showing the colour coded analysis with themes

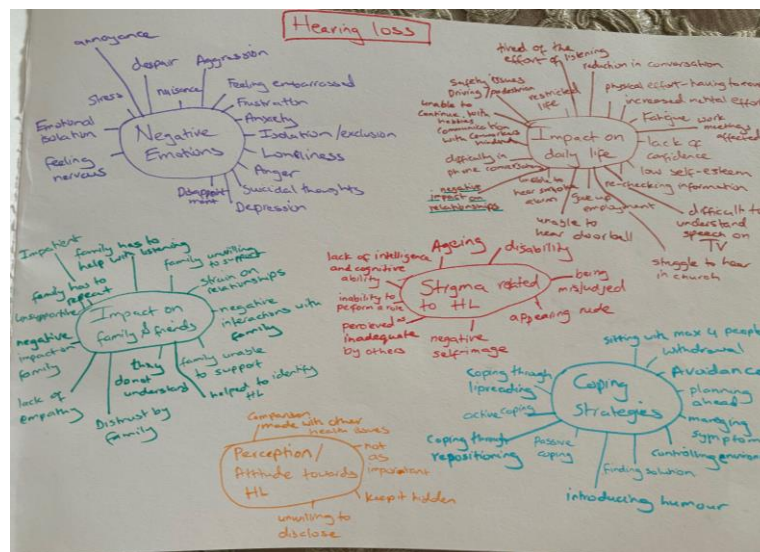
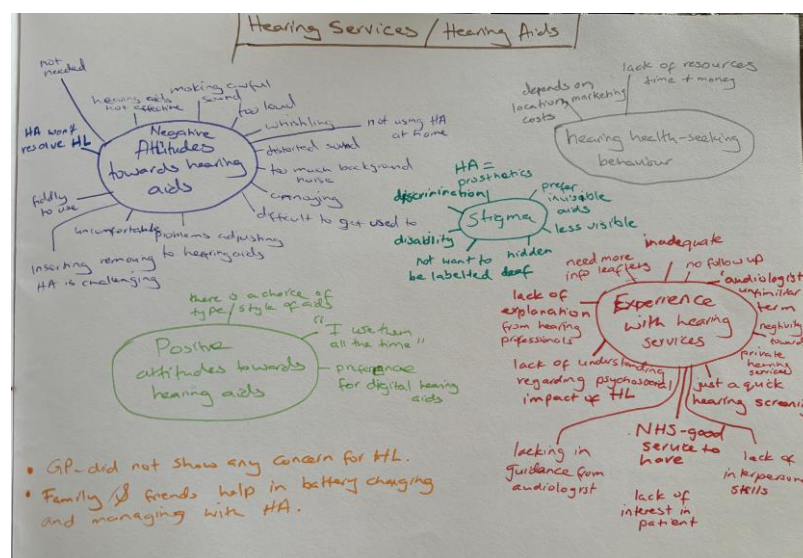


Figure 3 - Spider diagram showing the colour coded analysis with themes



The emerging themes were revisited, reviewed and refined, and the most prominent themes were then developed based on the volume of codes associated with each one as shown in figures 2 and 3. Those that did not have many codes assigned to them were not considered as stand-alone themes such as 'positive attitudes towards hearing aids'. Instead, this data and the 'negative attitudes' were both assigned under the theme 'attitudes towards hearing aids'. As the more prominent themes were developed, subthemes were also assigned to ensure that the main theme is representative of

all data. This thematic analysis led to development of four main themes (negative emotions, family involvement, impact of hearing loss and coping strategies) that highlighted peoples' perceptions and experiences of hearing loss three themes (help seeking behaviour, experiences with hearing services and attitudes towards hearing aids) that addressed second part of the review question about hearing services. There was one theme (stigma) which overlapped across both parts of the question. Figures 4 and 5 (below) show the categorisation of themes and subthemes according to which issue they addressed.

Figure 4 - showing the themes that addressed the review question regarding the perceptions and experiences about hearing loss

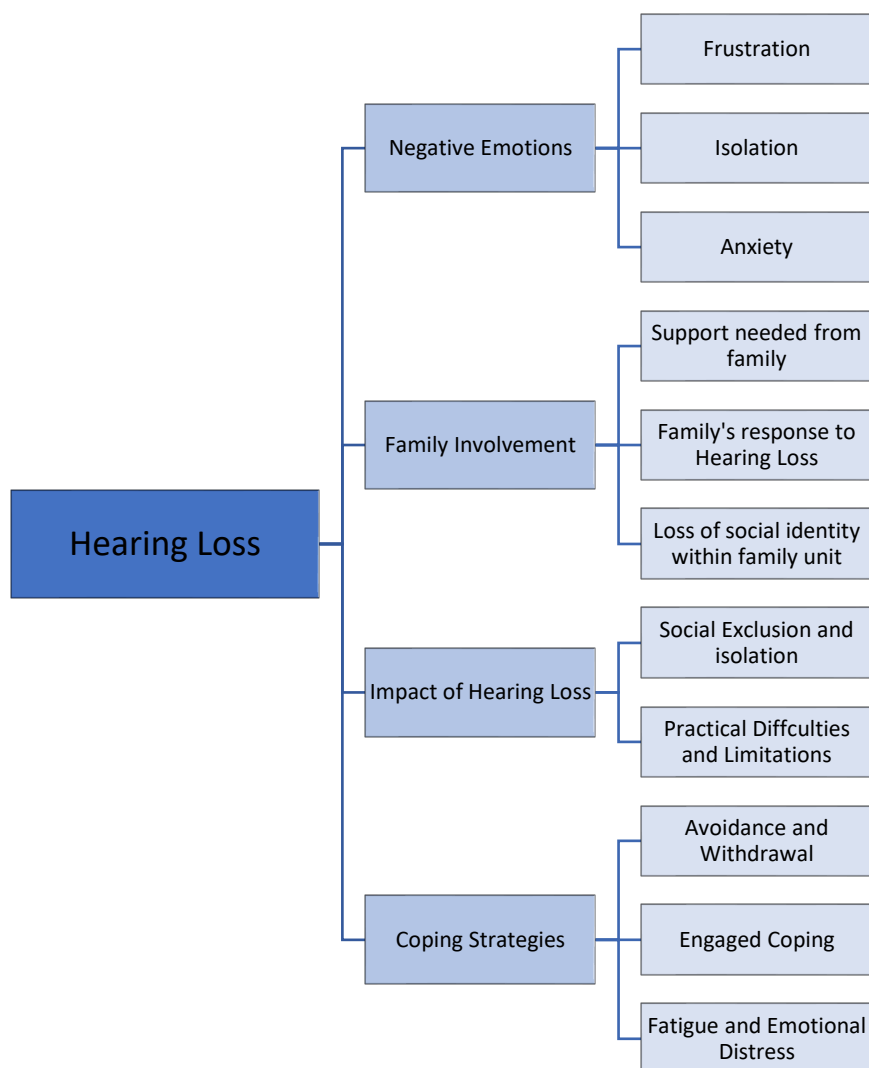
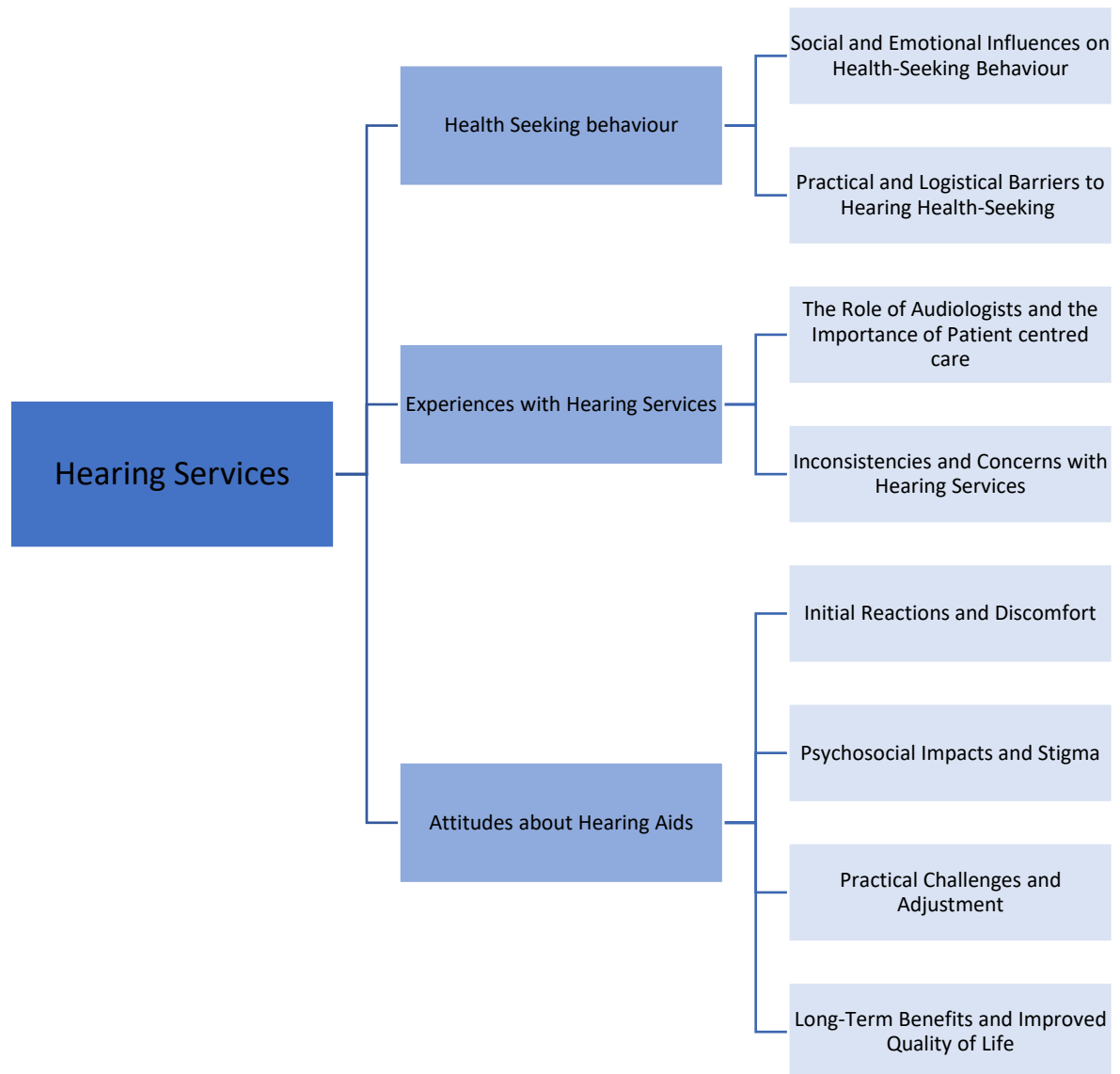


Figure 5 - showing the themes that addressed the review question regarding the perceptions and experiences about hearing services



2.5.1 Themes about perceptions and experiences of hearing Loss

Four themes concerning experiences of hearing loss were identified: negative emotions, family involvement, the impact of hearing loss, and coping strategies. Each theme is interconnected and

provides a holistic view of the challenges and adaptations associated with hearing loss. The sections below detail each theme, highlighting their subthemes and how they are interconnected with the other themes.

2.5.1.1 Negative Emotions

The theme negative emotions comprise three subthemes: frustration, isolation, and anxiety. Of the 18 studies reviewed, six report negative emotions associated with hearing loss (Barlow, 2007; Bennett, 2021; Heffernan, 2016; Holman, 2019; Holman, 2023; and Smith, 2024). Six studies explicitly investigate the emotional impact of hearing loss, which may lead to an overemphasis on negative emotions in their findings. It is likely that people experiencing negative emotions towards their hearing loss actually participated in studies to express those emotions, whilst others less concerned about their hearing problem may have not taken any initiative in that area.

Frustration is expressed in relation to difficulties understanding conversations. The literature illustrates how people express feeling frustrated with others for not speaking clearly and with themselves for not being able to hear those conversations (Holman, 2023; Bennett, 2022 and Linssen, 2013). Bennett (2022) notes two primary sources of frustration: one stemming from external factors (difficulty hearing or understanding what's being said) and the other from internal factors (self-criticism or self-blame when unable to follow along). Smith (2024) also finds frustration linked to others speaking too quietly or lacking empathy towards the hearing difficulties. All 30 of Bennett's participants were aged above 60 years and report frustration during social interactions, while Smith, despite having participants with a wide age range 16–96 years found frustration in formal work-related events mostly among the younger population. The impact of hearing loss on employment is discussed later under the theme of 'impact of hearing loss' as more practical adjustments is noted than emotional issues when work is in question.

Barlow (2007) finds similar representations of frustration, recorded through experiences of lack of patience. This applies to two situations: one when hearing-impaired people are impatient due to their hearing loss and the other when external people are impatient with someone with hearing difficulties. Barlow (2007) in his study offered an intensive rehabilitation course for people with hearing loss, investigating their emotional state before and after the course. It is likely that the reporting of negative emotions may be heightened, particularly at the pre-rehabilitation stage to show a greater improvement in the emotional state for those who were part of the rehabilitation course. Frustration and other negative emotions mentioned in Barlow's (2007) study are all recorded at the pre-rehabilitation stage, and it is not clear if the negative emotions were not explored or not reported by the participants, post-rehabilitation. Although Barlow's (2007) participants responded positively to receiving support through the rehabilitation program, how it impacted the feeling of frustration was not provided.

Other studies that research personality types and fatigue related to hearing loss both find frustration to be a prominent theme (Holman, 2023, 2019). Although Holman (2023) did not explicitly explore personality types, his findings suggest that certain personalities influence how emotions are experienced. For example, perfectionists tend to experience 'more negative hearing-related emotions' compared to those who identified themselves as introverts report fewer negative emotions related to hearing loss (Holman, 2023).

Holman (2023) and Heffernan (2016) both associate frustration with communication difficulties, which is similar to Barlow and Bennett's findings reported above. During conversations with others, people also mention fatigue as the main cause of frustration (Holman, 2019). Fatigue is associated with stress and frustration due to the effort in trying to successfully communicate with people (Holman, 2019). The link between fatigue and frustration is only established when people are explicitly asked about fatigue in Holman's (2019) study and is not mentioned by other authors. However, Barlow (2007) mentions exhaustion to be caused by hearing loss which leads to the feeling

of burden. Burden was associated with family members and friends where sense of burden was felt when daily activities and routine seemed to become exhausting (Barlow, 2007). For example, when their daily lives are disrupted and they are unable to carry out their usual tasks efficiently, people express frustration (Holman, 2023).

Bennett (2022) presented similar findings and reports people feeling overwhelming pressure when constantly asking family to repeat or speak louder. Therefore, negative emotions are not only felt through the impact it has on oneself but also through the feeling of being a burden on family and friends (Smith, 2024). The role of family and friends is discussed later in detail in the theme 'family involvement'.

The situations in which communication difficulties are often reported are social gatherings and not at home or with family or friends, except for one study (Holman, 2023). Holman (2023) finds that frustration is most likely to be expressed toward those considered close family or friends. Due to the level of comfort shared with these people, the hearing-impaired openly express their frustration by asking them to repeat or speak louder (Holman, 2023). However, Smith (2024) records contrasting views, noting that people experience frustration more in formal situations such as meetings and seminars. Frustration is more prominent when people feel unable to openly acknowledge their hearing difficulties (Smith, 2024). There is a sense of embarrassment related to expressing hearing loss in social situations with strangers (Holman, 2023 and Heffernan, 2016).

Frustration is also linked to coping strategies during social events (Heffernan, 2016). Those who cope better feel less frustrated than those who struggle to cope (Heffernan, 2016). This point also explains Holman's (2023) findings related to personality types and experiencing negative emotions. Those who are able to cope better due to their confident personality feel fewer negative emotions than those who struggle to cope with their hearing difficulties resulting in being frustrated with themselves or the situation. Frustration is often followed by other negative emotions, such as

isolation and anxiety, particularly when individuals feel they cannot manage or overcome their hearing challenges (Bennett, 2021; Heffernan, 2016 and Barlow, 2007).

Other less prominent emotions related to frustration were anger, annoyance and grief. The only distinct description of anger is reported in relation to the initial onset of hearing loss (Barlow, 2007; Heffernan, 2016). People express anger when they realise their loss of hearing. This same concept of realisation is linked with the feeling of grief (Bennett, 2021).

Isolation is one of the most prominent negative emotions that appear in five of the six studies. Two studies acknowledge that almost all the participants mention a sense of isolation resulting in negative emotions linked to hearing loss (Bennett, 2021; Holman, 2023). Isolation is reported as a consequence of failed social interaction and communication difficulties (Bennett, 2021; Heffernan, 2016). People experience social withdrawal and do not feel part of their social gatherings (Smith, 2024; Holman, 2023 and Heffernan, 2016). A similar concept is found by Barlow (2007), whose participants state that isolation is a feeling of being different from everyone else. This is further clarified in Heffernan's (2016) study, where isolation is felt when people feel excluded from group conversations and social events such as weddings. All studies reporting isolation express it as a form of social disconnect. Three studies highlight physical isolation, such as avoiding social gatherings and work events to avoid embarrassment, awkwardness, and anxiety (Smith, 2024; Holman, 2023 and Heffernan, 2016). Not only does hearing loss cause feelings of isolation when people are unable to participate in social events, but it is also other people who avoid conversation or contact with the hearing-impaired person (Barlow, 2007). Feelings of being left out or cut off from conversations enhance the sense of loneliness and isolation (Smith, 2024; Holman, 2023; Heffernan, 2016; Bennett, 2022 and Barlow, 2007).

Anxiety results from difficulty in social interactions and the related stress caused by communication challenges (Bennett, 2021; Holman, 2019 and Barlow, 2007). Holman (2023) finds anxiety as part of

self-perceived negative emotion, where people feel anxious about mishearing or misunderstanding others. Heffernan (2016) presents a different perspective on anxiety, finding that people feel anxious about their hearing declining as the years progress. Anxiety is strongly linked to the mere anticipation of hearing difficulties (Holman, 2023; Bennett, 2021 and Heffernan, 2016). People, when predicting their hearing difficulties will override their coping strategies in certain situations, experience anxiety and avoid those situations (Smith, 2024; Holman, 2023; Bennett, 2021 and Heffernan, 2016). Anxiety seems more prominent among those who experience severe to profound hearing loss (Barlow, 2007). This further reiterates the point about the extent of coping involved, as those with more severe hearing loss cope less effectively compared to those with mild hearing loss (Bennett, 2021; Heffernan, 2016). Conversely, Holman (2019) does not find anxiety to be linked to hearing loss or the negative emotions experienced by people.

In conclusion, the studies reviewed highlight the negative perceptions and experiences of hearing loss through negative emotions such as frustration, isolation, and anxiety, primarily due to communication challenges and social exclusion. Frustration arises from both internal self-criticism and external misunderstandings, while isolation stems from withdrawal and a sense of disconnection. Anxiety is linked to anticipated communication difficulties and declining hearing ability. Hearing loss is not only reported to be experienced individually but also mentioned as burdening family and friends and having a wider impact.

2.5.1.2 Family Involvement

The theme of family involvement comprises of three subthemes which highlight the role of family as primary support, family's response to hearing loss and the intersection between family, social identity and hearing loss.

Support need from family was noted in nine of the eighteen texts and how family members, particularly spouses and children, play a crucial role in supporting people to manage the social and emotional impacts of hearing loss (Barlow, 2007; Gaeta, 2023; Heffernan, 2016; Holman, 2019, Powell, 2019; Bennett, 2022; Bennion, 2023; Holman, 2023 and Ritter, 2022). Family is recognised as the most significant support network in managing with hearing loss. When in social situations family support was a key protective factor and those who received understanding and encouragement from their families reported better adjustment (Barlow, 2007). For example, one participant in Barlow's (2007) study noted that their family helped them learn finger spelling by learning with them to ease communication and ensuring inclusion in social situations by actively involving them in conversations. However, a majority felt their hearing loss negatively impacted family dynamics. Participants highlight their feeling of being alienated in family gatherings due to missed conversations and lack consideration towards the hearing difficulties (Bennett 2022).

The sense of exclusion is magnified when family members do not make accommodations, such as ensuring that the person with hearing loss is properly included in discussions (Powell, 2019). Many individuals describe withdrawing from social events due to the frustration of not being able to participate fully in conversations and not receiving enough support from family (Claesen, 2012 Gaeta, 2013; Holman 2019, Bennett, 2022). On the contrary, Bennion (2023) discusses how some participants' families begin to "talk more clearly and move their mouths more clearly" once they realise the person has hearing loss, highlighting the adaptive role that families take on. Family acting as primary support givers also meant that hearing loss created a "dependency dynamic," where the individual with hearing loss constantly needed family members to help them fill in the gaps in conversation (Powell, 2019). This sometimes puts a strain on the relationship, as some participants noted that asking for constant repetition or clarification can be perceived as a burden by other family members (Barlow, 2007 and Powell, 2019).

Family dynamics play a significant role in managing the challenges of hearing loss, but they often present a mix of support and strain. Gaeta (2013) highlights how family members, such as daughters or spouses, frequently take on caregiving responsibilities, including providing transportation to medical appointments and acting as translators during healthcare visits. While family support can greatly enhance the individual's experience, particularly through actions like adjusting their speech to facilitate communication it can also lead to tension (Ritter, 2022). Frustration may arise when family members forget or fail to consistently accommodate these needs, resulting in misunderstandings and stress. Participants in Holman's (2019) study noted that their family members' frustration with miscommunication often triggered feelings of anger or resentment. This underscores the importance of empathy and awareness within families to reduce emotional strain and foster a more supportive environment for individuals with hearing loss.

Family's response to hearing loss in some instances is ambivalent or strained. For instance, Dawes (2014) and Gaeta (2013) both described situations in which family members first noticed hearing loss before the individual did, signalling a kind of "outsider" awareness that can lead to reluctance or even pressure on the person to accept their hearing loss. Another reason, for the reluctance to accept hearing loss is the stigma related to it which is discussed in more detail later in the theme of 'stigma related to hearing loss and hearing services'. Claesen (2012) also acknowledged that the initial recognition of hearing loss was through family's prompts or comments. Conversely Barlow (2007) found that family members often struggle with acceptance of the hearing loss, which can manifest as denial or minimisation of the issue. It must be noted that hearing loss is more acceptable with increasing age and Barlow's participants were all below the age of 60 years which could have contributed to the family's unacceptance. In the older population, more than denial, minimisation of hearing loss was prominent where the family linked humour with hearing difficulties (Holman, 2023). Making light of any misheard conversation was more acceptable among closer family

members and not considered as embarrassing or frustrating as it may be in other social situations (Holman, 2023).

However, not all people felt comfortable in openly acknowledging their hearing difficulties within family settings, particularly when background noise or crowded spaces made hearing very challenging (Heffernan, 2016 and Holman, 2023). This aligns with the experiences of participants in Ritter's (2022) study, who noted that family members often avoided discussing hearing loss for fear of offending the individual. Yet, ironically, participants often express frustration that their condition is not openly addressed, leading to feelings of being misunderstood or ignored (Ritter, 2022).

Reluctance to acknowledge hearing loss within family may be exacerbated by generational differences or cultural stigma surrounding disability (Gaeta, 2013). Gaeta's participants belonged to a specific Hmong population living in the USA and their culture played a significant part in their perceptions of hearing loss. Family attributed hearing loss to genetic factors from the maternal side and did not view it as a health issue Gaeta (2013). This suggests that family narratives and cultural understandings significantly shape how hearing loss is perceived and dealt with within certain families and communities. Gaeta's (2013) study shows that family members may be unaware of the impact of hearing loss on the individual, particularly when there is a lack of historical awareness of such conditions in the family. These type of cultural beliefs and attitudes are only reported by one study and not explored as a factor in other studies and so cannot represent how family respond to hearing loss in other cultures.

Loss of social identity within family unit was identified as an extension to the main theme of family involvement. The data shows that hearing loss profoundly affects a person's social identity, and much of the emotional strain described in these studies stems from the way in which a person perceives their hearing loss within the family unit and society (Barlow, 2007). For many participants, the loss of communication due to hearing difficulties resulted in feelings of disconnection from

family members, which in turn affected their sense of identity. One participant described being with family but feeling as though they were "not in the same world," which highlights the isolation factor (Heffernan, 2016). The sense of not being "fully present" in family life can erode an individual's sense of self, leading to a loss of identity in familial roles.

The loss of identity within the family is particularly acute for those who were once the primary caregivers or involved in family activities. Heffernan (2016) illustrates how an individual who was once a caretaker (such as a grandmother) may feel that they can no longer fulfil their role, which contributes to a sense of personal loss. One participant said, "I feel I am too old to babysit for them because I couldn't hear what they were saying," which speaks to a loss of one's role in family life. However, participants who reported loss of identity were mostly above the age of 65 years when possibly other comorbid health issues also contribute to loss of self identity.

Another example was given by Bennett's (2022) participant who reported being removed from the list of people giving a speech on her son's wedding due to her hearing problems. In both the above cases, participants were older than 60 years of age and the ageing factor may have contributed to the reporting of loss of self identity. Hearing impaired people are subjected to social exclusion and isolation which leads to losing self identity among their social groups. Interestingly, in the younger population, loss of self identity was reported through the stigma of ageing related to hearing loss (Barlow, 2007; Heffernan, 2016; Holman, 2023). Younger population synonymised hearing loss with ageing and felt if it was openly acknowledged they will be considered as being old and usually preferred to conceal it.

As mentioned above, hearing loss was less acceptable among family members of younger participants who are then subjected to dismissal of any hearing loss (Barlow, 2007). The younger population (below 60 years) described their loss of identity, not just within the family but in the broader social context such as work or other social participation (Barlow, 2007). An example was the

worry of losing the role of the breadwinner and not being able to provide for the family financially due to the hearing loss. Although this point only appeared through one participant's account, it was an area unexplored by most studies and the impact of hearing loss as a financial burden was not investigated.

The texts collectively highlight that family and friends play a dual role in the lives of people with hearing loss: as crucial support networks that can alleviate emotional and practical difficulties, but also as sources of tension, frustration, and miscommunication when they do not fully understand or accommodate the individual's needs. The experiences of people with hearing loss show that family members' responses range from denial and avoidance to proactive support in some cases and these can significantly shape how individuals manage their condition. The emotional dynamics between family members and individuals with hearing loss often require careful negotiation of expectations, boundaries, and communication strategies to minimise strain and maintain strong relationships.

2.5.1.3 Impact of hearing loss

The theme 'impact of hearing loss' presents the practical changes that people have to adopt to overcome their hearing problems. The subthemes of this section included experiencing social exclusion and isolation and the difficulties people have to face due to their hearing loss.

Social exclusion and isolation was one of the main impact of hearing loss which was caused by practically withdrawing from social situations. This type of impact is in addition to the emotional isolation and exclusion (presented in 'negative emotions') felt by people in social situations. Barlow (2007) describes people practically being excluded from conversations and social gatherings due to the difficulty in communication. People avoid having conversations with those who had a hearing loss in order to evade any awkwardness (Barlow, 2007). This exclusion was not always intentional on the part of the general public but stems from a lack of understanding about deafness. Dawes also highlights how individuals withdrew from social situations due to an inability to engage in

conversations, describing a sense of isolation and frustration. This type of behaviour is recognised as disengaged Hefferman (2016). Similarly, Bennion (2013) notes that participants struggled in social environments, particularly in group settings or when background noise is high, which leads to withdrawal from those situations. These accounts suggest that one of the main impacts of hearing loss is on social life.

In contrast, Gallagher (2018) offers a slightly more optimistic view, suggesting that some individuals with hearing loss managed to maintain their social lives by actively seeking help, such as asking for repetition or adjusting the volume on the television. However, this suggests a proactive rather than reactive approach to managing hearing loss, as individuals strive to minimise the impact on their social lives by overcoming the difficulties and the limitations.

The subtheme of **practical difficulties and limitations** was found on the basis of hearing loss having a significant impact on daily tasks, including day to day life, work, and everyday interactions.

Bennion (2013) and Linsen (2013) both describe how hearing loss can interfere with personal and professional interactions as well as simple daily life activities. Gallagher (2018) mentions how people attempt to adapt their environments by turning the TV volume up or sitting closer to the one speaking to overcome any hearing difficulties. In contrast, Bennett (2022) and Holman, 2019 elaborate on the activity limitations caused by hearing loss, particularly in group settings. Many individuals report feeling fatigued or stressed when trying to follow conversations in social environments and so they refrain from going to these places. Specific examples of these social settings were not provided by the participants in both Bennett (2022) and Holman's (2019) study, however a few participants mentioned restaurant as one of the social settings that is avoided (Gallagher, 2018; Heffernan, 2016 and Dawes, 2014).

Hefferman (2016) and Holman (2019) also discuss the impact on work life, which is a significant area affected by hearing loss. Individuals with hearing loss often report workplace difficulties, such as

having to navigate noisy environments, attend meetings, or handle phone calls. Some individuals struggle with feelings of invisibility in the workplace, where they may be overlooked in discussions or not given the support they need to engage fully (Claesen, 2012). One of Barlow's (2007) participant left employment due to not being able to hear and effectively participate in meetings. Heffernan notes that individuals may feel the need to "bluff" or pretend they can follow conversations, which can lead to embarrassment or frustration when they miss key information. Holman (2019) describes how fatigue related to hearing loss can affect work life, especially in meetings where individuals need to constantly focus on understanding speech. This can lead to emotional exhaustion and a desire to withdraw from professional interactions, further complicating their ability to participate in the workforce.

The impact of hearing loss is noted through people experiencing being excluded from social settings and at times avoid social situations in order to cope with their hearing loss. The impact is also identified on professional settings where hearing impaired people struggle to continue their jobs. Following the impact hearing loss has, people start to adopt different coping strategies.

2.5.1.4 Coping Strategies

The coping strategies as mentioned briefly above are employed by individuals to deal with their hearing loss can range from disengagement and avoidance to active coping mechanisms involving self-advocacy and environmental control. Drawing from the works of seven authors it becomes clear that hearing loss requires individuals to navigate not only physical limitations, but also significant emotional and social struggles through different coping strategies (Smith, 2024; Bennett, 2022; Holman, 2019; Gallagher, 2018; Heffernan, 2016; Bennion, 2013; Claesen, 2012). Some of the points mentioned below overlap with the previous themes but coping strategies appeared as one of the most important themes.

Avoidance and withdrawal are recognised as a strategy for coping with hearing loss (Bennett, 2022).

Avoidance is when individuals avoid social gatherings altogether due to fear of embarrassment, ridicule, or failure to follow conversations, as seen in the example: “I don’t tend to go to things where there’s going to be a lot of people because I embarrass myself or I don’t hear the joke or I say something completely inappropriate.” (Bennett, 2022). This is consistent with Heffernan’s (2016) findings, which categorise avoidance as part of disengaged coping, where individuals either physically avoid social situations or become passive participants in them. Withdrawal as a coping strategy is when a person chooses "withdrawal within the situation," which involves staying present but not engaging, thereby exacerbating feelings of isolation and frustration (Bennett, 2022).

Bennett (2022) and Heffernan (2016) both note that avoidance and withdrawal as coping strategies, though initially provide a protective layer, they tend to amplify underlying distress, often leading to greater social isolation and emotional fatigue. Holman (2019) also underscores the additional toll this takes in workplace environments, where participants express frustration at their inability to participate fully in meetings or social events, furthering feelings of anxiety and stress.

Engaged coping, in contrast to avoidance involves proactive strategies such as self-advocacy, which allows individuals to manage their hearing loss by asking for help or modifying communication strategies. Both Bennion (2013) and Smith (2024) highlight the importance of self-advocacy, a strategy where individuals take active steps to ensure their communication needs are met. For example, Bennion’s (2013) participants reported openly acknowledging their hearing loss by asking others to repeat themselves or by saying, “I can’t hear very well, could you please say that again?”. This active approach allows individuals to regain some control over social interactions, preventing feelings of inadequacy or frustration.

Similarly, Smith (2024) demonstrates that individuals with hearing loss often develop resilience through educating others about their hearing loss, teaching them the best ways to communicate.

This not only empowers individuals to manage their condition but also fosters greater understanding in social environments. This aligns with Heffernan's (2016) notion of engaged coping, where people take action, such as using hearing aids or communication strategies, to manage their hearing loss effectively. By adopting these proactive methods, individuals with hearing loss can combat feelings of embarrassment and avoid the social withdrawal that can deepen emotional distress.

Fatigue and emotional distress related to coping was found across many studies where fatigue was caused by the constant mental effort required to manage hearing loss. Holman (2019) highlights the exhaustion individuals experience when they must constantly plan and prepare for listening tasks in both work and social settings. The need for extensive planning, as well as the cognitive load associated with following conversations in challenging environments, can be emotionally draining. Especially those experiencing more advanced hearing losses, can be impacted by the toll of fatigue and social withdrawal.

The emotional burden of hearing loss is often exacerbated by a lack of effective coping strategies, particularly when individuals feel they cannot seek help from professionals or loved ones. As Bennett (2022) observes, few participants described having developed solution-focused coping strategies, leaving them vulnerable to frustration, exclusion, and sadness. One participant highlighted the importance of audiologists and healthcare providers offering support for emotional coping strategies rather than just focusing on fitting hearing aids to improve hearing (Bennion, 2013). This shows the importance of using effective coping strategies to overcome hearing difficulties.

Coping involves both active engagement and passive management. Active coping mechanisms, such as self-advocacy, controlling the environment, and actively asking people to repeat, are crucial in helping individuals regain control over their social lives. While avoidance strategies like withdrawal provide temporary relief, they often lead to greater social isolation and emotional distress. However,

the stigma associated with hearing loss and hearing aids remains a significant barrier, affecting the strategies individuals are willing to adopt.

Considering the review question which asks '*What are the perceptions and experiences of hearing impaired people about hearing loss?*' the literature identified four main themes. The literature shows that people's perceptions and experiences of hearing loss are negative. People associate various negative emotions such as frustration, isolation and anxiety with hearing loss. The perceptions towards hearing loss are also influenced by family and their responses. Family support in managing with hearing loss is paramount, especially in social situations. However, hearing loss is generally more accepted among older people and less in younger individuals by the family members. Those who do not receive family support, feel isolated and disconnected to the point it impacts their social identity. The impact of hearing loss is not only on emotional state and family relations but also other day to day activities. Hearing impaired people experience difficulties and changes in their daily life and working environments, such as avoiding social interactions, making adjustments to their TV volume and sitting place. These experiences add to the tension and frustration that people feel due to their hearing loss. To overcome these negative impacting factors, people adopted attitudes that would help them cope better. The main coping strategies involve either avoiding situations or participating in them by asking people to adjust to their hearing problems. People's perceptions and experience to hearing loss are associated with negative emotions and difficulty in social and personal situations and family support plays a big role in how hearing loss is perceived and managed.

2.5.2 Themes addressing the issue of Hearing Services

This section presents the key themes that were found through literature focusing on the issue of hearing services. The below listed themes answer the review question about '*What are the perceptions and experiences of hearing impaired people about hearing services?*'. Three main

themes are found to be linked with hearing services which include people's health seeking behaviour, attitudes towards hearing aids and experiences with hearing services. Each theme is divided into subthemes giving further detail and context to the theme.

2.5.2.1 Theme Hearing Health Seeking Behaviour

Health seeking behaviour related to hearing loss was studied by five authors (Gaeta, 2023 Claesen, 2012; Powell, 2019 and Rolfe, 2016; Laplante Levesque, 2012). It is found to be influenced by many factors including social, emotional, and practical. Below two subthemes detail the central aspects: the impact of social and emotional influences on the decision-making process and the logistical barriers individuals face when seeking hearing healthcare. This discussion highlights the challenges individuals encounter when considering seeking hearing services.

Family's influence on health-seeking was one subtheme which highlights the social and emotional dimensions of the previous themes (family involvement and coping strategies). This section describes how participants' decisions to seek help for hearing loss are often influenced by the perceptions and expectations of others, especially family (Laplante Levesque, 2012). In some cases, individuals are motivated to seek assistance not because they initially recognise hearing loss as a problem, but because they are influenced by the concerns of their family or partners (Claesen, 2012). This external pressure, such as being guided by a spouse or family member, is a common factor in their health-seeking process. Two of Claesen's (2012) participants explicitly admitted that they only sought help for their hearing loss because their spouse 'forced' them. Powell and Gaeta (2012) on the other hand present a more subtle way adopted by the family in influencing their health-seeking behaviour. This was identified incidents where family and partners point out the significant situations where the individual struggled to hear and how things could be better if they sought help (Powell, 2018 and Gaeta, 2023). These personal situations influenced people and triggered their health seeking, especially when encouraged by family (Powell, 2018).

Practical and logistical barriers to health-seeking are another consistent theme across the texts (Gaeta, 2023; Claesen, 2012 and Laplante Levesque, 2012). Gaeta's (2023) exploration of transportation issues highlights how practical concerns, such as the inability to drive or the need for assistance in scheduling appointments, can prevent individuals from accessing hearing services. For example, the rural population in USA have to travel lengthy distances to hearing specialist clinics and at this point, family support during transportation is considered important (Powell, 2013). Other logistical factors are how time, money, and concerns about the efficacy of hearing aids influence individuals' decisions to delay or avoid seeking help (Laplante Lavesque, 2012). Laplante Levesque (2012) conducted her study in Australia, USA and Denmark as well as UK. Two Participants in Laplante Lavesque's (2012) study expressed concerns about the cost of hearing aids and the perception that hearing aids may not solve their communication difficulties, as significant barriers to seeking help. This resonates with Claesen's (2012) discussion, where participants express low optimism about the effectiveness of hearing aids, preferring to seek a medical solution to the hearing difficulties, referring to medication or an acute treatment. Gaeta (2023) adds a slightly different perspective where her participants who belonged to the Hmong community preferred to "avoid treating their hearing loss than pay for hearing aids". Most studies, conducted outside UK show financial burden to be one of the significant barriers in seeking hearing healthcare.

Powell's (2018) study that represented the rural American population, identified a sense of confusion about seeking hearing services. People were unsure about the first point of contact when seeking help. Gaeta (2023) and Powell highlight that these barriers can be particularly impactful when individuals need to rely on external support, such as family members, to navigate the healthcare. Gaeta (2023) mentions the expectation from family members to accompany people during audiology appointments is also an added aspect when considering seeking hearing services.

The lack of access to resources, whether financial resources for hearing aids or transportation to healthcare appointments, can create significant barriers to seeking timely care. Individuals' decisions

to seek help are rarely solely based on the recognition of a health problem. Instead, hearing health-seeking behaviours are often shaped by external pressures, internal barriers, and access to resources, highlighting the need for more accessible and inclusive healthcare systems that account for these diverse factors.

2.5.2.2 Expectation mismatch with Hearing Services

The experiences individuals have with hearing services are shaped by a combination of expectations, frustrations, and the quality of both interpersonal and technical aspects of care. Drawing on various studies, patients' experiences with audiology services are influenced by the quality of the relationship with healthcare providers, the adequacy of the services themselves, and the accessibility of resources (Barlow, 2007; Laplante-Levesque, 2012; Dawes, 2014; Grenness, 2014; Gallagher, 2018 and Bennet, 2022).

The role of audiologist and the importance of patient centred care was a consistent theme across multiple studies. It identified the importance of developing a strong, trusting relationship between patients and audiologists. People emphasise that individualised care is essential for effective uptake of hearing services (Grenness, 2014). As one participant said, "I am a person who has needs" and the audiologist is expected to identify those needs and provide a customised solution (Grenness, 2014). For many participants, the relationship with their audiologist is at the heart of patient-centred care. When this relationship is nurtured, it leads to long-term loyalty and satisfaction with the service. A positive therapeutic relationship marked by trust, competence, and empathy is repeatedly cited as a key factor in patient satisfaction and engagement (Barlow, Gallagher, 2018 and Grenness, 2014).

Similarly, Dawes (2014) highlights that a good relationship with an audiologist makes a significant difference in whether patients will persist with their treatment and follow-up appointments. This was reflected in a participant's account of feeling more likely to continue with hearing aid fitting and follow-up due to the warm and considerate attitude of the audiologist (Dawes, 2014). This contrasts

with some negative experiences, where patients felt that audiologists were too busy or lacked adequate interpersonal skills, leading to frustration and a sense of neglect (Laplante-Levesque, 2012 and Grenness, 2014). Some participants felt healthcare professionals lacked knowledge and sensitivity when dealing with those who are deaf or hard of hearing (Barlow). Most healthcare professionals were found to be treatment focused through providing hearing aids and the technical information about them. These points align with Grenness's (2014) findings on the need for personalised care; without an adequate understanding of the patient's specific needs, the quality of service suffers. This lack of understanding on the part of the audiologists was further compounded by poor communication practices, such as shouting or ignoring the needs of the deafened individuals (Barlow, 2007). One of Barlow's (2007) participants described their hospital visit, where the healthcare staff raised their voice to compensate for the hearing impairment experienced by the patient leaving them feeling embarrassed.

Another common issue raised by several studies is the lack of sufficient information for patients. Gallagher's (2018) research points out that many individuals did not receive adequate explanations or written instructions about their hearing aids, leading to confusion and frustration. This sentiment is echoed by Laplante-Levesque (2012), where participants noted that more time should have been dedicated to training patients on how to properly adjust and use their hearing aids. Barlow further emphasises that a lack of education on how to navigate life with hearing loss, such as developing coping strategies for social interaction leaves many individuals feeling unsupported. These gaps in the service provision results in dissatisfaction which compound the existing barriers to seeking hearing healthcare (Bennet, 2022).

Inconsistencies and concerns with hearing services represents the crucial point about experiences with the overall quality of hearing services which is seen to vary significantly. Gallagher's findings reveal that while some patients were highly satisfied with their hearing aid provision and felt the service was excellent, others expressed dissatisfaction, particularly with the lack of follow-up care.

Many regular hearing aid users noted that they were given a device without any scheduled check-ups, which they felt left them unsupported (Gallagher, 2018). This gap in service provision was perceived as a major issue, with participants highlighting the need for more proactive engagement from healthcare providers.

On the other hand, Laplante-Levesque's (2012) research, conducted in 4 countries, highlights the significant differences between public and private hearing aid providers. Public services such as the NHS are often seen as less accessible due to longer waiting times, while private providers are appreciated for quicker access to appointments, though they are less affordable. Gallagher's (2018) participant stated that they would be more comfortable in accessing free NHS hearing services than paying for private healthcare. These differences in hearing service provision are indicative of the systemic barriers that shape people's experiences with hearing services, highlighting how access to timely care influences overall satisfaction. In the UK, dissatisfaction with the audiology service is often linked to the feeling that the NHS and its audiologists are overburdened, impacting the way audiologists treat the patients (Gallagher, 2018). Participants noted that they rarely received follow-up appointments unless they initiated contact, and this lack of structured care contributes to a sense of neglect. In contrast 3 of Gallagher's (2018) participants reported NHS as providing excellent services. One of them highlighted that "I think they do the best they can".

In conclusion, the experiences with hearing services outlined by the various researchers point to the need for a more holistic approach that encompasses not only the technical competence of audiologists but also their ability to build meaningful relationships with patients and provide a more patient-centred service. Patients expect individualised care that is responsive to their specific needs and concerns. Moreover, adequate informational support and follow-up services are crucial for maintaining long-term satisfaction and engagement with hearing aid use. Structural issues such as access to timely care, the availability of resources, and the adequacy of services must also be addressed to ensure equitable and effective hearing healthcare.

2.5.2.3 Attitudes Towards Hearing Aids

The use of hearing aids (HAs) is marked by participants' experiences with them, which include initial discomfort, psychological barriers, and the practical complexities. However, these difficulties are often balanced by the long-term benefits of improved hearing and social engagement. The following analysis brings together insights from various authors, exploring key themes related to people's attitudes towards hearing aids.

Initial reactions and discomfort were a common theme across the literature that was associated with hearing aid use. Barker (2014) and Dawes (2014) highlight how individuals often experience the amplification of background noises as overwhelming and intrusive. Participants in Barker's study, describe the initial shock of hearing new sounds, such as birds chirping or the hum of traffic, which they had not noticed before. This is echoed by Dawes (2014), who notes that many participants reported feeling uncomfortable with the new auditory experiences, including "the battery of noise" or feeling like the hearing aids were a "foreign body" in the ear. Such reactions underscore the adjustment period that accompanies the introduction of hearing aids.

Despite these initial challenges, the process of acclimatisation is vital. Dawes (2014) suggests that over time, participants adapt to the amplified sounds, with one participant commenting that the discomfort subsides as they "got used to it." However, this adjustment is not always seamless, as some reported that despite having hearing aids, they still missed a significant part of the conversations (Bennett, 2022). Heffernan (2019) explains this point by highlighting the disconnect between expectations and reality. Some participants initially believed that hearing aids would restore normal hearing, which created unrealistic expectations and led to disappointment when they fell short of these expectations. However not all people expressed disappointment with their hearing aids at the initial stages, as some stated that wearing hearing aids made them 'realise how much they had been missing' (Bennion, 2013).

The experiences with hearing aids amongst the older and younger people varied. Literature suggests that the older population find it more difficult to adjust to the hearing devices compared to those who are younger (Bennion, 2013 and Gallagher, 2018). One 75 years old participant, stated that they forgot to take them off before showering, leading to the aids malfunctioning while another 69 years old found the controls very “fiddly” (Gallagher, 2018). In contrast a younger participant (aged 47 years) provided highly favourable feedback about his hearing aids and stated that hearing aids restored most of his life as it was before his hearing loss (Smith, 2024). However other studies conducted on older participants highlight other factors such as psychological state or personal beliefs about hearing aids which contribute to their acceptance (Barker, 2020 and Linssen, 2013).

The initial reaction to hearing aids is also impacted by people’s psychological state regarding their hearing loss. Those who had self proclaimed the acceptance of their hearing loss seemed to acclimatise easily to their hearing aids compared to those who reported coming to terms with it (Barker, 2020). Rolfe named this psychological state as “readiness” to obtain hearing aids, resulting in a more positive outcome. Linssen (2013) found that people with a mild hearing loss did not perceive their hearing aids to be of much benefit and did not wear them even after trying. One participant attributed the inflammation and the wax build up to her use of hearing aids and therefore perceived the disadvantages of wearing them to be greater than the advantages (Linssen, 2013). It must be noted that Linssen’s (2013) participants were all non-users of hearing aids after acquiring them, which explains why they may perceive hearing aids in a negative light.

Psychological impact and stigma were one of the most significant barriers to hearing aid use.

Participants in various studies, describe feeling self-conscious about their hearing aids, particularly in social contexts (Barker, 2014; Dawes, 2014; Rolfe, 2016; Gallagher, 2018 and Smith, 2024). For instance, one participant discusses how he hid his hearing aids and felt ‘embarrassed’ to admit that he wore hearing aids (Barker, 2014). However, this negative perception gradually shifted as he saw others wearing them and felt more accepting of them. This experience is mirrored in Dawe’s (2014)

findings, where participants struggled with the stigma of aging or disability but gradually grew more comfortable with the idea that hearing aids are simply a tool to assist with hearing.

Moreover, encouragement from family and social acceptance of hearing aids plays a crucial role in shaping an individual's attitude towards them (Gaeta, 2023; Rolfe, 2016 and Dawes, 2014). If family reinforcement of the use of hearing aids and help with their management, such as changing batteries, is most. Likely to result in persistent use of them (Gaeta, 2023 and Rolfe, 2016). For example, one participant noted that their children were happy to engage with them now that they could hear better, demonstrating how support from others can ease the adjustment process (Gaeta, 2023 and Dawes, 2014).

The practical challenges of using hearing aids are frequently cited as factors that hinder their effectiveness and regular use. Smith (2024) and Gallagher (2018) both note that individuals encounter issues with maintenance, such as battery replacement and keeping the aids clean, as well as the need to adapt to wearing them in different environments. Smith (2024) highlights the challenge of fitting hearing aids in conjunction with glasses where some found it difficult. As mentioned above, some found the controls fiddly and hard to navigate (Gallagher, 2018 and Rolfe, 2016). Gallagher's (2018) participants also found the use of hearings aids challenging while speaking over the telephone and in those circumstances, people preferred to remove them.

In addition to these maintenance issues, the effectiveness of hearing aids in specific environments is also a common concern. Dawes (2013) describes how some participants found that hearing aids were particularly useful in quiet settings but less effective in noisy environments like social gatherings or crowded public spaces. This aligns with Heffernan's (2019) observations, where participants noted that hearing aids did not fully address the challenges posed by noisy backgrounds, limiting their effectiveness in certain social situations. One participant stated that the volume of the

hearing aids was too loud at times during conversations leading to severe discomfort and non-use (Gaeta, 2023).

Despite the challenges, some hearing aid users reported *long-term benefits and improved quality of life* due to the aids. Holman (2019) and Bennion (2017) both suggest that hearing aids significantly improve participants' overall well-being, leading to enhanced social participation and reduced effort in communication. Holman found that participants who wore hearing aids consistently reported less fatigue and improved mental well-being due to the increased clarity of sound, which allowed them to engage more easily in social activities. Similarly, Bennett (2017) mentions that although hearing aids did not eliminate hearing difficulties, they allowed participants to regain a sense of connection with their environment and their social circles. It must be noted that all of Bennion's (2017) participants were satisfied experienced hearing aid users which may have contributed to their positive outlook of the hearing aid use. However, only 2 out of 17 participants in Bennett's study who wore hearing aids mentioned improvements in their lives as a result of using the devices. This may be attributed to the focus of Bennett's (2022) study, which aimed to explore the experiences of individuals with hearing loss rather than specifically assess the impact of hearing aid usage.

Bennion (2017) notes that some participants expressed amazement at the range of sounds they had previously overlooked, such as birdsong or the hum of household appliances, which they could now hear clearly. This awareness of the "lost sounds" of life can be an emotional revelation, contributing to the positive perception of hearing aids as a valuable tool for improving quality of life.

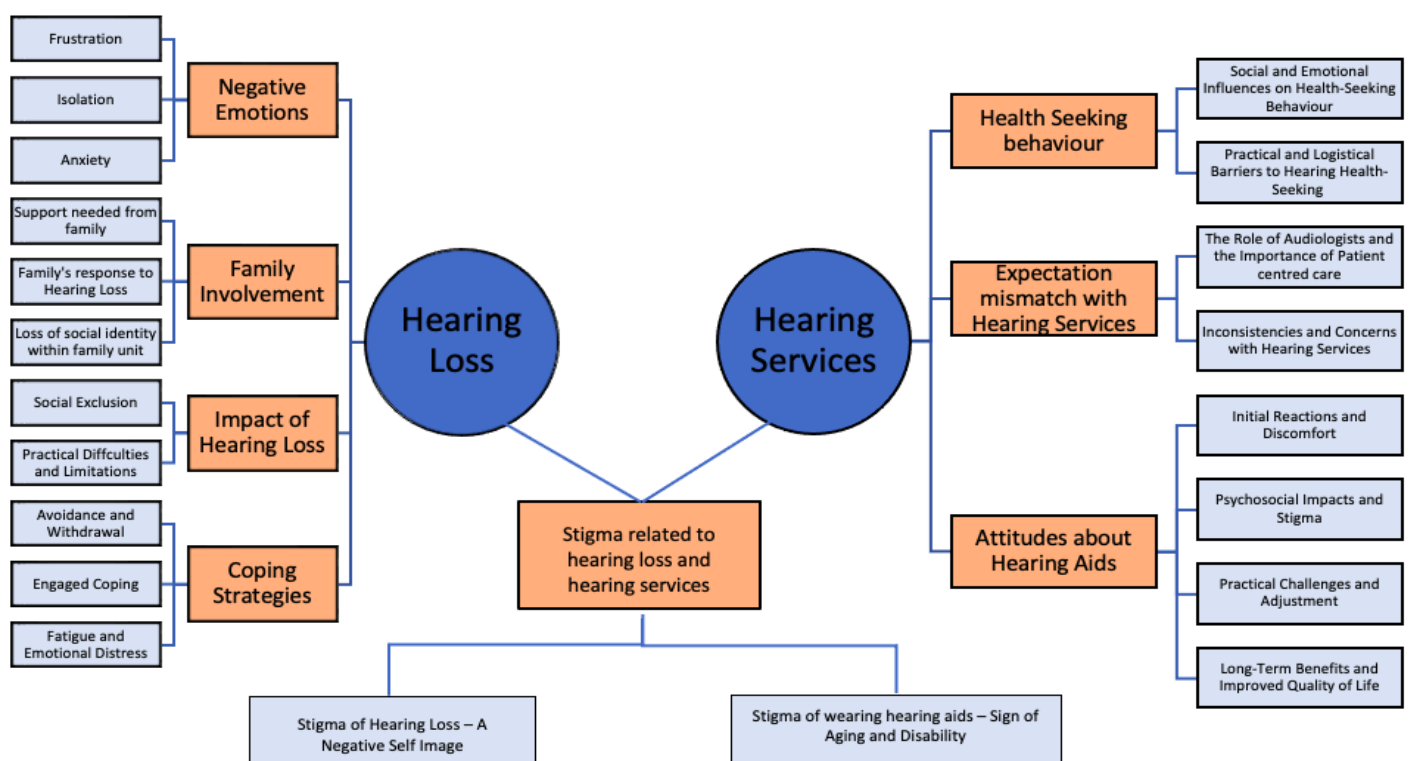
In conclusion, the use of hearing aids is marked by a complex interplay of practical, psychological, and social factors. While many individuals experience initial discomfort and psychological resistance, particularly due to stigma and unrealistic expectations, the long-term benefits often outweigh these initial challenges. The adjustment process, though fraught with practical difficulties, ultimately leads to greater integration of hearing aids into daily life. The experiences shared by participants across

studies suggest that the benefits of hearing aids extend beyond simple hearing improvement, enhancing emotional well-being and social engagement. Nonetheless, for these devices to reach their full potential, ongoing support, clear expectations, and positive reinforcement are crucial to fostering sustained use and acceptance.

2.5.2.4 Stigma related to hearing loss and hearing services

The theme of stigma was found to be an overlapping theme across both parts of the review question (see figure 6). It is closely associated with both hearing loss and hearing services, with each influencing the other. Hearing loss is often perceived as a stigmatised condition, primarily due to its strong association with aging and disability and hearing aids are seen as a visible sign of accepting this stigmatized condition. Both of these factors and their interplay are explored in detail below.

Figure 6 - Showing the 4 themes and subthemes of the thematic analysis



The stigma of hearing loss itself often stems from societal perceptions of impairment, which can lead to self-stigma and negative self-image. For instance, Heffernan (2016) highlights that individuals with hearing loss often experience negative emotions, such as feeling stigmatised or embarrassed, as it affects their identity and social relationships. Some participants in Heffernan's (2016) study felt they were perceived as "unfriendly" or "difficult" due to communication issues, while others resisted acknowledging their hearing loss out of fear of being labelled as disabled. Similarly, Powell (2018) describes how some individuals refuse to admit to hearing loss due to shame and fear of social repercussions, even refusing to seek a hearing test. This internalised stigma complicates the ability to cope with hearing loss and can prevent individuals from seeking help or adjusting to the condition.

Barker (2020) contrasts this by describing the experiences of "overcomers", individuals who, despite initial feelings of embarrassment and fear of negative evaluation, manage to transcend these obstacles. Overcomers learn to embrace their hearing loss as part of their identity, moving beyond the shame often associated with it. This theme suggests a more resilient approach to stigma, where individuals find a "new normal," allowing them to regain confidence in their social interactions. The tension between resisting the stigma of hearing loss and learning to live with it creates a complex dynamic for those who experience it, as seen in both Heffernan's and Barker's (2020) findings.

Stigma of hearing aids is associated with aging and disability and is a theme prevalent across several studies. The studies with younger participants identified hearing aids being stigmatised as a sign of ageing (Barker, 2020; Ritter, 2020 and Barlow, 2007) and the older participants stigmatised hearing aids as a sign of disability (Dawes, 2014; Claesen, 2016; Heffernan, 2016; Rolfe, 2016 and Gallagher, 2018). Claesen (2016) and Dawes (2014) emphasise how hearing loss and hearing aids are often linked to aging, which many individuals find distressing. For example, Claesen found that participants felt hearing aids were "old age" markers, comparing them to "continence pads," which further fuels the discomfort and stigma surrounding aging. Similarly, participants in Gallagher's (2018) study

noted that "vanity" and a desire to avoid being perceived as old were key reasons for not wearing hearing aids. On 20 year old participant refused hearing aids because she did not believe that these devices were for younger population (Ritter 2020). Due to these stigmatised views, people expressed reluctance to seek hearing healthcare, adding to the barriers to accessing audiology and non-use of hearing aids (Ritter 2020).

Contrasting with this, Rolfe (2016) discusses how participants, once they accepted their hearing loss, often faced the reality of how society views aging, disability, and hearing loss. Some participants in Rolfe's study expressed reluctance to identify with hearing loss due to its association with aging and feared being viewed as disabled or dependent. However, other participants recognised that accepting hearing loss as part of aging could reduce the stigma and help them move forward, a process that echoes Barker's concept of overcoming stigma. One participant explained the journey of accepting hearing aids through the length of her hair, which she initially kept long to hide the hearing and gradually cut shorter (Bennett, 2022). This suggests that while stigma around aging and disability can initially hinder acceptance, gradual acknowledgment of hearing loss can potentially lessen its social impact, as individuals redefine their identities.

Wearing hearing aids is a highly stigmatised act, often associated with visible disability, which exacerbates both internal and external stigma. Many studies highlight that the visibility of hearing aids is a crucial factor in their stigmatisation (Claesen, 2012; Dawes, 2014 and Heffernan, 2016). Many participants in their studies feared the social consequences of wearing hearing aids, with some mentioning how hearing aids would mark them as different or less capable. For example, one participant in Claesen's (2012) study considered wearing a hearing aid "without anybody knowing," suggesting that concealment of the device could reduce stigma, or conversely, visible hearing aids increases stigma. Heffernan identified that people synonymised wearing hearing aids with looking 'stupid' or 'silly'. Both of the stated studies collected data from a wide range of age groups covering

views from 4 different Western countries. Therefore, the results are representative of a broad population.

Gallagher (2018) also notes that some participants, particularly those who were older, disliked drawing attention to their hearing loss and associated hearing aids with old age and frailty. However, other participants, such as those in Dawes' (2014) study, reported that after initially resisting hearing aids, they came to terms with their use, and wearing them became part of their "new normal." This shift parallels Barker's (2020) findings on overcomers, who, despite initial resistance, learn to embrace hearing aids as an essential tool and part of their identity.

On the other hand, Ritter (2023) and Rolfe (2023) found that some participants reported that stigma related to hearing aids may be reduced if celebrities or public figures openly wore and endorsed them to normalise hearing aids. These findings align with Dawes' research, where participants who redefined, their self-image began to accept hearing aids as part of their everyday life. Social support and the visibility of public figures with hearing aids were seen as important factors in combating the stigma, suggesting that societal perceptions can shift when more prominent figures embrace hearing aids.

In conclusion, comparing the views of different authors on stigma related to hearing loss and hearing aids, it is evident that stigma plays a significant role in shaping individuals' decisions regarding help-seeking and the use of hearing aids. Authors like Claesen (2016), Dawes (2018), and Heffernan (2023) focus on the initial resistance to hearing aids due to their association with aging and disability. At the same time, Barker (2018) and Rolfe (2023) highlight the transformative process of overcoming stigma, where individuals come to terms with their hearing loss and find ways to redefine their identity. The stigma surrounding both hearing loss and hearing aids, while powerful, can be mitigated through self-acceptance, societal normalization, and support systems, as illustrated by various studies.

2.6 Discussion

2.6.1 Statement of principal findings

This literature review aimed to explore the perceptions and experiences of hearing-impaired people regarding hearing loss and hearing services. Eight key themes emerged that shaped the individuals' perceptions and experiences of hearing loss and hearing services which included i) negative emotions, ii) family involvement, iii) impact of hearing loss, iv) coping strategies, v) help-seeking behaviour, vi) mismatched expectations, vii) attitudes towards hearing aids and viii) stigma related to hearing loss and hearing services. The review demonstrated that these themes are interrelated and contribute to understanding the complexities of hearing loss experiences. This study found that hearing loss is not a condition which is experienced individually but rather has strong social and dimensions and a powerful impact within the family. From the initial recognition of hearing loss to the day to day hearing difficulties family involvement was important. People sometimes only acknowledged their hearing through family members' comments and those with established hearing issues needed their family to assist with the hearing difficulties. Where this support was lacking, people struggled to cope and resorted to self isolation and avoiding social interactions. The attitudes towards hearing loss were formed through these experiences and the views of family which contributed to people's help-seeking behaviour.

The literature found that one of the barriers in accessing hearing services was the negative stigma related to hearing loss and hearing services. People reported reluctance to seeking hearing services as it was only seen as a route to obtain hearing aids. Wearing hearing aids in younger years (generally below age 65 years) was seen as unacceptable as it was associated with old age and infirmity. Additionally the older generation were not keen to wear hearing aids due to the stigma of disability. In both cases the underlying issue was the negative stigma. However, not all people were impacted by this stigma and sought hearing services for their hearing issues. Those who had been in

contact with the hearing services reported negative experiences due to a lack of consideration of psychosocial factors in the appointments. People felt that hearing loss was more than a medical problem and impacted other psychosocial aspects of life which were not addressed in the hearing services provided, leading to a less satisfactory experience. There was also an expectation that hearing services or hearing aids resolve their hearing loss. This showed that there was a general lack of awareness regarding different types of hearing loss and the hearing services available.

The review also highlighted a significant gap in the literature regarding views and attitudes of ethnic minority populations. An initial literature search to gather views of people belonging to the ethnic minority backgrounds yielded no results. The findings of this review represent the experiences and attitudes of the majority white populations residing in the Western countries and cannot be generalised to people belonging to other ethnicities. There may be differences in how hearing loss is perceived within different communities especially because hearing loss seems to be considered less of a medical issue and more a social issue. One study in this review (Gaeta, 2023) identified that views of Hmong populations when considering seeking hearing services included their cultural and traditional beliefs. Based on that there is a lacking in the field of research and understanding what hearing loss means to people belonging to different ethnic groups.

2.6.2 Situating this review within a wider literature

2.6.2.1 *Role of family*

Family played an important role in many aspects of people's lives who suffered from a hearing loss. This review found that support in accessing hearing services was seen as beneficial in positive hearing health outcomes. However, the support required was not limited to accessing hearing services but also needed in social situations and day to day activities. This extensive need for family involvement was also linked to a feeling of burden placed on others.

Additionally, some findings showed that the family strongly encouraged people to seek hearing services in order to lessen the burden of listening on the family. This meant a lack self motivation for accessing hearing services led to further straining relationships. There were some contrasting views which highlighted the trivializing of hearing loss by family members who considered it insignificant. All the above concepts are discussed below with the wider literature.

Family involvement in acknowledging the hearing loss

Family involvement emerged as a key factor in helping individuals acknowledge and better cope with their hearing loss. Words of encouragement from communication partners positively impacted the management of hearing loss and even the uptake of hearing services (Chang et al., 2020). Similar views have been identified from those with visual impairment, where support from family and friends was considered beneficial (McIlvance and Reinhardt, 2001). Although, both hearing loss and visual impairment are sensory losses, the kind of support required for both conditions is different. People with hearing impairment sometime did not acknowledge their issue until it was highlighted by the family which may indicate a carefree attitude towards it (Van Leeuwen et al., 2021). Conversely, visually impaired people did not need help in acknowledging their condition or motivation to access the relevant health services (Bambara et al., 2019). Eyesight is noted to be the most important sensory loss whereas hearing loss can be neglected for up to 10 years before hearing services are sought (Simpson et al., 2019). However, the vision services offered are different from hearing services where vision is divided into two types, i) vision impairment and ii) vision loss. Those experiencing vision impairment seek optometry services to obtain spectacles which are nowadays very common and acceptable. On the contrary, hearing aids, which are the most common devices offered for hearing impairment are still associated with negativity and not as socially acceptable. The second type of vision services are where spectacles, contacts or surgery cannot correct eyesight then low vision services are offered which may include a white cane and specialist magnifying glasses (Pollard et al., 2003). Access to these low vision services is reported to be the

ones where support from family is lacking and, in some cases, family is noted to be a barrier (Pollard et al., 2003).

The role of family regarding hearing loss was identified as inconsistent as some families did not hold a positive or encouraging outlook towards hearing loss (Van Leeuwen et al., 2021). Acquiring hearing loss in younger years was seen to provoke humorous comments and trivialisation of the issue. This may be because people with a hearing impairment did not self-acknowledge their hearing loss as a serious health issue and often hid it and so it was perceived as non-existent by family. In contrast, some of the common conditions for vision impairment are often instantly expressed as a concern and the family perceive it as a serious issue and often assume the caregiver's role without extra prompts (Hanna et al., 2024). Families were seen to lack understanding regarding the impact of hearing loss as a health condition. In comparison, the family's lack of knowledge regarding visual impairment was primarily related to understanding the best ways to support their affected relatives, rather than the severity of the condition itself (Bambara et al., 2009). In both cases, the family is directly affected by the condition, necessitating essential adjustments from those around them, hence the need of family support appearing as essential.

Negativity towards hearing loss by family

Another role that was played by family members was their negativity towards hearing loss. These attitudes were based on the impact of hearing loss on family life. Spouses and partners were usually required to be the listeners and responders on behalf of their hearing impaired family member. This type of assistance from family was likely to strain relationships and affected the social wellbeing of the family (Choi et al., 2020; Kandula et al., 2018). The anxiety and stress caused by strained relationships could leave people feeling like a burden on others. The accumulation of these negative emotions leads to hearing loss being perceived as the source of adverse experiences. Previous literature, based on family perceptions, has established the significant impact of hearing loss on

family (Wallhagen et al., 2004; Vas et al., 2017). Similar burden and stress is experienced by the caregivers of visually impaired individuals (Shtein et al., 2016). However more of the frustration was identified through not being involved in the medical interventions and then having to navigate the visual difficulties at home. In the recent years there is more literature which identifies the family as caregivers of visually impaired people and research is focusing on the needs of these caregivers (Bassi et al., 2023; Enoch et al, 2022; Jin et al., 2021). Whereas the role of caregivers is not extensively recognised when hearing loss is concerned except for those who care for children with hearing loss (Kasper et al., 2023; Meinzen-Derr et al, 2008).

A health issue which is more relatable to hearing loss is mental illness where both are hidden in nature and to an extent based on subjective expression (Tanka et al., 2023). The caregiver's role for those experiencing mental health issues has also been long established where nurses provide support to family members and teach them the care responsibilities (Noghani et al., 2016; Schulz and Sherwood, 2008). Despite the evidence that highlights the need for providing emotional and psychological support for caregivers, research in this area seems thin (Acri et al., 2017). However, unlike vision impairment but similar to hearing loss, family members sometimes deny the existence of some mental health issues due to negative stigma (Misra et al., 2021). Stigma is generally a construct of society where deviation from the so-called norm in a physical or mental form is devalued (Gagne et al., 2009). Even family at times did not give importance to hearing loss like some mental health problems and encouraged coping strategies in order to conceal the issue.

People with hearing difficulties sometimes faced negative reactions from family members where at times family members helped in concealing their hearing loss by adopting coping strategies which was the same for some mental health issue (Monnapula-Mazabane and Peterson, 2021). This was because family members denied the hearing loss due to the stigma and felt the need to help their

hearing impaired person maintain a normal social identity. Negative stigma towards hearing loss within families has been a well recognised (Ekberg and Hickson, 2023).

Hearing loss stigmatised by family

The stigma related to hearing loss, although has direct impact on the hearing impaired individual, it is also felt by family members and can affect their social interactions (Wallhagen, 2010). To maintain a so called 'normal' image, hearing loss was concealed, and this included the family's efforts to do so. Just like hearing loss, vision impairment and mental health issues are also stigmatized (Kumar et al., 2022, Van der Sanden et al., 2015). In all three cases family members are impacted by the condition and also feel the impact of the stigmatisation in society. However, in both hearing loss and mental illness, families tend to help to conceal the health issue while maintaining a normal image in society (Corrigan et al., 2004). Unlike visual impairment which although was heavily stigmatised a couple of decades ago, it has become more acceptable especially because wearing glasses endorsed by prestigious brands has become a trend (Orr and Rogers, 2006, Killeen et al., 2023). Additionally, sight loss is also considered as the worst ailment and ranked first when compared to other health issues including hearing loss (Scott et al., 2016). Despite the understanding regarding visual impairment, people still reported being subjected to discrimination in social situations in the same way as those with hearing loss (Hienze et al., 2024). However, it must be acknowledged that all the views gathered about stigma in this review and other research are through self perception. It is this self-perception which strongly impacts people's attitudes towards hearing loss and experiences with hearing services.

Family involvement in seeking hearing services

Apart from attitudes and experiences of hearing loss being influenced by family, seeking hearing services was also seen to require assistance from family. Some families encouraged their affected family members to seek hearing services and most reported the reason for that encouragement was

also to reduce the impact hearing loss was having on family dynamics. Those who only sought help due to family encouragement may have lacked self-motivation and accessed hearing services primarily to satisfy their family's concerns. Self-motivation and having a clear understanding of hearing loss is important in successful uptake of hearing services (Ridgway et al., 2020). However, family-led motivation may not always result in beneficial hearing healthcare engagement (Ferguson et al., 2016). Those who access hearing services without any self-motivation are likely to reject the services offered or give up easily. In order to increase service uptake, it is important to reduce the negative stigma among family members and educate them about the condition which is what has been previously suggested regarding some mental health issues and low vision services (Thornicroft et al., 2022, Pollard et al., 2003). Any evidence of how effective anything has been implemented to reduce that stigma among family is still lacking. Although positive family support would improve the attitudes towards hearing loss and uptake of hearing services, it was not found to be consistently available for all.

2.5.2.2 Experiences with hearing services

Access to hearing services was often misunderstood by people. Many researchers noted a general lack of awareness and appreciation of available services. Even so, individuals who had accessed hearing services expressed dissatisfaction due to inconsistencies in service delivery (Gallagher, 2018). Contributing factors included lack of individualised care, limited trust in audiologists, and perceived inconsistencies in service quality (Laplane-Levesque, 2012). Many individuals expected to receive customised hearing rehabilitation that addressed not only their hearing loss but also the broader challenges they faced in daily life. Some believed that seeing an audiologist would "treat" their hearing loss, and when these expectations were not met, it led to dissatisfaction and mistrust in the services provided. This highlighted that raising awareness about hearing health services and the use of hearing aids among the general public is essential to ensure that expectations align with reality. Hearing aids are sophisticated amplification devices that enhance hearing but cannot fully

restore normal hearing (Lesica, 2020). Providing patients with clear explanations of how these devices work, including their benefits and limitations could help manage expectations. However, like other NHS clinicians, audiologists often face time constraints that limit their ability to provide in-depth explanations (Raphael et al., 2021).

Integration of psychosocial factors in clinical services

Psychosocial factors, such addressing negative emotions, encouraging coping strategies and general non-medical support was considered important by people seeking hearing services (Heffernan, 2016; Barlow, 2007). Integration of psychosocial factors in clinical services was found to be lacking as people experienced appointments focused on medical and theoretical knowledge rather than broader and holistic individualised care (Grenness, 2014). People expected more than just treatment for their hearing loss and sought support for psychosocial aspects. Psychosocial factors such as optimism, mastery, and self-esteem play a significant role in health behaviours and outcomes (Institute of Medicine, 2008). This review highlighted the psychosocial factors associated with hearing loss, including frustration, anxiety, family involvement, and stigmatisation, all of which influenced their attitudes and experiences. Although only two studies explicitly reported psychosocial factors, all other studies acknowledged them to some degree suggesting the importance of them (Heffernan, 2016; Barlow, 2007). The literature identified the negative emotions which are linked with hearing loss, the impact it has on their personal and social life as well as the underlying stigma.

Inclusion of psychosocial aspects in healthcare provision have been extensively researched with other health conditions, such as vision loss and mental illness (Wu, 2022; Demmin and Silverstein, 2020). Previous literature has established that addressing psychosocial aspects improves health outcomes, enhances mental and emotional well-being, and promotes self-efficacy and motivation (Khorrami-Nejad et al., 2016; Brunes et al., 2019). Although this list of benefits does not cover the

full scope of research in the field, it aligns closely with the findings of this review. Low vision where intervention beyond spectacles is required (such as glaucoma or legal blindness) is linked with depression and anxiety (Demmin and Silverstein, 2020). Similarly, mental health disorders are strongly associated with elevated stress levels, low self-esteem and isolation (Holman, 2023; Cacioppo & Cacioppo, 2018). Addressing these psychosocial factors is important in ensuring the well being of the individuals suffering from any mental health issues (Carmen et al., 2024). All these aspects further emphasise the necessity of integrating psychosocial care into healthcare practices or through offering additional services. For example, vision rehabilitation has been identified as a necessity where clinical services are combined with counselling, orientation and mobility and training on improving quality of life (D'Amanda et al., 2020). The need for similar hearing rehabilitation services was established through the literature review. Ignoring these psychosocial factors in dealing with hearing loss can result in dissatisfaction with the services and possible avoidance of further uptake of hearing services.

2.6.2.2 Clinical complexities and time constraints

Although the benefits of a holistic approach to healthcare requires clinicians to consider not only the physical aspects of illness but also psychological, social, and spiritual factors, incorporating these aspects come with its challenges (Huljev & Pandak, 2016). Firstly, time constraints and high patient load may contribute to clinicians being unable to address the psychosocial factors (Joseph-Williams et al., 2014). There is an emphasis on focusing the clinic time on the physical symptoms and medical diagnosis to ensure medical accuracy (Wieczorkowska, 2024). Therefore, most clinicians direct their appointment times towards the medical symptoms and treatment. There is a longstanding debate between educationalists and scholars regarding the best approach in healthcare. Despite the research advocating incorporating a psychosocial approach, training and education for healthcare emphasises the medical approach (Quintero, 2014). However, there has been a shift in the NHS to promote psychosocial care by addressing social determinants of health and promoting holistic,

patient-centred services (Gibbons, 2024). The British Academy of Audiology's Curriculum Guidance Document for Audiologists emphasises the importance of incorporating psychosocial elements into the curriculum, suggesting that current training may not uniformly address these critical aspects (BAA, 2023).

Following on from the above point, this review found that people were less satisfied with the NHS hearing service provision. NHS patients reported lack of personalised care from their audiologists compared to those in receipt of private healthcare (e.g., in the USA). In the U.S., concerns focused more on the cost of hearing aids rather than on the expertise of hearing healthcare professionals (Heffernan, 2016). One possible explanation for this difference can be that private healthcare providers may experience less time pressure or lower patient loads compared to NHS. Additionally, private clinicians may offer more tailored care and a softer approach, partly because securing sales may be one of their goals.

2.6.2.3 Stigma as a barrier to accessing hearing services

The literature showed that people were reluctant to access hearing services as they did not want to wear hearing aids. Due to the stigma related to hearing loss, when seeing a clinician, some individuals preferred to focus solely on physical symptoms, making it difficult for clinicians to address the psychosocial aspects effectively (Ocloo et al., 2021). This suggests that delving into psychosocial factors related to a hearing loss maybe a sensitive issue which needs to be approached with caution. Even with clinicians employing a sensitive approach, disclosure of psychosocial impacts remains contingent on the individual's willingness to share. To address this issue, training and awareness is required for both parties that allows these difficult conversations to be approached with sensitivity.

Previous literature identified specialised programs developed to overcome stigma and social barriers to seeking effective healthcare (Cacioppo & Cacioppo, 2018; Livingston et al., 2012). There are

programs that have been reported to improve treatment acceptance and social reintegration, of which both are essential for hearing loss (Livingston et al., 2012). One recommended strategy is utilizing support groups, where individuals can share experiences with those facing similar challenges (Cacioppo & Cacioppo, 2018; Young-Hayman et al., 2016). Another approach is advocating for family support and involvement, particularly in navigating social situations (Thomas et al., 2020; Carmen et al., 2024). There also seems to be limited access to trained counsellors or mental health professionals who could help to improve wellbeing whilst seeking hearing healthcare (Wang et al., 2021). Currently there are no integrated counselling services offered to people in receipt of hearing services and the same seems to be true for vision loss, even though the need for it has been well established (Braakman and Sterkenburg, 2023; Sarabandi et al., 2021).

Stigma of hearing aids

One of the most significant barriers to hearing aid use is the stigma associated with wearing them. There was a sense of embarrassment linked to wearing hearing aids, particularly in social contexts (Barker, 2014; Dawes, 2014; Rolfe, 2016; Gallagher, 2018 and Smith, 2024). Hearing aids, unlike spectacles are still seen as a sign of disability which deters people from adopting them (Nickbakht et al., 2024). The experiences with hearing aids amongst the older and younger people varied.

Literature suggested that the older population found it more difficult to adjust to the hearing devices compared to younger people (Bennion, 2013 and Gallagher, 2018). The studies with younger participants identified hearing aids being stigmatised as a sign of ageing (Barker, 2020; Ritter, 2020 and Barlow, 2007) and the older participants stigmatised hearing aids as a sign of disability (Dawes, 2014; Claesen, 2016; Heffernan, 2016; Rolfe, 2016 and Gallagher, 2018). Comparable to that behaviour, the low vision services were also associated with the stigma of disability (Santos et al., 2019; Pollard et al., 2003). Previous literature reveals similar negative views towards visual assistive devices (e.g. a white cane) as were found for hearing aids (Santos et al., 2019). In both cases people felt that use of these assistive devices meant expression of disability which can lead to facing

discrimination in society (Backman, 2023). The white cane in recent years is being substituted for smart watches (Gamage et al., 2023) whilst there is shift towards transforming hearing aids into multifunctional earpieces (Madara and Bhowmik, 2024). In these instances, the concealment of the health condition is reinforced by the development of devices designed to mask its presence. As a result, the stigma and misconceptions surrounding these sensory impairments remain unchallenged, rather than being actively addressed through societal acceptance.

In summary the impact of hearing loss was noted to be mostly quantified through everyday life interactions with family and social situations. These factors determined how individuals perceived and experienced their hearing issues. Hearing loss is most definitely one of the health concerns which requires addressing psychosocial issues in addition to the medical treatment. Patients are likely to have a more improved clinical experience when their suffering is alleviated by understanding the wider context in which it exists

2.6.3 Strengths & weaknesses of the study

The literature for this review was searched strategically with guidance from two research librarians to ensure all relevant data was identified. However, it cannot be assumed that all literature related to my subject area was identified. The indexing process through which the literature is published is not free from human error. There is a possibility of error when the indexer chooses keywords or certain tags that help identify the articles. A search term may have various words which can be used to describe it and these cannot be exhausted for all the literature around the world. However, to ensure rigour within the capacity of my research and time, I followed a rigorous process by including all possible synonyms, maintained consistency in search strategies across databases and sought advice from experts. Due to financial and time constraints, I was unable to have any articles published in languages other than English translated. To explore the attitudes and experiences of

people belonging to different ethnic backgrounds, it may be beneficial to review literature from within their communities which may be printed in their native languages.

The majority of the literature that was identified was based on participants that were extracted from pre-recorded medical databases and were professionally diagnosed with a hearing loss. This meant that views presented in this review are from people who had some contact either directly or indirectly with hearing services. One study that reported recruiting participants from a non-clinical setting still recruited them from lipreading classes (Smith, 2024). It is likely that those who attended lipreading classes had previously been in contact with hearing services and diagnosed with some form of hearing loss to warrant the need for lipreading. It would be valuable to explore the perspectives of individuals from the general public who, despite recognising their own hearing loss, have not sought hearing services. Investigating the perceptions of those who acknowledge their hearing difficulties but continue their daily lives without seeking healthcare could provide insight into the personal beliefs, reasons, and barriers that hinder access to hearing services. Such an exploration would help identify factors contributing to the underutilisation of hearing healthcare and inform strategies to improve accessibility and engagement.

This literature review was unable to gather any data regarding the ethnic minority groups and their views on hearing loss and hearing services. However, it highlights a few important factors which contribute to the majority white population's attitudes and experiences related to hearing loss. There are themes found in this review which align with previous studies such as the emotions, coping strategies and stigma related to hearing loss/hearing services (Smith, 2024; Holman, 2023; Bennett, 2021). However, my findings go further to explain the reasons why people's attitudes and experiences with hearing loss and hearing services are associated with negativity. Although the previous studies investigated lived experiences of hearing loss and the barriers in the uptake of hearing services, there does not seem to be an explanation given for these. Through this review, the

resulting themes and concepts provide possible reasoning and explanation for the negativity that is fostered within people's attitudes towards hearing loss and their experiences with hearing services. This is valuable in addressing the underlying causes of negative views in order to reshape people's attitudes towards and reduce any barriers in the uptake of hearing services.

2.6.4 Potential implications for practice and policy

The main points that may implicate practice and policies are support from family and the integration of psychosocial factors and counselling to overcome stigma as these play an important role in shaping people's attitudes towards hearing loss and hearing services. In order to gain family support for those experiencing hearing difficulties, the clinicians need to encourage family to attend the audiology appointments. In these clinical sessions, explaining the hearing loss and the possible impact on the individual's life is important in ensuring that the family is also on board. The current practice policies by the British Society of Audiology (UK) do not propose any guidelines for inclusion of family of adult patients (BSA, 2023). There is extensive recognition and implementation of family involvement for paediatric patients with hearing loss. With regards to adults, the NHS launched initiatives where family involvement is encouraged, such as the ReSPECT and Shared Decision Making. However, both the ReSPECT process and shared decision-making (SDM) is quite varying in degrees of adoption and integration in the health services (Chang et al., 2024).

Training in SDM and psychosocial factors

Discussing the psychosocial factors in clinical settings requires knowledge and training that will equip clinicians to explore these with care and sensitivity. Once these can be established, SDM can be implemented more easily. Addressing this training gap is crucial for fostering patient-centred care and ensuring that treatment decisions align with patients' values and preferences. Implementing structured SDM training programs within medical education and continuing professional

development can enhance clinicians' confidence and competence in engaging patients and possibly their family in meaningful decision-making conversations.

Improving Policies

Consistent with previous studies, this review underscores the need to strengthen hearing health practice. Achieving this requires better integration of family perspectives and psychosocial factors into policies and guidelines. Although there are guidelines proposed (as stated above), the policies do not currently facilitate training of clinicians or time in clinics to be able to implement these factors. To enhance patient-centred care, current healthcare policies must prioritise the integration of psychosocial factors and shared decision-making with inclusion of family in clinical practice. Addressing the current gaps in policies require a multi-faceted approach involving education, workforce development, policy reform, and patient engagement.

Raising awareness to reduce stigma

Specific counsellors or audiology clinicians can help reduce the negative stigma regarding hearing loss and hearing aids by:

- Educating patients and families to change perceptions about hearing loss and hearing aids
- Promoting hearing aids and beneficial devices that improve quality of life
- Encouraging the general public towards early intervention through advertising or liaising with primary care clinicians
- Creating supportive communities for hearing aid users where experiences and knowledge can be shared
- Training other healthcare professionals to detect hearing issues and encourage seeking hearing healthcare

Audiologists can help to address the societal perceptions of hearing loss through education and raising awareness (Saunders et al., 2021). However, to enable that type of service to be provided,

there is a need to increase clinical times with patients and reduce the pressure and workload on clinicians which seems to have worsened post COVID period.

2.6.5 Unanswered questions and future research

The main unanswered question was the initial aim of this review; to explore perceptions and experiences of people belonging within the south Asian backgrounds regarding hearing loss and hearing services. No relevant studies were identified that had researched this topic. Therefore, the research question was broadened to all populations which yielded studies mostly conducted on majority white populations. The attitudes and experiences about hearing loss of people who had not contacted the hearing services could not be gathered from this review. The views are only representative of the population who have some knowledge or contact with the hearing services. Although there was some indication of the different experiences amongst younger and older adults, the data did not explicitly distinguish between the populations.

Research gathering views of people belonging to ethnic minority backgrounds is required as it is a field yet to be investigated and is particularly important in a diverse population. Further research could also be conducted on people who have not been in contact with hearing services but acknowledge having a significant hearing loss. A focus of further investigation could be directed towards understanding the difference between the younger and the older generations as their attitudes and experiences may be different. These can then be used to facilitate improved hearing service provision.

Chapter 3 - Methodology

3.1 Introduction

This chapter sets out the rationale for adopting a qualitative methodology, developed in response to the literature review which highlighted the absence of research into South Asian communities' perceptions of hearing loss and hearing services. It also details the specific qualitative methods considered, explains the reasons for the chosen approach, and shows how my epistemological and ontological positioning informed the methodological decisions. In my role as an audiologist, working in a diversely populated NHS Trust, I observed that fewer people from ethnic minority groups, especially the south Asian communities, attended their audiology appointments compared to the majority White people. Stemming from that observation, my study proposed to understand why there may be a disparity in the attendance at the audiology clinic. I aimed to explore the perceptions of people belonging to south Asian groups about hearing loss and hearing services.

3.1.1 Aims and research questions

Aim: To explore perceptions of people from South Asian ethnic minority communities about hearing loss and their views on uptake of hearing services.

Research question: What are the perceptions of people from ethnic minority communities about hearing loss and hearing services?

3.1.2 Objectives

1. To ascertain south Asian peoples' views and perceptions on hearing loss
2. To explore behaviours and attitudes of south Asian groups regarding uptake of hearing services.

This study aims and objectives are to gain a deeper understanding of South Asian communities' perspectives on hearing loss by exploring their views, beliefs, and perceptions of the condition. It further seeks to investigate the behaviours and attitudes of South Asian groups in relation to the uptake of hearing services, not by examining the experiences of those who have engaged with hearing services but by gaining insights from individuals who have not sought help. In particular, the research explores their perceptions and views on uptake of hearing services, and the reasons why they may choose not to pursue available support. By addressing these objectives, the study aims to shed light on the cultural, social, and practical factors that shape both engagement with and avoidance of hearing services within the south Asian communities.

This chapter elucidates the specific qualitative methods which were evaluated, and a rationale is given for the chosen qualitative approach. While deciding on the most appropriate methodological approach, it was important to understand my positionality which I clarify through the epistemological and ontological underpinnings of the research as these shaped and influenced the method chosen (Birks, 2015; Lincoln, 2011).

3.2 My Ontology and Epistemology

Ontology is the belief about reality (Killam, 2013). Different methodologies have different ontological views, whether multiple truths exist or if they exist at all, whether the truth about something is already present, waiting to be discovered or whether the truth is a construction whilst investigating (Al-Saadi, 2014). The philosophy of reality is divided into two broad ontological views, objectivism and subjectivism. Bryman (2004) states that objectivism supports that reality exists objectively and is found externally, without researcher's involvement. Subjectivism, on the other hand advocates construction of reality based on social interactions and perceptions (Saunders et al., 2012). Another way of looking at this divide is that one is physical science (objectivism) and the

other social science (subjectivism). A researcher's ontological beliefs dictate their epistemology because epistemology is the 'nature of knowledge'.

Epistemology defines the relationship between the knower and the known which is dictated by the researchers' ontological beliefs (Krauss, 2005). Ontology and epistemology both are aligned with each other, where objectivist ontology believes that knowledge is discovered whilst subjectivist ontology would suggest that knowledge is created. There is a distinction in attitudes to knowledge between physical sciences and social sciences, where the former agrees with objectivism and latter with subjectivism. There are various terms used for two conflicting epistemological stances which are empiricism/rationalism, realism/relativism, positivism/interpretivism and even objectivism/subjectivism. In these three dyads, the first terms imply that knowledge is pre-existing and the secondary terms suggest that it is created. To explain my epistemological stance, and to maintain consistency the terms objectivism/subjectivism are used in the sections below. Objectivist/subjectivist epistemology aligns with the above explained ontological stance.

This qualitative study where perceptions of south Asian' people were explored, my ontological stance was at the subjectivist spectrum. I was actively involved in the data gathering and analysis and the nature of reality I gathered was a construct of my interaction with my participants. I explored views of ethnic minority people who experienced a different reality (Bulatao, 2004). My participants' outlook on the issue was unique to them and hence ungeneralisable to other disciplines in healthcare or to the majority western populations, however it was their perceived reality, and no less than any other reality perceived by other ethnicities.

My epistemology also agreed with subjectivism, where I believed that knowledge is a construct of perceptions and interpretations. In this qualitative methodology, participants' views and opinions were shaped through my interactions and discussions with them. Their perspectives reflected past

experiences and were influenced by their surrounding circumstances, which they shared with me during questioning. My professional audiology background shaped my understanding of the issue and directed how I approached the study interviews. These pre-existing ideas evolved through exposure to participants' responses, eliciting new themes and concepts, hence the reality and knowledge regarding hearing issues was constructed during the interactions and through the questions posed in the interviews. I explored views of south Asian people who may have experienced a different reality (Bulatao, 2004). My participants' outlook on the issue may be unique to them and hence ungeneralisable to other disciplines in healthcare or to the majority western populations, however it was their perceived reality and no less than any other reality perceived by other ethnicities.

An objectivist stance would have been difficult for this research as I could not have remained detached from the participant's data positioning myself among subjectivist ontological and epistemological position. My previous audiological knowledge was inevitably present in the research process but was explicitly recognised and reflected on rather than bracketed out. As Birks (2015) reports, that it is imperative for the researcher to clarify their prejudices and preconceptions to ensure transparency and make the reader aware of their position. After establishing my ontological and epistemological position, I clarify the research framework called a paradigm, that underpins the methodology chosen for this study.

3.3 My Paradigmatic beliefs

A paradigm is a research culture which provides the researchers' community with a conceptual framework dictating the course of the study (Antwi and Hamza, 2015). It is recommended to identify paradigms suitable to address the research questions as the initial step to form the foundations for

subsequent choice of methodology and method (Mackenzie and Knipe, 2006). I reviewed the most appropriate paradigms for my study and chose one that most befitted my research aim.

Many different paradigms have been formed which evolved over the years creating various paradigmatic controversies (Guba and Lincoln, 2005). The four paradigms widely referred to in social research include positivist, post-positivist, critical theory and interpretivism/constructivism (Guba and Lincoln, 1994; Thornhill, Saunders and Lewis, 2009). The chosen paradigm for my research; Constructivism/Interpretivism is discussed below considering the intent, motivation and the alignment with the current research project (Scotland, 2012).

3.3.1 Constructivism/Interpretivism

Paradigms make sense of the world from the individual's point of view rather than observing human behaviour objectively and trying to deduct cause and effect (Wahyuni, 2012). These paradigms are often used in conjunction due to their closely related beliefs that are based on principles that reality is constructed through interactions with the participants and interpreted by the researcher. The constructivist/interpretivist paradigm (drawn from the social sciences) was most suitable for my research because my subjectivist ontological and epistemological beliefs correspond with constructing a reality based on my interactions with the participants, their perception of reality and interpretation of the data. As Heron and Reason (1997: 3) state, "To experience a world is to participate in it, simultaneously moulding and encountering it". This approach also acknowledged my involvement in the research field and incorporated my previous audiological knowledge and south Asian upbringing. Followers of the constructivist/interpretivist paradigm are critiqued for their inability to criticise their thought process due to being heavily embedded within the study (Schwandt, 1994). However, I aimed to immerse myself in reflexivity journals and integrated reflexive accounts throughout the research process to clarify my positionality in the construction of data.

Constructivist/interpretivist positions have been criticised for lacking reliability and generalisability (Scotland, 2012). However, proponents of this paradigm do not claim generalisability; rather, the focus is on studying a specific phenomenon relevant to the population under investigation (Charmaz, 2016). Reliability is also challenged, as repeating the same research project with a different researcher would likely yield different findings, shaped by their ontological and epistemological positions, which guide subjective interpretations and discourse (Danby & Farrell, 2004). Critics further argue that this paradigm neglects external forces influencing human behaviour (Cohen, Mannion & Morrison, 2007). I disagree with this criticism, as external factors such as age and gender inevitably form part of participants' lived experiences and interpretations, shaping their perceptions of hearing issues. Adopting a constructivist/interpretivist paradigm therefore facilitates an exploration of hearing loss within its social and experiential context, leading to a highly conceptualised, interaction-based study (Hall, Griffiths & McKenna, 2013).

3.3.2 Evaluating other paradigms - Post positivism and Critical theory

This section briefly evaluates post-positivist and critical theory in relation to my study and explains the reasons why they were not chosen. Post-positivism provides flexibility across methodologies and a framework that could be used to address the quantitative and qualitative research objectives. Post-positivists propose investigating subjective responses and reactions against a certain pre-existing theory (Fox, 2008). For example, if the disparity in uptake of hearing services and the reasons for that disparity were already established, post-positivism suggests obtaining subjective views from people about that disparity and the reasons (Crotty, 1998). Despite the fluidity in the subjective responses, post positivists remain steadfast in their belief about the existence of reality (Guba and Lincoln, 1994) which neglects construction or interpretation of knowledge emerging into new reality. In my study, I did not have any established facts on attitudes of people from south Asian

backgrounds about hearing issues and despite having substantial knowledge in the field, I intended to approach the participants with an open mind.

Critical theory paradigm aimed to study society with a critical view to understand and create a new reality (Guba and Lincoln, 1994). This theory assumes conflict between the privileged populations and the common people. It encourages studying the influence of systematic and structural principles put in place by those in power. If this paradigm was chosen for my research, the south Asian groups might be portrayed as the less powerful groups and the policies related to them would need to be critically analysed. Adhering to this paradigm would require the focus of inquiry to shift from researching disparity in the uptake of hearing services to challenging the currently offered hearing services, healthcare and governmental policies and the impact of capitalism on south Asian groups and their lifestyle. This may have been beneficial in understanding the views of these communities and their views on the current hearing healthcare system in place. However, the aim of the study was not proposed as a service evaluation but to extend out to those who had not yet been seen at the hearing services. Specific questions focusing on critically analysing hearing services would have narrowed inquiry and neglected other important issues based on the participant's and researchers' specific beliefs. Therefore, to address the aims of the study, this paradigm was not adopted.

Considering different paradigmatic frameworks and clarifying my ontological and epistemological position allowed me to improve my understanding of the underpinnings of the research methodologies. The constructivist/interpretivist paradigm, along with my subjectivist ontological and epistemological beliefs highlight my position as a researcher for this project. Below, I present the method which were used within the qualitative approach.

3.4 Qualitative Methods - the selected methodology

Qualitative methodology is explored along with the different types of approaches that exist within it to justify the selection of the most appropriate approach to serve the purpose of my study.

Qualitative methods emphasise understanding the reasoning underlying a phenomenon by questioning what, why and how rather than how much or how many (Green and Thorogood, 2018). It proposes a theoretical journey exploring experiences, practices, and human perspectives (Silverman, 2016). Qualitative method was adopted for the exploratory research with the aim of gaining in-depth rich data directly from people belonging to south Asian backgrounds. There are many approaches within qualitative research, used for data collection and analysis, which were evaluated as to their relevance to my research later in this chapter.

The qualitative data was gathered from the field through conducting semi structured interviews, and it emerged from its natural environment where the context of inquiry was also understood, focusing primarily on the process and not just the outcome (Atieno, 2009). In qualitative research, there is no right or wrong data (Walls et al, 2010) therefore the course of the study evolved and changed as it progressed (Denzin and Lincoln, 2008). This meant, responses provided by my participants were all accepted as their perceptions. Questions during the interviews were based around the topic of hearing issues but participants were allowed flexibility to discuss what mattered to them.

The flexibility in gathering qualitative data and the less structured approach requires more time and higher costs which contribute to a smaller sample size. One of the main criticisms of qualitative research by positivist researchers is limited validity and reliability linked to the researcher's subjective involvement and often consider that as contaminating the process. I acknowledge that any influence from my subjective involvement, ethnic background and audiology experience was a strength and contributed to the data collection and the analysis process, and yes, these intervening factors made the study virtually impossible to be replicated and neither did my qualitative study

claim replicability. Although the analysis and findings based on the researcher's intuition and subjective interpretation raised concerns, human behaviour cannot be investigated unless the contextual framework within which it existed is considered (Atieno, 2009). Therefore, researcher involvement to gain detailed understanding of the phenomena was essential. Objective investigations risk losing valuable and meaningful data by imposing standardised scientific approaches and there subjective involvement was accepted as the better approach.

3.4.1 Evaluating the most suitable qualitative methods approach

The most common qualitative research approaches include narrative research, ethnography, phenomenology, and grounded theory, all of which were initially considered for this study. Each approach offers a distinct perspective and frames inquiry from a different standpoint. The data collection strategies and analytical frameworks associated with these approaches were reviewed and evaluated to determine their suitability for addressing the research aim. Table 5 provides an overview of the approaches considered, along with the reasons for not adopting them. Based on this evaluation, grounded theory was identified as the most appropriate qualitative method, and its rationale is presented in the following section.

Table 5 - Evaluating other qualitative approaches and reasons for why they were not adopted

Approach	Main features and use of approach	Reason for not adopting	Key References
Narrative research	Based on analysing people's narratives about a phenomenon. The aim is to capture an individual's, or a group of individuals' lived experiences about a particular event and analyse those stories. One important aspect of this approach is the chronological arrangement of the narrative, which is essential when analysing data to build a story which flows.	The current study aims are to explore hearing loss experiences and life events related to hearing issues. However, these are not limited to narratives but will also include perceptions, beliefs and ideologies embedded within the ethnic minority communities. A strictly narrative approach would not provide the platform to retrieve those factors explicitly from life events or biographical accounts alone. Narrative research risks losing free-flowing data while trying to restrict the questions to only inquire themes which fit the storyline. Data for my research will be gathered on hearing loss and hearing services with the support of additional questions or prompts such as, "Can you tell me more about that?". As interview questions will not be restricted within the narrative of a story, it is not selected for my research.	Clandinin and Connolly, 2004 Ollerenshaw & Creswell, 2002
Ethnography	Ethnography is the study of a particular nation, origin or group of people. This approach originates from anthropologists studying cultures of different tribes in the 19th century. It involves the researcher embedding himself/herself within the lives of these people to understand their integral culture, beliefs, and way of life. A considerable amount of time is required to be spent within the particular group of people under study, observing their day-to-day life and seeing their world from a native perspective. Ethnography recognises that research data is constructed with the presence of the ethnographer's own experience rather than just being a descriptive process. Ethnography claims a naturalist	Understanding the presence and effect of a hearing loss in the day-to-day life of people from ethnic minority groups would have provided rich data. This would only be possible if specifically studying the Deaf ethnic minority population. Observing hearing loss would prove challenging due to its invisible nature causing difficulty in collecting relevant data. It also requires to be embedded within the lives of a small sample for an extended period of time which is impractical for my research. Ethnography does not aim to achieve conclusive findings and hence lacks in any contribution to policy making and clinical practice. The current research intends to obtain data that may influence the offered audiology services as well as the hearing help-	Hammersley and Atkinson, 2007 Malonwski, 1922 Savage, 2000 Denscombe, 2014 Bloor and Wood, 2006

	position where the researcher observes participants in their natural environment with or without awareness of the researcher's presence	seeking behaviour of people from ethnic minority groups. Studying the specific phenomena of hearing services needs focused interaction and questioning which would not be achieved through ethnography.	
Phenomenology	Phenomenology is concerned with studying a phenomenon that arises from the participant's experiences in life. Two main types of phenomenology present contradictory views where Husserl advocates intentionality which is free from the interpretation and suggests focusing on the description of natural attitudes. Conversely, Heidegger adopts interpretive phenomenology and is interested in the 'theory of being' and believes that prior knowledge influences how a phenomenon is experienced. .	In the current study, participant's experiences with their hearing issues will be enquired into, extending further towards exploring their views on hearing services which are not based on their experiences. An aspect of phenomenology, relatable to my research, is the researcher's positionality. Husserl proposes bracketing and excluding the researcher's preconceptions out of the research. However, Heidegger argues that the researcher's knowledge influences the study and should be incorporated. As an audiologist, bracketing myself out is not warranted for this study, so including my previous knowledge concurs with interpretive phenomenology. Phenomenology emphasises investigating lived experiences of people and learning from those. However, there has been apprehension from clinicians as some questions have been raised as to how much can clinical practice be adapted based on peoples' lived experiences (Neubaur, 2019). Although phenomenology was a strong contender for the qualitative part of my study the main difference is that it only recommends focusing on the lived experiences, unlike grounded theory that incorporates everything as data (perceptions, feelings, observations etc) (Urcia, 2021). Therefore, phenomenology will not be feasible for my research.	Van Manen, 2016; Moustakas, 1994 Reiners, 2012 Denscombe, 2014 Creswell, 2017 Karin, Nyström and Dahlberg, 2007

3.4.2 Grounded Theory

Ground theory methodology is based on the works of Glaser and Strauss who proposed a methodology to inquire into human interactions and encourage developing relative theories, models or frameworks grounded within the data (Schutz, 1967; Hall et al., 2013). Theories resulting from grounded theory are generally a statement that sum up the findings of the study and make a claim based on the data (Charmaz, 2014). Models and frameworks are generally a tool developed through the findings of the data and can be used in practical settings (such as a clinic) to gain further insight to the subject (Charmaz, 2014). The complex, yet creative nature of this methodology allows researchers to interpret its application through their perceptions (Charmaz and Belgrave, 2007; Strauss and Corbin, 1998). It emphasises studying the processes in social relationships and the underlying meanings, exploring exactly what was happening (Glaser, 1978). Grounded Theory (GT) allowed flexibility and creativity which was required in the current study to approach the subject of hearing loss when interacting with participants belonging to south Asian backgrounds. The analysis process began consecutively with data collection while consistently recognising my own interpretations of it as the researcher.

The original grounded theory evolved, and different versions were developed by its followers. The three main GT approaches (Classical, Straussian and Constructivist) were considered for the qualitative part of the research. Prior to discussing the specific approaches, a brief overview of the origins of this approach is essential to clarify the variations and hence rationalising the most suitable approach for my research. In the mid twentieth century, research culture was dominated by the positivist paradigm where qualitative approaches like were considered lacking in scientific rigour and to some extent anecdotal (Hall et al., 2013). Qualitative research was largely rejected as a scientific methodology due to no statistical validity and reliability. Glaser and Strauss challenged the positivist research approaches and proposed Grounded Theory that extends research strategies from descriptive to a more explanatory phase. Some scholars suggested (Moore, 2009) the need for this

change suggested by Glaser and Strauss was due to their sociological background and interest in nursing education sector. GT was developed to study actions, interactions and self-perception within social contexts of their participants (Charmaz and Belgrave, 2007) which were deemed useful in gaining a deeper understanding of healthcare as my study aimed to do.

3.4.2.1 The Grounded Theory division

What distinguishes Grounded Theory (GT) from other qualitative approaches is its distinctive interplay between data collection and analysis, undertaken simultaneously to generate theory directly grounded in the data. This iterative process requires continual movement between data and interpretation, with concepts, cases, and events compared against one another to refine and strengthen emerging insights (Charmaz, 2011; Glaser, 1992). The outcome may take different forms, ranging from conceptual categories and explanatory frameworks to practical solutions, depending on the researcher's stance. As Charmaz (1990, p.1164) emphasises, a robust theory must explicate phenomena, specify relevant concepts, articulate relationships between them, and provide a framework for prediction. However, GT resists prescriptive boundaries, encouraging researchers to remain open to varied theoretical outcomes that adequately address the research question.

A critical source of contention lies in the divergent interpretations of theory development across GT traditions. Glaser's Classical GT (1978) maintains that theory should *emerge* inductively from data, warning against imposing preconceived structures. Yet, as Bulmer (1979) noted, even induction entails a move from data to empirical generalisation, blurring the line between emergence and interpretation. By contrast, Strauss and Corbin (1998) rejected reliance on induction alone, advocating for a more structured approach that incorporates verification. Later, Charmaz (1994) advanced Constructivist GT, which foregrounds the co-construction of theory through researcher-participant interaction. This stance, however, has been criticised by Glaser, who argued that it undermines GT's scientific credibility by privileging subjectivity (Hall et al., 2013). His response

reaffirmed the primacy of induction, positioning theory as something to be *discovered* in data rather than co-created.

Despite being categorised as a qualitative methodology, GT's founders themselves expressed dissatisfaction with what they saw as the overly descriptive and insufficiently critical nature of qualitative research at the time. Glaser and Strauss (1967) framed GT as a systematic alternative, one that could integrate both qualitative and quantitative strategies to move beyond description towards theoretical explanation. Yet, their initial collaboration eventually fractured, giving rise to competing interpretations: Classical GT, Straussian GT, and later, Constructivist GT. These three dominant approaches are examined in the following sections, with the aim of identifying the most appropriate framework for this study.

3.4.2.2 - Classical Grounded Theory

This is based on Glaser's initial definition of grounded theory which believes in free rein when collecting data and analysing it. He encourages considering everything as data including quantitative, observations, field notes, advertisement and anything else which may be related to the research. According to classical GT "all is data" and should be included to form a comprehensive theory (Glaser, 2001: 145). This is beneficial when considering mixed methods or use of more than one type of data collection. He states that GT is about studying patterns that occur in the data using constant comparison (Walls et al., 2010). He encourages development of new theory which would not be based on any pre-existing theories (Glaser and Strauss, 2017). A complete methodological package is proposed by Glaser which includes systematic data collection, guidance for analysis leading to theory development (Glaser, 2001). Glaser suggests researchers should apply an inductive process of analysing data. He proposes that GT can be used to analyse quantitative and qualitative data combined or distinctly (Glaser, 1998; Glaser, 1999). In my research I obtained qualitative data through interviews and did not require quantitative data to address the research aim. classical GT may have been more feasible to use in a mixed methods study where qualitative and the

quantitative data were both obtained from the same participants (Holton and Walsh, 2016). Classical grounded theory advocates treating “everything as data” and promotes a highly flexible approach (Glaser, 2001). However, for this study, a degree of structure was necessary to ensure that the research remained consistently aligned with the topic of interest. Reliance on broad observations or demographic variables may have added a different line of inquiry and deterred from the focus required to adequately address the research aim. Therefore, classical GT was considered the most appropriate grounded theory approach for this study.

3.4.2.3 Straussian Grounded theory

This approach was developed by two sociologists Anselm Strauss, who originally developed the initial ideas with Glaser and Juliet Corbin in 1990. However, Strauss and Corbin collaborated and diverged from original (classical) grounded theory methodology (Strauss and Corbin, 1990). Straussian grounded theory is based upon a detailed set of instructions which benefit novice researchers in adopting and conducting this type of GT (Strauss and Corbin, 2015). Strauss and Corbin encourage preliminary literature review prior to engaging in the field for data collection as they said “...the researcher does not begin a project with a preconceived theory in mind” but rather “he/she begins with an area of study and allows the theory to emerge from the data” (Strauss & Corbin, 1998: 12). It prescribes a series of objectives to follow while analysing the qualitative data. The first stage of open coding prescribes 5 steps to be followed. The second axial coding has four properties to be followed while the third stage demands inclusion of symbolic interactionism (Blumer, 2004). Symbolic interactionism is a theoretical perspective based on Herbert Blumer’s (1937) ideas about interactions between people according to their perception of the social situations (Denzin, 2004). The last stage is selective coding which is achieved by linking the axial codes and categories together to reach a core category. The core category is selected as one main prominent emergent theme which forms the basis of a theory.

Straussian grounded theory was deemed unsuitable for my research due its overprescribed stages and steps. Navigating through the steps would have lost the free flow of data during collection and analysis. Although it is an easier approach of GT compared to the other two where the researchers are provided with clear instructions, it may in some form be restrictive whilst trying to fit the study process withing the proposed steps. One of the other reasons for declining Straussian GT was my subjective involvement within the study. My involvement in the research required acknowledgment and transparency, and the structured approach within Straussian GT partly eliminates the role of the researcher and therefore it was deemed not suitable for my study.

3.4.2.4 - Constructivist grounded theory

Constructivist grounded theory (CGT) was introduced by Charmaz (2000). She proposed a methodological approach which adopts aspects from classical and Straussian GT with the aim to overcome the criticisms faced by the former two approaches. CGT positions the researcher as the author and supposes that data is constructed rather than deduced or induced from the data. It encourages acknowledgement and inclusion of the researcher's presence and interaction with the participant to form part of the data analysis. This point aligns with my subjectivist ontological and epistemological stance as stated previously.

CGT adopts a similar data collection and analysis process to Glaser and Strauss's classical GT, with concepts, categories and core categories emerging through data leading to conceptualisation and theory development. However, one of the main factors which distinguishes CGT from other approaches is the role of the researcher. Charmaz (2014) advocates the incorporation of the researcher's subjectivity throughout the study and the data analysis. She endorses the researcher's imagination and creativity while engaging with the data and believed that to be an integral part of the emerging themes (Charmaz, 2014).

However, CGT is criticised by Glaser (2002) for its subjectivity and the possibility of being too specific to the researcher's personal choices. Even though subjectivity is based on an individual's views it does not necessarily stem solely from personal judgments (Charmaz, 2014). According to Marx (1852: 5) "Men make their own history, but they do not make it just as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past". This quotation suggests how other aspects contribute to the formation of perceptions and the views each individual may hold. The theory emergence in CGT is processual rather than content-based, which means that the findings continue to develop throughout the data collection and the analysis process.

3.4.2.5 Evaluating the grounded theory approaches

Grounded theory has been developed by a number of scholars with a difference of opinion on how it should be conducted. Glaser proposes the use of GT but does not give directions for data collection procedure (Clarke and Friesen, 2014). Alternatively, Strauss and Corbin do just that by adopting a complex prescriptive approach. They give researchers clear guidance and directions to be followed to achieve theory generation. However, it was this explicit step by step guide which Glaser disputes and proclaims Straussian GT to be a completely different methodology rather than a form of GT. He argues that giving clear directions means following a pre-determined path risking loss of rich meaningful data which may emerge from unplanned circumstances within the research field (Glaser, 1998). He advocates a less formalised version of GT while explicitly criticising Straussian grounded theory:

"Strauss' method of labelling and then grouping is totally unnecessary, laborious and is a waste of time. Using constant comparison method gets the analyst to the desired conceptual power quickly with ease and joy. Categories emerge upon comparison and properties emerge upon more comparison. And that is all there is to it." (Glaser, 1992: 43).

However, Glaser's lack of instructions and vagueness of data analysis lacks clarity and can be too complex for a novice researcher like me. Also considering the specific study subject of hearing loss required some form of previous knowledge to be able to investigate it to which Glaser objects. In my case, my professional background and knowledge in the field is pre-existing and so my position did not agree with Glaser's propositions. Conversely, the strictly structured framework in Straussian GT would have restricted the data collection to certain themes around hearing loss and hearing services without the flexibility of exploration of ideas which emerge not only through data but the research process as a whole. Concepts other than those directly related to hearing loss such as family and cultural values may be missed if the enquiry followed a strict strategy.

Despite the differences between the two sociologists (Glaser and Strauss), their basic fundamentals and the ontological position remains consistent (Charmaz, 2000; Denzin and Lincoln, 2000; Charmaz, 2011). Both believed in the existence of an objective reality but suggested different paths to be adopted to achieve its discovery. However, the recent versions of Straussian GT seems to have reduced the emphasis on the systematic procedures and endorse a more reflexive approach where the researcher is consciously reflexive of their interactions with the participants (Charmaz, 2011). Charmaz (2006) also concurs with researcher reflexivity and encourages transparency in how the researcher perceives their reality as part of the research project. CGT emphasises the researcher's direct involvement in constructing and interpreting data and does not assume that data appears itself.

3.4.2.6 My Position within Grounded Theory

I consider myself a co-constructor of the data rather than an objective observer (Mills, 2006). My actions and decisions during the research process are embedded within the data collection and analysis which were ineliminable due to my audiology and South Asian ethnic background. The way any researcher approaches a phenomenon in CGT is subjective and influenced by their perspectives.

My internalised professional knowledge, perspectives and experiences influenced my actions and guided the enquiry in the field. My ethnic background and the understanding of cultural norms of south Asian community contributed to how I interpreted responses of any south Asian participants. For example, when speaking about family, I did not need to go into the details as I understood the family values due to my existing knowledge of them. However, it is acknowledged that any pre-existing views were subject to change through interaction with the participants and the data analysis. I also recognised the gradual transition from being an audiologist to being a researcher over the period of three years whilst the study was being conducted.

A major criticism of CGT is the fragmentation of the participant's story through the perspectives of the researcher's interpretations (Glaser, 2007). This may have risked losing the participants' voice or feelings, as the data was a formation of the participant's words through the researcher's understanding. However, Charmaz (2014) proposes to address the over-involvement of the researcher's personal views by constant reflexivity and explicit acknowledgement. I wrote memos and reflexive journals which helped to reflect on my thoughts and perceptions of the participant's words. Another aspect which raised concerns was the subjectivity of the researcher which lead to a paucity of generalisation to broader societal challenges (Timonen, 2018) such as those faced by other ethnic groups which do not access hearing services. However, CGT in no way suggests generalisation and accepts the specificity of the researcher and the studied participants, which in my case came from people belonging to south Asian backgrounds.

Despite all the differences in GT approaches, all are consistent on emphasising inquiry within the social context aiming for development of a theory. Charmaz (2014) states that all adaptations of GT are part of the same constellation and they do not claim to find the truth but conceptualise the phenomenon under investigation.

3.5 My critical reflexivity

Critical reflexivity can be defined as a person's ability to self-evaluate in a situation while critically reflecting on their cognitive and behavioural pattern during their active involvement in the research (Dowling, 2006; Morse, 1991). Critical reflexivity allows "basic assumptions, discourse, and practices used in describing reality" to be explicated (Pollner, 1991, p. 370). It is a technique which has gained popularity in the last two decades, encouraging researchers to shift from the idea of absolute objectivity to recognising the continuous social activity in research by reflexivity (Cunliffe, 2003). Conducting CGT demands engaging in reflexivity and prioritising the researcher's own analytic voice (Morse, 2016). Charmaz (2014) suggests the way to engage in critical reflexivity is through memo writing and keeping reflexive journals throughout the research and the data analysis process. I have included my critical reflections in green font text boxes and memos in the appendices. The reflexive journals provide a written account of my inferences and explaining how they guided the data analysis. Critical reflexivity promoted thinking critically about my interpretations and actions, which shaped the representations of participant's words (Gentles et al., 2014). Critics of reflexivity (Chesney, 2001; Cutcliffe, 2003) advocate cautiously balancing the inclusion of researcher interpretations with participants' voice. They suggest that the researcher must not be exhaustive of their personal views and remain attentive to participant's perceptions.

My reflexivity journals critically reflect on some of the challenges I experienced, trying to remain open to new concepts whilst clarifying my positionality as a researcher. Some reflections were based on interactions with the participants and how I interpreted their views. Through reflexivity, I constantly acknowledged my conscious involvement and impact on the research (Ghaye, 2005; Cooke and Matarasso, 2005).

In order to maintain consistency, I aim to follow a specific model of reflexivity after analysing a few different ones. One of the models is proposed by Borton (1970) who provides a framework for

reflective writing is based on three simple stages: What? So What? and Now What?. He recommends using 'What?' to cover the grounds for explaining the overall situation. Second stage, 'So What?' prompts the reflector to think of the consequences and the impact while the last stage 'Now What?' should be used to examine further decision making. Borton's simple approach was deemed the most appropriate as it allows flexibility in expressing my reflexive thoughts. Although Borton's model is for reflective writing and not reflexivity, it seemed appropriate for my reflexivity due its broad prompts. I used these prompts to be reflexive on my attitudes and interpretations of the participants' responses. Critical reflexivity along with memo were recorded to ensure complete transparency of the data collection and analysis process as suggested by Charmaz who considered these to be essential part of CGT approach (Charmaz, 2014).

3.6 Summary

When clarifying my positionality for this research, I agreed with subjectivism ontological and epistemological stance which emphasises that reality is constructed from interactions and knowledge is created as a result of those interactions. My chosen paradigm which underpinned my study was constructivist/interpretivist. Both my positionality and paradigmatic beliefs align with my chosen qualitative methodology. Different qualitative approaches to conducting qualitative study have been evaluated and constructivist grounded theory emerged as the most appropriate to address the aims of this study.

Chapter 4 – The Research Process and the Methods Used

4.1 Introduction

This chapter outlines the data collection methods and tools employed in this qualitative study. It describes the recruitment process and interview structure, and considers ethical governance, including the process of obtaining ethics approval. The chapter also details the information provided to participants, the procedures for obtaining consent, and the measures taken to ensure secure handling and storage of data.

4.2 Qualitative Data Collection

This section gives an overview of the range of methods and techniques used to gather qualitative data. The study aimed to address the research question; ‘What are the perceptions of people from south Asian communities about hearing loss and hearing services?’ through interviewing people.

4.2.1 Recruitment and Sampling of participants

In my professional practice within an ethnically diverse area, I observed a noticeable disparity in the number of individuals from South Asian backgrounds attending the audiology clinic. This prompted me to explore the reasons why some people may not access hearing services. I therefore planned to interview individuals from the general public who had not sought hearing care, in order to gain insight into their perceptions of hearing loss, rather than focusing on those already referred but who did not attend. Recruiting from the general public was essential to capture broader understandings of what hearing loss means for people from South Asian communities. Relying solely on existing clinic databases would have restricted the study to those who had already sought medical advice or referral, narrowing the research question to issues of non-attendance at appointments rather than

providing a more comprehensive understanding of hearing loss within everyday life. Therefore, the aim was to recruit participants belonging to any south Asian communities who recognised having a hearing issue and showed interest in the study. Recruitment of participants was initiated by using promotional material in the form of posters placed in community centres, faith centres and local supermarkets in twelve ethnically diverse suburbs in Birmingham. The study was advertised in 35 different venues to attract the attention of the general public from different south Asian ethnic groups. A simple version of the inclusion criteria was listed on the poster (see Appendix 2) for potential participants to consider. No contact or response was received through this type of promotional advertising in the whole month following the advertising of the study. There was poor uptake of the study, and no progress was made in recruiting any participants. Consequently, the recruitment strategies were altered in order to attract potential participants. It may be a possibility that people with hearing issues may not be seeing these posters as hearing impairment is associated with social isolation, shyness and fear of public places (MickKawachi and Lin, 2014). This probably prevented people who suffer from a hearing issue, from visiting congregational places (such as community centres, supermarkets and faith centres) hence reducing the chances of potential participants seeing the promotional material in public places.

4.2.1.1 Inclusion criteria for Interviews

The extensive inclusion and exclusion criteria, listed below, was created to be reviewed once any interested participants contacted me for participation.

Inclusion criteria-

- People who self-designated themselves as belonging to south Asian ethnic minority backgrounds using the Personal Demographic Services Ethnicity codes.
- People who experience some degree of hearing loss in one or both ears.
- Anyone between the age of 18 and above living in the UK.

Exclusion criteria-

- In attendance of regular audiology appointments.
- Anyone who is due to have or has had any sort of ear operation in the past 12 months.
- An experienced hearing aid user.
- Anybody who does not have the ability to attend the interview.
- Users of British sign language or any other sign language.
- Anyone who does not share a common language with the researcher (English, Urdu, Punjabi, Pothwari and Hindi).
- Recent Immigrants who have been in the UK for less than 6 years. Immigrants are able to become UK citizens who have lived in the UK for the required 5 years with one additional year as a settled resident (Blinder, 2016).

4.2.2 Recruitment of participants from planned to actual recruitment

Out of necessity, recruitment for this study evolved into a more interpersonal, community-based approach that relied heavily on word-of-mouth, face-to-face engagement, and familiarisation within local networks (Matthews et al., 2012). I visited South Asian community and wellbeing centres, where I delivered short introductory talks to present my study to attendees. These sessions acted both as an advertisement for the research and an opportunity for potential participants to meet me in person before deciding to take part. Such interactions proved crucial, as mistrust of researchers has often been cited as a reason for the underrepresentation of ethnic minority groups in research (George, Duran and Norris, 2014). By creating a space for dialogue, participants, their relatives, and friends were able to ask questions about hearing issues and gain clarity about the project.

The managers of these venues may also have perceived me as an insider due to our shared native languages, which facilitated trust and rapport. This underscores the importance of the researcher's ethnicity when conducting research in ethnic minority communities. Initial participants were recruited through these presentations, and subsequent participants were identified through snowball sampling, beginning with this first purposeful sample.

4.2.3 Sampling strategy

The initial sampling method was through purposeful sampling where subjects with certain characteristics were approached and chosen to fulfil the purpose of the study (Patton, 2015). I adopted purposeful sampling by selecting people from south Asian backgrounds who acknowledged having some degree of hearing issue. The purposeful sampling was identified as quite effective, particularly for those hard to reach populations, such as south Asian ethnic minority communities (Matthews *et al.*, 2012). Purposeful sampling later developed into snowball sampling, which yielded recruitment of further participants (Glaser, 1999). Even though this method has been criticised as minimising the diversity of data likely to emerge from homogenous communities (Johnson, 2015), it served the purpose for this study recruiting only those who met the inclusion criteria (Mason, 2002).

It has been observed that the use of incentives can attract participants with a range of personality types, thereby enhancing sample diversity (Sharp *et al.*, 2006). In this study, participants were offered a hearing test upon completion of the interview. This served a dual purpose. Firstly, it provided a non-traditional, informal route to hearing assessment, which aligned with the study's aim of engaging individuals who had not previously accessed audiology services. The hearing test may have been perceived as a low-barrier opportunity for health screening, thereby facilitating recruitment from typically underserved populations. Secondly, the incentive was intended as a gesture of appreciation for participants' time and contribution. As hearing tests are commonly

available at no cost through many high street opticians and pharmacies in the UK, the offer held minimal monetary value but was considered ethically appropriate and contextually relevant to the study.

4.2.4 Post Recruitment Process

Potential participants who expressed interest by contacting me via phone or email were screened according to the inclusion criteria and those who qualified were sent an information pack via post or a digital copy via email which included:

- A letter of invitation with a response slip (see Appendix 3)
- A participant information sheet (see appendix 4)
- Consent form (which was discussed and signed before beginning the interview), (see appendix 5)
- A stamped self-addressed envelope
- Professional contact details about the researcher

The potential participants were given fourteen days from the point when they received the information pack to send the response slip back or reply via text showing interest. Potential participants who responded and wished to know more prior to agreeing to participate provided a contact number and were called by telephone to discuss the project and to agree on an interview time and venue. Meeting rooms at what were considered safe sites, including community centres, health centres, faith centres or Birmingham City University campuses were booked according to participants' preference. They were also given a choice of language they preferred for the interview as I speak five languages other than English (Urdu, Punjabi, Pothwari and Hindi).

Participants who showed interest in taking part were contacted via a text message. I used a separate mobile phone which was exclusively used for the research. On receiving a response, potential

participants were given the opportunity to ask questions and discuss the research. If they then agreed to participate, a date and preferred venue of the interview was discussed. Participants were given a choice of attending any of the Birmingham City University campuses or otherwise to state a place of their preference. A few of the participants agreed to meet at the University, while some were interviewed in meeting rooms at the community centres where I delivered my initial talks. These meeting rooms were offered to me free of charge as their managers considered my research would help raise awareness about hearing healthcare among south Asian communities.

A total of 19 participants were recruited for interviewing over the period of one year commencing in March 2018. Initially, 30 were proposed for whom ethical approval was obtained, as an arbitrary number which is suggested to be appropriate for qualitative research by previous literature (Creswell and Poth, 2017). However, recruitment stopped at 19 as data received from these participants was considered sufficient to answer the research question.

4.2.5 Participant profiles

The sample of 19 participants included thirteen females and six males, ages ranging between 26 and 78 years, with an average age of 46. Although all participants identified as being from South Asian backgrounds, it is important to acknowledge that South Asia comprises multiple countries, each with its own distinct cultural traditions and values. Within these countries, further diversity exists across regions, languages, and communities. However, when discussing hearing loss, such differences were not strongly evident; rather, participants tended to express broadly shared cultural perspectives. Given that this study focused on a healthcare issue, some of the more nuanced cultural distinctions may not have been as visible or relevant in the data. For this reason, the analysis emphasises the commonalities across South Asian groups, while recognising that these generalisations cannot fully capture the complexity of intra-regional cultural variation. For the purpose of transparency, all participant profiles have been presented in table 6.

Table 6 - Profiles of the research participants

Participant Number	Age	Gender	Ethnicity
Participant 1	26	Male	South Asian
Participant 2	34	Female	South Asian
Participant 3	36	Female	South Asian
Participant 4	45	Female	South Asian
Participant 5	36	Female	South Asian
Participant 6	78	Female	South Asian
Participant 7	53	Female	South Asian
Participant 8	48	Female	South Asian
Participant 9	49	Female	South Asian
Participant 10	32	Male	South Asian
Participant 11	65	Male	South Asian
Participant 12	67	Female	South Asian
Participant 13	42	Male	South Asian
Participant 14	32	Female	South Asian
Participant 15	63	Female	South Asian
Participant 16	44	Male	South Asian
Participant 17	35	Female	South Asian
Participant 18	45	Male	South Asian
Participant 19	36	Female	South Asian

The different colours represent the cohort of participants that were interviewed before taking a pause to analyse the transcripts.

The recruitment of participants took place in tranches where the first five were interviewed and their transcripts were analysed which directed some changes in the subsequent interviews. The questions were adapted after each group, covering topics that were mentioned by previous participants. The strategy to recruit participants in clusters was to distinguish the participants who were recruited and interviewed around the same time and after each set there was a 2-4 week gap.

This gap increased to 3 months after 17 participants were interviewed. The pause between interviews provided time to analyse the interview data in order to extract the emerging themes that guided further data collection. This was in line with theoretical sampling recommended when conducting constructivist grounded theory (Charmaz, 2014). The interview questions were altered according to the developing codes (see appendix 6 for all versions of the interview questions).

4.2.6 Theoretical Sampling

Theoretical sampling is one of the key aspects of constructivist grounded theory (Strauss, 1978; Charmaz, 2014 and Glaser, 1998). It is a type of sampling method based on the emerging themes which guide further data collection and recruitment of participants (Charmaz, 2014; Strauss and Corbin, 2014). After the initial set of five interviews, the data was analysed, resulting in a few themes which included 'stigma of becoming old', 'being judged' and '(hearing) not priority yet' emerged repetitively. Such themes guided additional participant recruitment where people older than 45 were sought by word of mouth through snowball sampling for participation to explore their views of hearing impairment. Charmaz (2014) suggested that theoretical sampling begins after the first set of data is analysed and further data is gathered based around the main emerging tentative concepts. Constant comparison was conducted, comparing new data with initially obtained data (Charmaz, 2014; Strauss and Corbin, 1998). For subsequent recruitments, a similar pattern was followed where the developing themes guided my interview questions and participant recruitment.

For the second set, all four participants recruited happened to be women. However, to ensure diversity in my participant population, after the ninth participant, I focused on recruiting more males through further talks with groups and word of mouth, where I especially encouraged more males to participate in my study. At that stage, after interviewing women, some social and cultural aspects emerged as contributing to how hearing loss was perceived by the south Asian community. As the roles of men and women differ in that ethnic minority group, I felt it was important to collect more

data from male participants. However, it seemed more challenging to deliver talks to mixed or more male dominant events, especially being a female researcher. Most of the community events I was allowed to present at were attended by predominantly female members. This could have been due to men being in employment and being unable to attend these events or my tendency as a female researcher to attract more female related talks such as 'parents coffee mornings' at a local school which had more mothers in attendance. To work around the challenges in theoretical sampling, I urged the female attendees to bring forth any males who may fit my study inclusion criteria. This strategy proved beneficial and subsequently some men were recruited. Although the aim was to interview more men, I did not restrict my sampling to males only and continued to recruit females who showed interest in my study. As more data was available and the data analysis began to take shape, the leads from those interviews were followed for further data collection whilst keeping an open mind to other new concepts (Butler et al., 2018). Charmaz (2014) recognises that once the sampling strategy is adapted around the study themes, the next step is to adapt the interview questions in order to focus on the identified themes. My study themes became more apparent after the analysis of thirteen interview transcripts. Interviews with participants 14-16 explored the identified themes by asking questions directed towards those relevant themes. Theoretical sampling continued until the resultant data seemed robust enough to show that all properties of the categories were examined (Charmaz, 2014). In my study, theoretical sampling continued until no new themes seemed to have emerged (after the 16th interview), however, a further three people were recruited to ensure that all variations of the developed themes were saturated, making a total number of 19 participants.

Two other people of South Asian ethnicity who had contacted me after seeing the poster did not meet the inclusion criteria, therefore were not recruited. Three South Asian men agreed to participate but could not commit to a time for the interview. Another four people were referred by their family or friends but did not reply after being contacted, their ethnicity was not established.

One participant from Bangladeshi decent, who met the inclusion criteria over text messages, attended the interview with a relative who facilitated translating. As one of the inclusion criteria for my study was someone who shared the same language with me, to avoid any information being lost through translation and to maintain equity among all participants, his transcript was not included in the data analysis (Filep, 2009). For the purpose of my study, it was important to ensure that every participant had a chance of discussing their hearing issue in their own words. This particular participant made an effort to attend the interview at a chosen meeting venue and time and therefore out of courtesy I went ahead with the interview and the hearing test following the interview.

According to constructivist grounded theory theoretical sampling should be pursued until the emerging themes become repetitive and no new data is generated at which point data saturation can be assumed (Charmaz, 2014; Strauss and Corbin, 1998). Although it must be acknowledged that full saturation can never be claimed when obtaining qualitative data as each human participant has a unique story to tell. The emerging data seemed to reach some saturation after 16 participants. However, 3 more participants were recruited to collect additional evidence for the identified themes (Saunders et al., 2018). Data saturation was assumed at the point when similar themes and codes were repeatedly identified from analysing the interview transcripts (Guest et al. 2006).

4.2.7 Interviews

Semi-structured interviews were chosen as the data collection tool for gaining in-depth understanding of participants' views on hearing issues and hearing services. These types of interviews were considered the most appropriate as they allowed for exploring the phenomena whilst remaining within the context of the study aims. The semi-structured approach provided freedom to both the researcher and the interviewee to have a free-flowing discussion and a conversation with the purpose of sharing experiences and reflections (Dyson and Brown, 2006).

Charmaz (2014) compared semi-structured interviews with intensive interviews where both opened an interactional space for the participant to relay their experiences. A structured approach could have inhibited flexibility in participant's responses and risk losing rich data (Birks and Mills, 2011).

Remaining true to constructivist grounded theory open-ended questions were asked (Charmaz, 2014). These open-ended questions allow the interviewees to answer in detail (Doody and Noonan, 2013). The structure of the interview was as such that first open-ended questions were asked, leading to intermediate and finally ending questions. Example of the type of questions asked were:

Open question- "So tell me about your hearing?"

Intermediate question- "What are your views on...?"

Ending question- "How do you think this impacts...?"

Although the questions were written prior to the interviews, they were only used as a guide while the course of the conversation was steered by what seemed significant to the participants during the interviews (Corbin and Morse, 2003). I do acknowledge that with experience the interview strategy may have improved, however, to practise my interviewing style and layout, a pilot interview was conducted.

4.2.7.1 Pilot Interview

A pilot interview was conducted with one of my supervisors to assess my interviewing style and the relationship with the participant. It was beneficial in practising the tone and the pace of the questioning while gently guiding the conversation towards the context of the research (Charmaz, 2014). The logistics of the interview room were also analysed, where to sit the participant so the dialogue was exchanged face to face. There was a conscious effort made to ensure both myself and the participant sat at the same level, opposite each other, maintaining eye contact, following visual cues and observing participant behaviour throughout. In the presence of a desk, the distance between myself and the participant was kept moderate and not too far or having to raise my voice

across the table. The idea was to create a comfortable environment in which the participant could share their views.

My clinical background allowed me to utilise my communication skills during the interviews, especially with those experiencing hearing difficulties. Working as an audiologist, and seeing many patients gave me the confidence to interview participants effectively. The appearance and the dress of the researcher was also an important aspect which was considered carefully in my pilot interview (Luker, 2008). I insured that I dressed in neutral colours and semi formal clothes as I felt it was important for the participants to view me as an informal interviewer rather than someone in a business dress who may appear intimidating. Interview etiquettes and techniques proposed by Charmaz (2014) were practised. Charmaz (2014) suggested to keep interviews conversational and informal whilst gently guiding the course. Feedback from my supervisors helped to reflect on my interviewing skills and improve on some aspects. The overall feedback from the supervisors was quite positive with a few improvements suggested such as, to allow a longer pause for the participant to continue with their responses before prompting further.

4.2.7.2 The structure of the interview

A verbal introduction to the study aims and the interview procedure was given at the beginning of the interview, which initiated an informal friendly conversation with the participant. They were given an opportunity to ask questions and were made to feel at ease by statements such as “there are no right or wrong answers...”. Charmaz (2014) advocates this type of introductory statement to avoid any awkward moments. The information sheet was also given to each participant, allowing plenty of time to read through it again if they desired. It was clarified that the interview could be stopped at any point if the participant wanted, they were welcomed to take breaks if required and they could withdraw any data provided prior to data analysis.

A consent form was signed prior to beginning the interview. Once all queries were addressed, I also gained verbal permission to begin the interview and the recording. During the interviews, I strived to limit the power imbalance which may be existent between the researcher and the participant, especially in my situation, also being a professional audiologist who the participants were aware of. In order to generate meaningful, naturally emerging data, I ensured attentive listening, nodding and encouraging participants to give more detail about areas that mattered to them (Charmaz, 2014). This measure was to build a trusting relationship where mutuality and reciprocity were the basis of the interview. Engaging in small talk also helped to normalise the conversation where questions such as “did you get here ok?”, “I hope you found the place ok” and stating something about myself that helped to establish an informal tone.

After the interview, participants were asked about being contacted to receive a short report of the study findings once it was completed to which everyone agreed. Once the report is compiled, the participants will be contacted via their phone numbers to ask for their preferred way of receiving the report. The participants at that time had the choice of providing their house addresses or email addresses for the report to be sent to. Those who chose to provide their email addresses were not asked for their house address to maximise confidentiality and ethical issues regarding storage of the identifiable data over the years until the report was prepared. Detailed ethical considerations related to the interviews, participants, safety, data protection and security are all discussed below (see section 4.3.8). At the end, all participants were offered a hearing test to recompense for their time and effort. All, except one, willingly accepted the hearing test. The one who had declined the hearing test was due to time constraints as he had to rush to leave. A separate consent form was signed for the hearing test before commencing it.

All interviews except for three participants, were conducted in English. Two were conducted in Pothwari and one in Urdu. The interview recordings were translated directly from the participant’s recordings into English transcripts. All translations were done solely by myself as I fully understood

the context in which the responses were given, avoiding any translation errors. I was aware of any cultural nuances and terms used during the interviews without the need for them to explain the context in which they were being used. For example, the term 'kohi nae' has a literal translation in English as 'no one'. However, used in the context of my interviews participants meant 'no worry' or 'it's fine' when speaking about their hearing issues.

4.2.7.3 Hearing Test

Ethical approval was received from BCU ethics committee to offer a hearing test to the participants at the end of their interviews. This section explains the hearing test method which was conducted on my participants. The procedure to determine the degree and type of hearing impairment is known as 'Pure Tone Audiometry' (PTA) (BSA, 2011). This was conducted using a calibrated portable device (Garson-Stadler GSI 61) called the audiometer, designed to produce sinusoidal pure tones across different frequencies with specific intensities. The range of frequencies tested in standard audiometric testing start from 250Hz (Hertz) up to 8KHz (KiloHertz). The quietest sounds heard by the subjects were established and plotted as thresholds. Each ear was tested separately, so that ear specific thresholds were obtained. Participants responded to each sound heard by pressing a button.

There are two types of sound transducers used which test different parts of the ear. Using headphones tests the entire auditory pathway from the outer ear up to the auditory nerve, which is called air conduction audiometry as sound travels through air. Another transducer called the bone conductor is placed on the mastoid bone behind the ear to test the auditory pathway bypassing the outer and the middle ear, testing directly from the inner ear onwards where sound is propagated through vibrations of the skull directly into the cochlea (Bahmad *et al.*, 2019). Establishing both the air and bone conduction thresholds allows distinguishing between a conductive or sensorineural hearing loss (SNHL). However, in the case of my participants, only the air conduction thresholds were tested, which were enough to determine the levels of an individual's hearing, although the

type of hearing loss was not established. It was not important to investigate the type of hearing loss for my study and so any unnecessary data from the participants was not obtained. Although audiometry is normally conducted in a soundproof booth, this was not possible for my study, though efforts were made to ensure a quiet environment for the hearing test by letting the manager know and placing a small sign outside the meeting room door stating 'Quite Hearing test in progress'. The results of the hearing test were used in accordance with the ethics approval and ethical considerations (see section 4.3.8.3). The hearing tests results were explained to each participant at the end and advice was given as I would have in my audiology clinic. However, in the capacity of me being a researcher, I was unable to refer them to a medical professional or offer treatment if it was needed, however advice on where to seek advice was given depending on the type and degree of hearing loss (see section 4.2.8.3 for further details).

4.2.8 Ethical Considerations in qualitative phase of the study

The current research was underpinned by the Declaration of Helsinki ethical principles which are formulated specifically for medical research. The most relevant for this study were selected from an extensive list of ethical standards which included: respect for participants, safeguarding, health and rights of participants and medical procedure only to be conducted by a qualified medical professional (BSA, 2001). Other generic ethical standards proposed through various frameworks were also considered. Due to the nature of my research and the participant involvement a simple framework recommended by Beauchamp and Childress (2013) was followed, who divided the ethical principles into four main categories: autonomy, justice, beneficence and non-maleficence. The former four ethical principles for medical research were incorporated within this framework to ensure participants' wellbeing and safety.

The proposal for this research was submitted to Birmingham City University (BCU), Health, Education and Life Sciences, ethics panel and approval was obtained with a letter issued on 11 November 2017 (see appendix 7, complete ethics form can be provided on request). To fulfil the BCU ethics committee request, contact details for an independent counselling service was provided in case any distress to participants was perceived during the interview. The study commenced recruiting participants in February 2018 and the time between ethical approval and recruitment was due to correspondence with the Research and Development (R&D) department, Health Research Authority (HRA), IRAS/NHS ethics and Freedom of information Act team members who concluded that further ethical approval was not required prior to recruiting participants as they belonged to the members of the public, even though some of them may have been in contact with the hearing services previously and may wish to discuss their experience. Once participant recruitment began for the qualitative research, the ethical principles remained at the forefront of all research processes which are explained below.

4.2.8.1 Autonomy

Autonomy is the right of participants to decide what is best for them (Sumner, 1996) without influence from external factors or other people including any limitations in the information provided (Beauchamp and Childress, 2001). Participants were not persuaded to take part, and neither was any information withheld from them, which may have influenced their decision to participate. They remained in full control of their decision and acted freely according to their chosen plan (Varelius, 2006). The information sheets included all relevant contact details for people involved with the research as well as an independent counselling helpline, should the participants feel the need to access anyone with any queries after the interview. Once the participants fully understood the requirements and voluntarily agreed to participate, a consent form was signed before commencing the interview. Implementation of autonomy is central in obtaining informed consent from participants (Wear and Moreno, 1994).

Participants were made aware of their right to withdraw from the research at any point without providing a reason. Participants were also made aware that they could withdraw their data up until the time of data analysis. None of the participants withdrew from the study after signing the consent form and neither did anyone withdraw their data later in the research process. The three people who initially agreed but decided not to proceed with the interview, their autonomy was respected, and no further contact was made with them.

4.2.8.2 Justice

This principle requires treating all participants equally (Beauchamp and Childress 2001) according to what would be fair within this research project. All participants went through a similar process of recruitment, arranging meetings and the interview. For example, they were all given the opportunity to choose their preferred location for the interview, they were all offered a hearing test at the end and given a chance to give feedback on the whole process. Participants' respect and dignity always remained at the forefront and where possible their needs and wishes were honoured. Some of the participants who had asked for a copy of their hearing test result, were given one. Otherwise, the result was explained orally in the same manner as followed in clinical settings.

All participants expressed positive feedback on the research process and the interviews. They seemed to value the opportunity to reflect on their hearing issue and felt listened to by someone who specialises in audiology. No physical or mental health issues were suggested/indicated during any of the interviews. However, one of the participants became slightly upset while discussing her family's health issues, which resulted in recalling her father's death. The interview was paused immediately, a drink of water and a break were offered. She was given the choice of withdrawing from the study, but she decided to continue. Oral consent was reiterated. The availability of counselling services was restated in case they were required at any point after the interview. The

contact details of these services were provided in writing in the participant information sheet (see appendix 4).

4.2.8.3 Beneficence and non-maleficence

Beneficence is to 'always do good' (Hendrick, 2000 pp 59), where morality endorses the benefit of participants by ensuring only positive contribution to their wellbeing. Non-maleficence is the principle not to cause harm or inflict evil on participants (McConnel, 1997). It is a conscious effort on the researcher's part to minimise any risk that may pose harm. Issues covered in this section which abide by these principles include, confidentiality, safeguarding, participant benefit and cause no harm.

Protecting the privacy of participants was always considered. Privacy is associated with confidentiality, which is simply described as keeping the information given, a secret (Braunack-Mayer and Mulligan, 2003) and the researcher is trusted not to share it with others (Bulmer, 2001). Confidentiality in the South Asian close-knit communities is even more significant when they discuss their hearing loss with me in an informal setting. However, promising complete confidentiality may sometimes be difficult to achieve in research (Wiles et al, 2006) due to data being used in reporting the findings. Therefore, the emphasis was focused on anonymity, where all data and quotes used were fully anonymised to maintain confidentiality. This was done by assigning a code number to each participant at the earliest opportunity possible (Long and Johnson, 2007). All identifiable information was stored securely in separate locations to the transcripts and not disclosed to anyone. The chief researcher remained the only one who had access to participant identifiable information. Confidentiality would have only been breached in case of any safeguarding issues, a threat to the individual's safety and the question of vulnerability. Appropriate authorities would have been involved in complying with the ethical duty to act for the benefit of the participant, in case any of the above issues were detected (Long and Johnson, 2007). This would ensure protection from harm

for participants and others. Depending on the information that emerges from the interviews or the hearing test, my professional code of conduct as an audiologist may require me to pass information on to other professionals. The participants were made aware of this in the information sheet that was provided to all before they agreed to participate in this study.

The current research was planned ethically with the aim of minimum inconvenience caused and maximum benefit to the participants. Semi-structured interviews were conducted, allowing participants to express their views without the stress of answering set questions. The interview venue was selected with preference given to the participant's choice. Clear directions to reach the interview site were provided to minimise the hassle caused in locating the venue. All venues were public buildings with reception staff in attendance to ensure safety of all involved in the research. If the participant was accompanied by someone else, oral consent was obtained from the participant to conduct the interview in their presence. Only one of my participants attended with a sibling. In one situation, when an unknown person entered the interview room without permission, the interview was paused and re-consented to continue once the interruption had ended.

The hearing test was beneficial for the participants due to the convenience of having it performed immediately after the interview. Participants were pleased to have their hearing results explained immediately after the test. The hearing test was conducted by me, a qualified and experienced audiologist. It provided an indication of the degree of hearing loss but was not recommended to be considered a conclusive diagnosis. Although some hearing test results showed that further testing would be beneficial, this was stated to participants, and they were advised to see their GPs for further investigation. Due to my position as a researcher, and conducting the hearing test outside the clinical capacity, the test results could not be shared with the participant's GPs or other medical professionals (e.g. audiologists or ENT consultants) for a further clinical referral. It was left to the participants' discretion whether they wanted to contact their GPs for further investigation. As stated above, if a serious issue was detected from a hearing test result, I would have acted according to my

professional code of conduct and shared the information with appropriate health professionals for further investigation.

4.2.8.4 Data Protection

All practices for this research conformed with The Data Protection Act 1998 and 2018 which regulates the process of how an individual's data is obtained, held, and used. The Act gives individuals the right to access their data and request copies of it from the researcher. Eight main principles researchers are required to comply with include fairly and lawfully processing personal data for the minimum time possible, used only for the intended purpose of the research, kept no longer than necessary, appropriate and relevant, accurate and up to date, in line with individual rights, stored securely and not transferred to other countries without adequate protection (Data Protection Act, 2018).

All interview transcripts were anonymised and no unnecessary personal data was obtained. The limited personal information given by participants was their name, phone number, addresses for two participants and the signature on the consent forms. Interviews were recorded and transcribed, and the digital voice recordings were stored on an encrypted, password protected USB stick. When recording interviews, mentioning any identifiable information such as the use of names was avoided to ensure maintaining confidentiality.

Paper data (consent forms) was stored in a secure metal cabinet at the home of the researcher prior to May 2018. All personal data was to be stored until the completion of the degree, which was the minimum time the data needed to be kept in accordance with The Data Protection Act, 2018 and could only be accessed by the chief investigator. However, the storage of data changed for participants interviewed after the new regulations of data protection act were enforced on 25th May 2018. These changes are elaborated in the next section.

4.2.8.5 General Data Protection Regulations – post 25th May 2018

Adhering to the recent EU General Data Protection Regulations (GDPR) in effect from 25th May 2018, Birmingham City University issued changes required to be made to research studies with previously approved ethics. These changes were made in participant information packs with an additional sheet (see appendix 8). A standard consent form (see appendix 9) formulated by the BCU research integrity team replaced the previous one. This was adopted for the last six participants interviewed for my study. The interviews recorded on a dedicated personal voice recording app were then required to be recorded on an encrypted voice recorder loaned by the university. This data was then uploaded onto a secure internet-based storage platform specifically attached to this study rather than a USB. All identifiable information was previously stored in a locked metal cabinet which was then handed to the university's research integrity officer and stored within the university premises.

4.2.9 Rigour in the qualitative research

The methodological rigour in qualitative research remains a topic of debate. According to Walby and Luscombe (2017) qualitative studies cannot be assessed against the same frameworks used for quantitative research. Validity and reliability cannot be used as a criterion for determining the quality of qualitative research as validity assumes the researcher is measuring a certain phenomenon by controlling variables whilst reliability assumes the results to remain consistent in a given situation (Tracey, 2010). In both cases, some scholars argue that applying these criteria could risk losing creativity, versatility, and uniqueness of the research (Sandelowski, 1993). As a replacement to validity and reliability, Lincoln and Guba (1981) suggested to use trustworthiness, transferability, dependability and confirmability. These four criteria were followed to achieve rigour in the qualitative part of my research in the following way:

Trustworthiness: is linked with the credibility of the research and the researcher. It aims to ensure a fair representation of the participants' perceptions and views. One of the main aspects of trustworthiness is the researcher's ability to demonstrate that the data analysis has been conducted in a precise and consistent manner. To provide credibility to my study, I recorded reflexivity journals and memos throughout the research. I am a qualified audiologist with over 15 years of experience in the field of hearing services. The findings of my study were discussed with my supervisors and peers.

Transferability: refers to whether the findings of the study can be used to enrich other situations and transferred to other comparable participants. The resulting categories of my study could be used to investigate other health issues among people from south Asian backgrounds. The findings could also help to understand hearing issues in other ethnic populations.

Dependability: is related to the reliability of the research, demanding consistency and accuracy. To ensure dependability, the researcher is required to present a comprehensive record of the analysis process to allow the reader to evaluate and critique the decisions made. I provide a step-by-step report of my data analysis and the conclusions drawn at each stage. A detailed description of how all the themes emerged into codes and developed into categories is given in chapter 5. The reflexive journals throughout the research also provide a constant awareness of my contribution and influence in the research process.

Confirmability: is concerned with confirmation that the data and the interpretation of the findings were not just based on the researcher's assumptions. This was demonstrated through a clear trail of the analysis process backed up with the participant's quotes. The themes and categories were scrutinised in my supervisory meetings to ensure the data was led by the words of the participants. My ontological and epistemological position is clarified in section 3.2 (Ontology and Epistemology).

4.3 Summary

Qualitative data was collected directly from 19 participants through semi-structured interviews. Advertisement posters were used initially to recruit from the general public, which did not prove successful. Purposive sampling was adopted which later developed into snowball sampling, where both resulted in successful recruitment of participants from south Asian ethnic groups. Theoretical sampling in alignment with constructivist grounded theory, remained an integral part of the subsequent recruitment process. Data was analysed simultaneously to derive the emerging themes and concepts which guided additional recruitment and data collection. All participants and their data were handled in accordance with ethical considerations. The next two chapters present the data analysis and the findings of the qualitative elements of the research.

Chapter 5 – The Process followed for Analysing Qualitative Data

5.1 Introduction

This chapter presents the data analysis based on sixteen semi-structured participant interviews. The interview data was analysed adopting Charmaz's (2014) constructivist grounded theory (CGT) which allows the researcher flexibility to progress through the analysis guided by the data (Chun Tie, 2019). I have presented qualitative data analysis in seven stages to navigate the reader through the process of developing the main categories. The initial stages of open coding and focused coding were followed by development of categories and a core category, eventually assuming theoretical saturation, when no new concepts emerged from the data (Bryant, 2007; Charmaz, 2014). Different methods and tools were used when progressing through the analysis stages, with each representing an elevated level towards conceptual abstraction. Charmaz (2014) encouraged learning the analysis process by navigating through multiple procedures gained from application and practice.

All interviews were audio recorded and transcribed immediately after each interview. The first five interviews were analysed using a technique called line by line coding (Charmaz, 2014), which required remaining open to all possible ideas/themes resulting in open codes. Subsequently segment by segment coding was pursued, consistently approaching the data with an open mind but grouping and labelling a section of data rather than each line.

As the interviews progressed with more participants, the questions were continuously adapted to inquire into areas highlighted through participant responses. Questions were reviewed after analysing each group of interviews to ensure they were relevant to the emerging concepts. Some interview questions were altered of which an example is provided:

Initial interview question – Tell me about your hearing loss?

Refined interview question- Tell me about your hearing?

The initial question assumed that hearing was a loss, however after conducting the first two interviews the term loss was removed and made into a more open-ended question. This allowed the participants to report their hearing through their own interpretation where it may or may not be considered a loss.

Memos were written (presented in grey text boxes) to capture ideas and my interpretation of the data. Memos were actively included in the analysis write up after stage two once I became more familiar and confident with how they needed to be integrated. These were beneficial in disseminating the emerging codes and increasing the analytic insight. Cooney (2011) encouraged maintaining clarity through the data analysis to enhance the credibility of the study.

5.2 Stage 1 Initial Coding

Stage one involved coding the interview transcripts to derive the initial codes. This required approaching the data with an open mind and labelling it in all possible ways (Charmaz, 2014; Punch, 2013) generating various codes. These initial labels were created using participants' own words to remain close to the context as suggested by Charmaz (2014). Although my initial codes were synonymous to participants' words, they enabled me to connect with the data and immerse myself within it. Charmaz (2014) recognised these initial codes as the "bones" (Charmaz, 2006: p45) of the research (see table 7 for examples). However, Glaser (1998) stated that grounded theory was a sociology of gerunds in which focusing on actions and the state of doing something was strongly recommended while coding. Therefore, my initial labelling of the data progressed from descriptive codes to gerunds. As a novice researcher, I admit that the terminology and the analytic expression

improved while progressing through the analysis process. The initial codes from the first interview transcript were obtained through line by line coding.

5.2.1 Line by line coding

Charmaz (2014) encouraged use of line by line coding which was applied to the first interview transcript. The initial codes were derived from questioning each line about ‘what is happening?’ (Charmaz, 2014; Glaser 1991). Although CGT (Charmaz, 2014) proposed that initial codes stemmed from the factors which appeared significant to the researcher, in this case some of the codes were from participant’s verbatim quotes (Birks, 2015; Charmaz, 2014) resulting in a broad range of codes. A two-column table was created in Microsoft Word (see table 7) with the codes in the left and the participant transcript in the right. An excerpt from participant one’s transcript is shown in Table 7.

Table 7 - Line by line coding of participant 1 transcript

Line by line coding	Participant 1 Interview Transcript (R- Researcher, P1- Participant1)
Collective examples spring to mind. Significant times were affected (job interview). Job application. Adjusting sitting position. Adjusting for hearing issue. Implied many other struggling situations. Always sit in a particular position Meetings Issues more on left side Right ear always forward for listening Acknowledging impact Hearing problem always at forefront of mind. First thought: to adjust and accommodate for hearing issue. Worried about being late.	R- Can you tell me about a situation where you may have experienced that you had to sit in a certain way to accommodate for the hearing problem you have on the right. P1-I mean I can give you multiple examples, one of them is when, when I went for a couple of job interviews I was applying for, and they didn't ask me why I was sitting in a particular way, but I had to position my chair very slightly slanted so I could actually hear the questions they were asking. I mean that's probably one episode that I remember generally what I do now if there's any, any, meeting there anything I tried to sit on the side of the table where you know my right side is, is, essentially pointing towards the person the speaker so it does have an impact because you walk into a room and suddenly your thought process isn't just, find a chair and sit on it, it's more like finding the chair that's appropriate in the right position in order for me to sit so I can listen because you know there's been time when I

Not having a choice or control over the environment. Denial of complete hearing impairment. Accepting difficulty in hearing Struggling to hear other people Constantly <u>adjusting</u> to compensate for hearing issue. <u>Adjusting</u> requires effort and can be difficult.	haven't had that luxury and I've walked in probably a little bit late to the meeting and so on and I've sat in a chair which is probably, I mean it's, it's not that I can't hear anything, of course I can hear. I can. But it just makes it much more difficult for me to pick up what's been said and obviously, I still have to try and adjust to try and hear it just, it just makes things more difficult like an extra hurdle I have to think about beforehand.

The columned table seemed sufficient at that stage due to features such as different font colours, highlighters and underlining words. These visual cues were beneficial in highlighting certain words or phrases which I needed to revisit in order to rethink my understanding of the context in which they were used. Although line by line coding encouraged scrutinising each sentence and critically assessing participants' words, it produced over 1500 codes for one interview transcript. The initial codes appeared to be monotonous and, in some cases, synonymous to each other. Line by line coding seemed arbitrary, especially in instances where not every line constituted a coherent sentence or presented a meaningful idea. It was also identified that some of the codes, when studied in isolation from the transcript, seemed to decontextualize the data. It is always important to remain close to the meaning of what was said and highlight the context in which it was said. As Charmaz (2014) and Glaser (1998) advocated coding actions, I noticed the initial codes such as 'job application' and 'meetings' did not represent gerunds but rather just highlighted a situation. Therefore, moving forward with the analysis, after the first interview, data was approached in segments rather than lines, to retain the contextual meaning.

5.3 Stage 2 Segment by Segment Coding

For stage two segment by segment coding was adopted that required labelling sections of data. Segmenting is when the transcripts are divided into units where each unit fits into the same chosen theme (Charmaz, 2006). In this case segmentation themes focused on "what is happening in the

data without sacrificing the enacted scenes” (Charmaz, 2006: 14). The idea is to capture the conceptual themes emanating from participants’ words whilst keeping the responses within the context. The transcripts were segmented based upon the topic or the issue being discussed by the participant. Segmenting data enabled me to scrutinise participants’ behaviour and actions within specific situations and merge similar words, such as ‘adjusting’ and ‘adjust’ (see Table 7). Charmaz said, “We take segments of data apart, name them in concise terms, and propose an analytic handle to develop abstract ideas for interpreting each segment of data” (Charmaz 2006: 45). Although segment by segment coding improves the analytic conceptualising, some codes remained as interpreted descriptions of the incident presented by the participants. For example, when people spoke about experiences with their GPs, that section was coded as ‘GP- practitioners’ while referring to appointments, was labelled ‘GP- appointments’. On the other hand, action codes such as ‘neglecting self’ or ‘overlooking hearing issue’ were derived from implicit meanings of participants’ narratives. Table 8 presents an excerpt from the interview with Participant 2 demonstrating segment by segment coding. The highlighted areas in the right column represent the segment with its allocated code in the left column.

Table 8 - Segment by segment coding of participant 2 interview transcript

Segment by segment coding	Participant 2 Interview Transcript (Participant2)
Not blaming hearing fully	Yeah, that's just reminding me like I work on the phone so I was taking detail down from someone a) they were like very fast b) they're line was um.. making me paranoid that is it my hearing that's gone mumbling or is it their line? But I could hear him clearly. So I was taking the number.. like it was account numbers and what not, I was taking them down and then his contact number and I was making him repeat it and he was like laughing but angry at the same time even, though it sounds like bipolar, but he was like sarcastic and that what are you dyslexic and then the way he was repeating that one (monotone slowed down) there was no need for that, but that then made me er.. To avoid it happening again er.. Because I
Acknowledging guilty-feeling, asking to repeat .	
Other's reaction	

Unhappy feeling	didn't like the way he made me feel so I would like can you repeat like your account number and then like every time he'd repeat I'm like can you just repeat one more because they would give you... because the account number is quite long so it's like the first x amount of digits so it's like to prepare that myself then the follow up calls or whatever other callers to avoid that situation again so it does make me feel quite paranoid so I'd like to put something else in place like the popping noise in place.
Repeating required	
Feeling paranoid	

Coding segments directed further data collection by adapting the interview question according to the emerging themes. For example, the question “what are your family’s views on having hearing aids?” was added after the fourth interview as I noticed from previous participants that family had a significant involvement in health seeking behaviour. The first interview transcript was re-coded using segment by segment coding as the list of initial codes resulting from line by line coding were too extensive. Those initial codes lacked precision and needed refining to be consistent with other interviews. The difference can be seen in codes resulting from line by line coding (Table 7) and segment by segment coding (Table 9) when analysing the transcript of the same participant (Participant 1).

It was at this stage where memos were written to reflect upon the emerging codes and justify why they were chosen. As a novice researcher, analysis was a learning process throughout the data collection and memos enabled a written explanation for the steps taken.

Table 9 - Open coding of Participant 1 interview transcript

Segment by segment coding - Open coding	Excerpt from Participant 1 interview transcripts
Friends noticed. Friends encouraged to seek help. Laid back attitude.	um... my friends, my friends they have, they have noticed it, they have noticed it and they said I should get myself checked out maybe it's something that can be easily treated, sorted maybe I've been just a little bit lazy, and I should persevere in trying to get that appointment and trying to get that

Struggle to get an appointment at GP. Appreciate restoring normal hearing. Barriers in getting a hearing test. Uncertain about coping but trying. Very supportive family. Acknowledging others' considerations towards the hearing problem. 'Shouting' may indicate annoyance. Change/adaptation required Don't want others feeling sorry. Self-declared guilty.	hearing test because I would love for this to be sorted if, if, there is a possibility just getting to that test and all that sort of stuff it just seems like you got so many hurdles, I mean. I'm trying to cope with it, I suppose. With regards to.... huh with regards to my family they've been very supportive really, to be honest in my household everybody kind of knows that I have difficulty in hearing, so they've adapted to it they speak a bit louder then probably what they've needed to sometimes, sometimes they say they're shouting and I don't I don't think that's the case at all um... You know I suppose we kind of changed ourselves for the situation and I don't really like it I feel like why should others have to change the way they, they speak or communicate just because I have a problem that also makes me feel a little bit guilty that they're having to adjust because of my issue.

5.3.1 Memo Writing

Memos can be described as “informal analytic notes” (Charmaz, 2006 p. 72) written about ideas the researcher develops through scrutinising the emerging codes. Charmaz (2014) strongly encouraged writing memos consecutively to the analysis, capturing thoughts, recording connections and interpretations. Memos were written about codes that required further explanation, ideas appearing through participant interactions and the implicit meanings of participants’ words.

These were written immediately after interviewing or whenever an idea seemed significant. Memos provided direction for further data collection and crystallised the interview questions (Charmaz, 2014). I also wrote memos to elaborate on my data analysis discourse and explain why certain participant quotes were given specific codes. My memos imitated a verbal discussion with my data, bringing me closer to it. They helped me recognise my viewpoints and assumptions, allowing me to ensure the analysis was led by participants’ words rather than my interpretations.

I actively began memo writing, as patterns and themes began emerging, leading to conceptualisation. Initially, my memos were added onto the analysis tables as a third column (see table 10). Table 10 shows an example of an earlier memo, presenting my thought process during the analysis of that particular segment of data. Later, these evolved into advanced memos exploring codes and categories, fragmenting them into their properties while focusing on the processes (Charmaz, 2014). Examples of advanced memos are included later in this chapter (in grey text boxes).

Table 10 - Segment by segment coding with quotes and memos

Segment by segment coding	Excerpt from participant transcripts	Memos
Hearing loss is only verified if hearing aid is worn. People don't believe her.	Now that I'm letting them know, I don't know.... I think like if people don't see a hearing aid or anything, they think 'oh' it's fine. She's not got a hearing aid, but even if you say to people like I got a hearing issue but like they think you haven't even got a hearing aid, how can you have an issue. (P3)	This participant implied the positive effects of having a hearing aid. She felt the visibility of wearing a hearing aid would act as proof for others to take her hearing issue seriously. Although the first two participants were proponents of hiding their hearing loss among those with whom they socialise, this participant provided a clear contrast. It is the atypical that helps to show the rule.

5.3.2 Visual diagrams displaying initial codes

On completion of segment-by-segment coding for the first five interviews, I created illustrations resembling spider diagrams. They were drawn by hand on A1 sheets of paper (see figures 3, 4, 5, and 6) and provided a visual representation of the initial codes which were categorised in broader concepts. The central concepts in the figures were represented by the codes written around it. The

Figure 8 - Spider diagram of the concept 'Self-perception/views' and the related initial codes

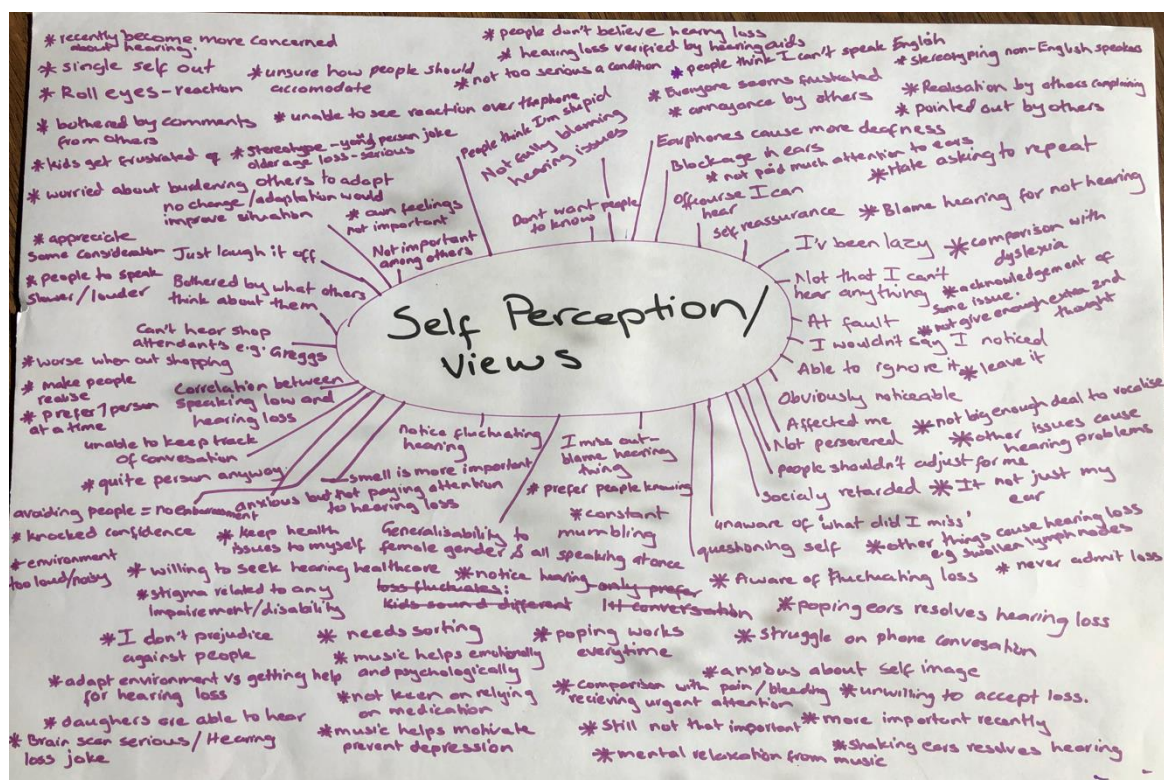


Figure 9 - Spider diagram of the concept 'Suggestions' and related initial codes

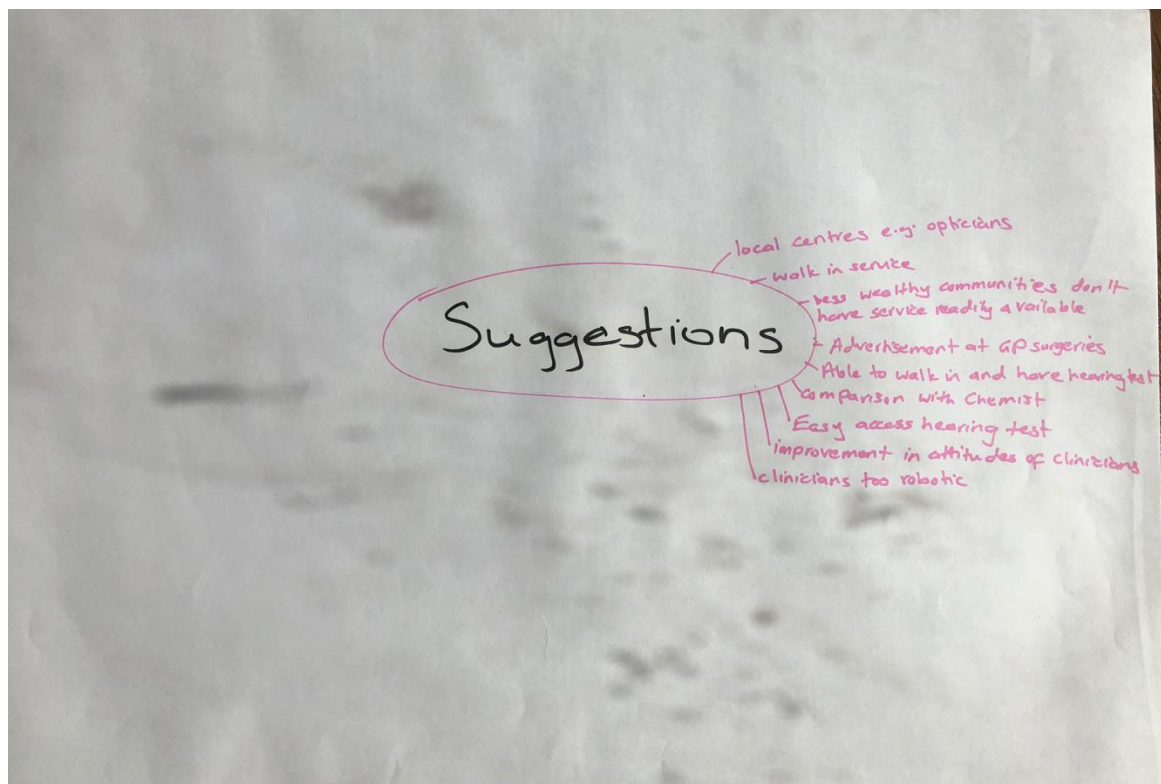
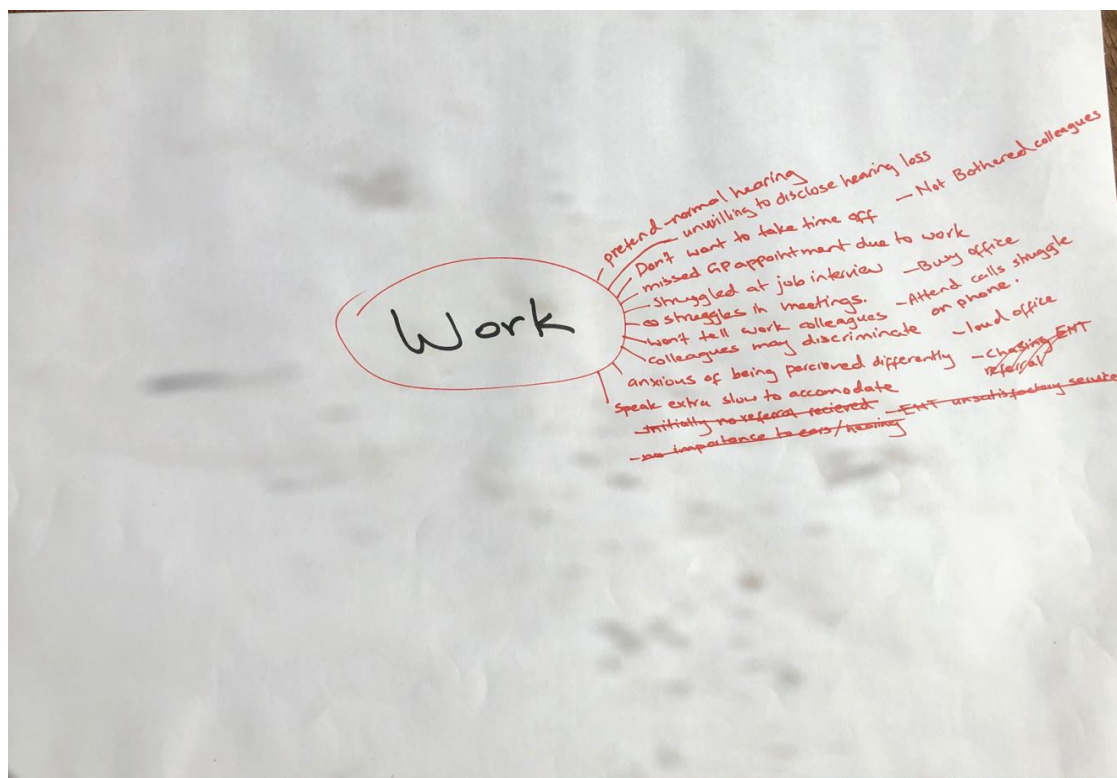


Figure 10 - Spider diagram of the concept 'Work' and related initial codes



This stage of data analysis categorised a large number of codes under 11 central concepts (see appendix 10 for the other 7). However, it was identified that these diagrams lacked critical analysis on a micro level. The codes were classified under broad headings, which did not permeate the depth of participant views. For example, the concept 'Family and friends' was saturated with all codes related to family and friends regardless of the context in which they were referred to. Examining these concepts closely showed various viewpoints which were grouped under one heading, losing the richness of participants' voice. Although the methods used for analysis such as Microsoft Word tables and spider diagrams provided a way of illustrating the codes, it became difficult to pursue these methods due to limitations in analytic expression of the data. The codes could not be subdivided or grouped exploring further into their properties. Therefore, NVivo (version 12), a qualitative data analysis software, was adopted which allowed management of large amounts of data in a systematic way.

5.4 Stage 3 Coding in NVivo

In stage three, NVivo, a qualitative data analysis software offered a way to structure and arrange large amounts of data in an orderly manner. It consisted of a set of tools that facilitated analysis but by no means claimed to automatically analyse the data (Bazeley and Jackson, 2013). It required me to sort and categorise segments of data into folders, which I entitled with different codes. Some of the codes were subdivided into further folders, labelled accordingly, which provided conceptual clarity (Bazeley et al, 2014) and better organisation. NVivo allowed instant easy access to original data when clicking any code, enabling the analysis to remain close to participants' words. For example, all participant responses regarding family were coded within the code 'family' which were subdivided into 'negative comments', 'supportive', 'worried'. These organisational tools were difficult to accomplish through spider diagrams and hence the decision to shift the analysis to NVivo proved beneficial. There were other helpful features such as attachment of memos, notes and annotations to any code. If a memo was attached to a quote, NVivo highlighted the selected quotes to prompt further analysis and integration in future interviews. It also provided visual representations of how the data analysis progressed, facilitating a focused inquiry.

NVivo could be used to store, classify, link and manage various types of data, including text, numbers, diagrams, videos and audio recordings (Bazeley and Jackson, 2013). However, in this case only, interview transcripts were analysed using this software. QSR International, the official developers of NVivo, on their website, stated that it is best used for gaining a richer insight when analysing qualitative and mixed methods data. Although there were features that allowed integration of statistics in the data, it was recommended for unstructured or semi-structured text rather than numerical information (QSR International, 2019).

Despite the many features of NVivo, Welsh (2002) critiqued it for lacking in proposing thematic ideas which emerge from creative fluidity. This analysis software could not be paralleled with innovative

thinking and articulation of ideas which transpire from a human mind. In my practice as a researcher, I found that NVivo was valuable as an effective organising tool, however analysis transpired through my subjective involvement to conceptualise and develop codes.

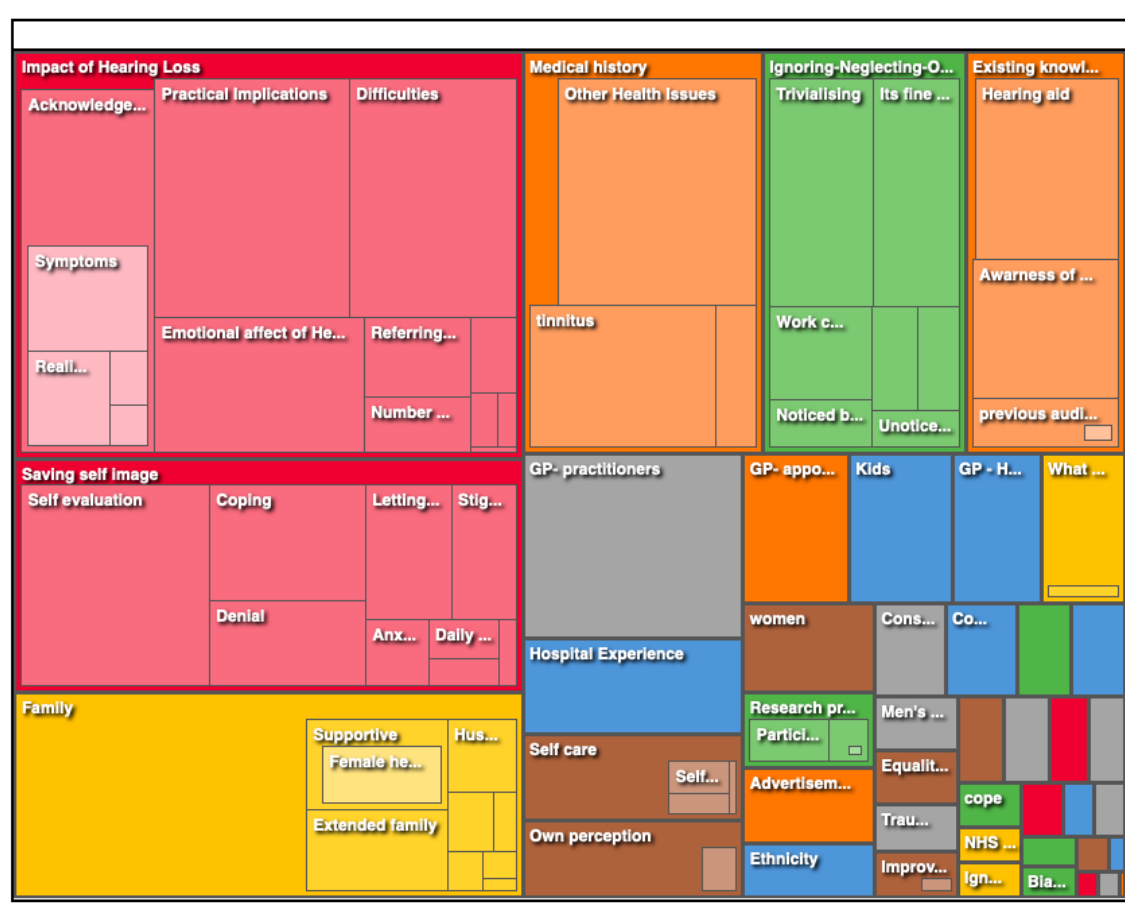
Out of the total 19 participants interviewed, first 14 were analysed in NVivo. The first five transcripts initially analysed in Microsoft Word were also added to NVivo along with data from subsequent nine. This was to maintain consistency and facilitate analysis on one platform. I approached the data with an open mind, labelling segments of the transcripts with all possible codes resulting in 53 initial codes, of which eleven were subdivided into branching codes. A segment of data could be marked with and attached to all different codes that initially appeared relevant. This allowed cross-referencing quotes between codes and forming concepts. For example, the quote below, by Participant 1 was classified under two codes 'difficulties' and 'impact of hearing loss':

"it is much more difficult for me to pick up what's been said and obviously I still have to try and adjust, to try and hear. It just, it just makes things more difficult like an extra hurdle. (P1)

The ability to switch across coded data and the source data provided rigour in the analysis process (Bazeley and Jackson, 2013).

The number of quotes, number of codes and participants they belonged to, could all be visualised while interpreting and analysing the data across fourteen transcripts. One of the diagrams automatically created by NVivo was known as the hierarchy chart, which showed prominent codes appearing larger with all codes presented in distinct colours. The visually larger codes were based upon the number of quotes I had selected under each. For example, if one of the codes had been assigned 30 quotes, while another only had five relevant quotes, the former would be displayed in a bigger square compared to the latter (see figure 7).

Figure 11 - A tree map hierarchy chart created in NVivo



The largest appearing code 'impact of hearing loss' had the greatest number of quotes, although quite a few belonged to the same participant. One of the drawbacks of NVivo was that it accounted for the number of words and the number of quotes to formulate the above figure but did not analyse the context or meaning of the words, although visualisation of data directed re-examining certain codes. Constant comparison between codes and quotes was made which led to merging and refining 53 initial codes (see table 11).

Table 11 - The 53 initial codes resulted from NVivo

1	Acknowledgement	2	Advertisement suggestion
3	Age Related	4	Biased Healthcare
5	Cause of loss	6	Children's health

7	Considering seeking hearing services	8	Coping
9	Dependant on others	10	Equality issues
11	Existing knowledge- hearing issues	12	Experience with hearing services
13	Extended family	14	Family
15	Female health	16	Friends
17	Frustration by others	18	Further referral
19	Googling health issues	20	GP- appointments
21	GP- Hearing issues	22	GP- practitioners
23	Hearing issues history	24	Hospital Experience
25	Ignoring/Neglecting hearing issue	26	Impact of Hearing loss
27	Improvements suggested	28	Kids
29	Local community	30	Medical history
31	Men's health	32	Neglecting self
33	NHS vs Private	34	Noticed by others
35	Number of years suffering	36	Other health issue
37	Others- hearing issue	38	Overlooking hearing issue
39	People need to raise voice	40	Personal views on hearing issue
41	Previous audiology experience	42	Comments from relatives
43	Research project reflection	44	Saving self-image
45	Self-care	46	Self-cleaning ears
47	Self-diagnosis	48	Self-evaluation
49	Tinnitus	50	Traumatic experience with healthcare
51	Unnoticed hearing loss	52	What would cause seeking hearing services
53	Work commitments		

The refining process included re-reading the coded segments of data and grouping those which expressed homogenous concepts. I questioned the 53 codes against the data which revealed duplication of meaning in some codes, for example, the quotes assigned to the code **'noticed by others'** and **'comments by relatives'** expressed similar views and hence were merged into one concept **'comments/opinions of others'**.

Quote assigned to the code 'noticed by others':

"See my uncle got a shop and sometimes I go help him out with deliveries in it and if he's on the other side and he's telling me to take an order he'll have to like shout at me and always complains that I don't hear him (laughs)." (P10)

Quote assigned to the code 'comments of relatives':

"It's when at home when everybody was complaining like you know you're deaf. yeah basically like everyone was like... ummm saying that you're deaf and that's coz after I had told them to repeat themselves a number of times and I still didn't get it and that's what it was like you know, go and get it checked out." (P3)

The above participant quotes demonstrate how all 53 codes were condensed into 21 (see table 12).

Remaining true to constructivist grounded theory, the analytic conceptualising was achieved through fracturing the data and re-constructing it whilst introducing abstract ideas (Charmaz, 2014).

When refining codes, my interpretation of how I saw the data and which codes fitted together became an essential part of the process. I focused on developing codes, which would justify and balance between what the participants' said and my understanding of it. Although it was initially challenging to choose titles for the codes, some had to be re-titled to ensure the most comprehensive terminology was representative of that code. This refining process resulted in 21 codes as shown in Table 12.

Table 12 - The 21 emergent codes resulting from analysing and refining in NVivo

1	Acknowledged struggle	2	Avoiding dependency
3	Comments/opinions of others	4	Compensatory adaptations
5	Deciding factor	6	Dissatisfaction with healthcare
7	Family approval-disapproval	8	Feelings linked with hearing issue
9	Fear of being different	10	Hearing aid stereotyping
11	Hearing test	12	Identity – self image
13	Lack of awareness	14	Only if in pain
15	Other significant disease	16	Preserving self-image
17	Reacting only to extreme circumstances	18	Reasoning with self
19	Rejecting hearing aids	20	Self-controlled access
21	Serious disease		

The 21 initial codes were divided into two lists according to the two main points in the research question; ‘hearing loss’ and ‘hearing services’. The 21 refined codes (where 2 codes overlapped) were divided in the following manner:

1- Exploring views of people from ethnic minority backgrounds about hearing difficulties

- Acknowledged struggle
- Avoiding dependency
- Comments/opinions of others
- Compensatory adaptations
- **Family approval-disapproval***
- Feelings linked with hearing issue
- Fear of being different
- Identity – self image

- **Lack of awareness***
- Other significant disease
- Preserving self-image
- Reasoning with self
- Serious disease

2- Exploring views of people from ethnic minority backgrounds about hearing services

- Deciding factor
- Dissatisfaction with healthcare
- **Family approval-disapproval***
- Hearing aid stereotyping
- Hearing Test
- **Lack of awareness***
- Only if in pain
- Reacting only to extreme circumstances
- Rejecting hearing aids
- Self-controlled access

Thirteen codes appeared relevant to addressing the question about hearing issues while ten codes were found to be related to hearing services. Although the total number of codes for both questions was 23, there were only 21 refined codes because two overlapped across both lists. These included 'family approval/disapproval' and 'lack of awareness' (marked in bold with an Asterix in both lists). Different aspects of these codes and all others were studied in detail in the next stages of analysis and further refined to create focused codes.

5.5 Stage 4 Developing focused codes

Stage four elaborates how the 13 initial codes related to 'hearing issues' resulted in 7 focused codes and 10 initial codes related to 'hearing services' were refined to 8 (see figures 8 and 9). Some initial codes remained consistent as they were important themes which could not be merged while terminology was adapted for others to be more concise. Figures 8 and 9 demonstrate the initial codes in grey, of which some were merged to form the focused codes shown in green.

Figure 12 - The initial 13 codes (in grey) resulting in 7 focused codes (in green) related to 'hearing issues'

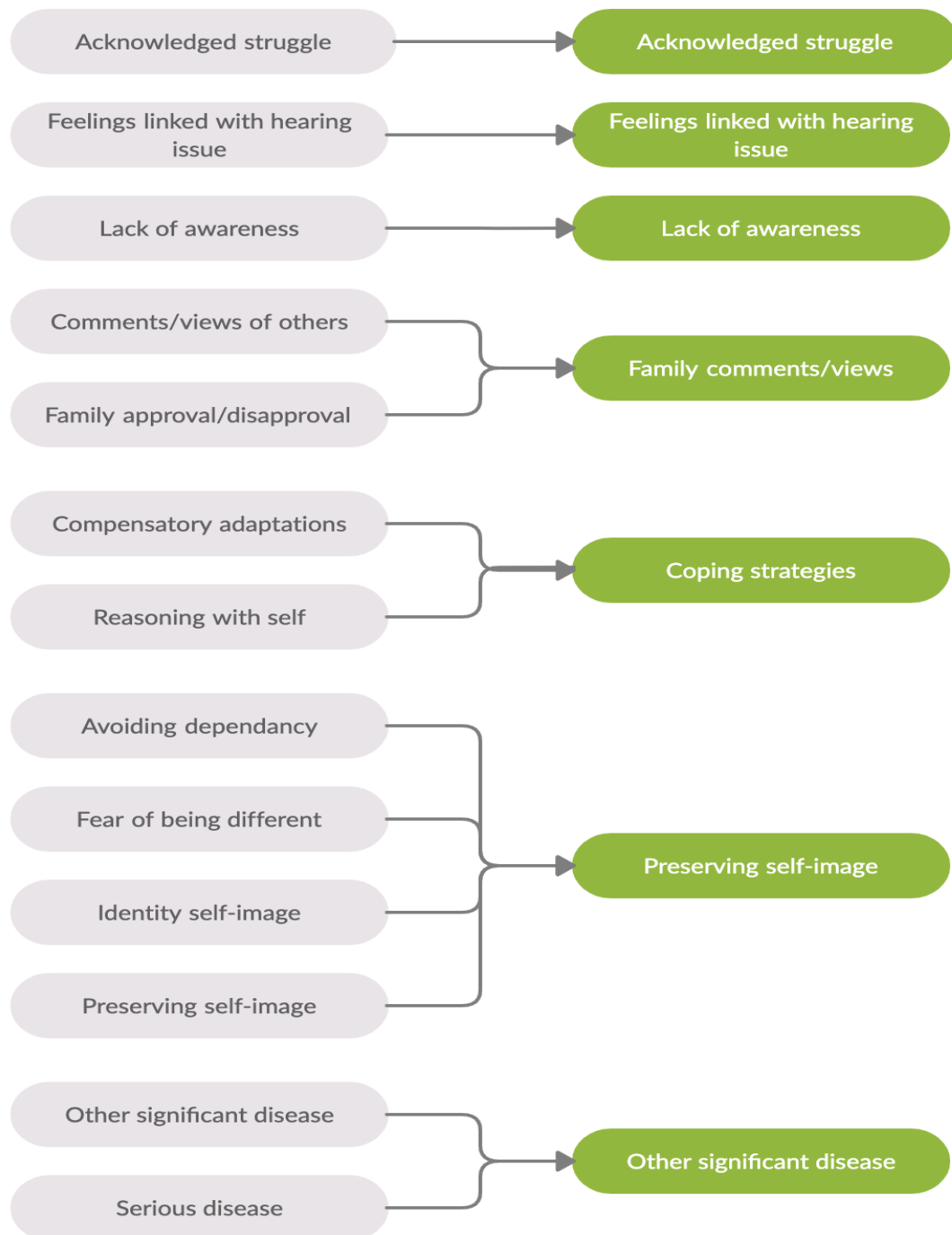
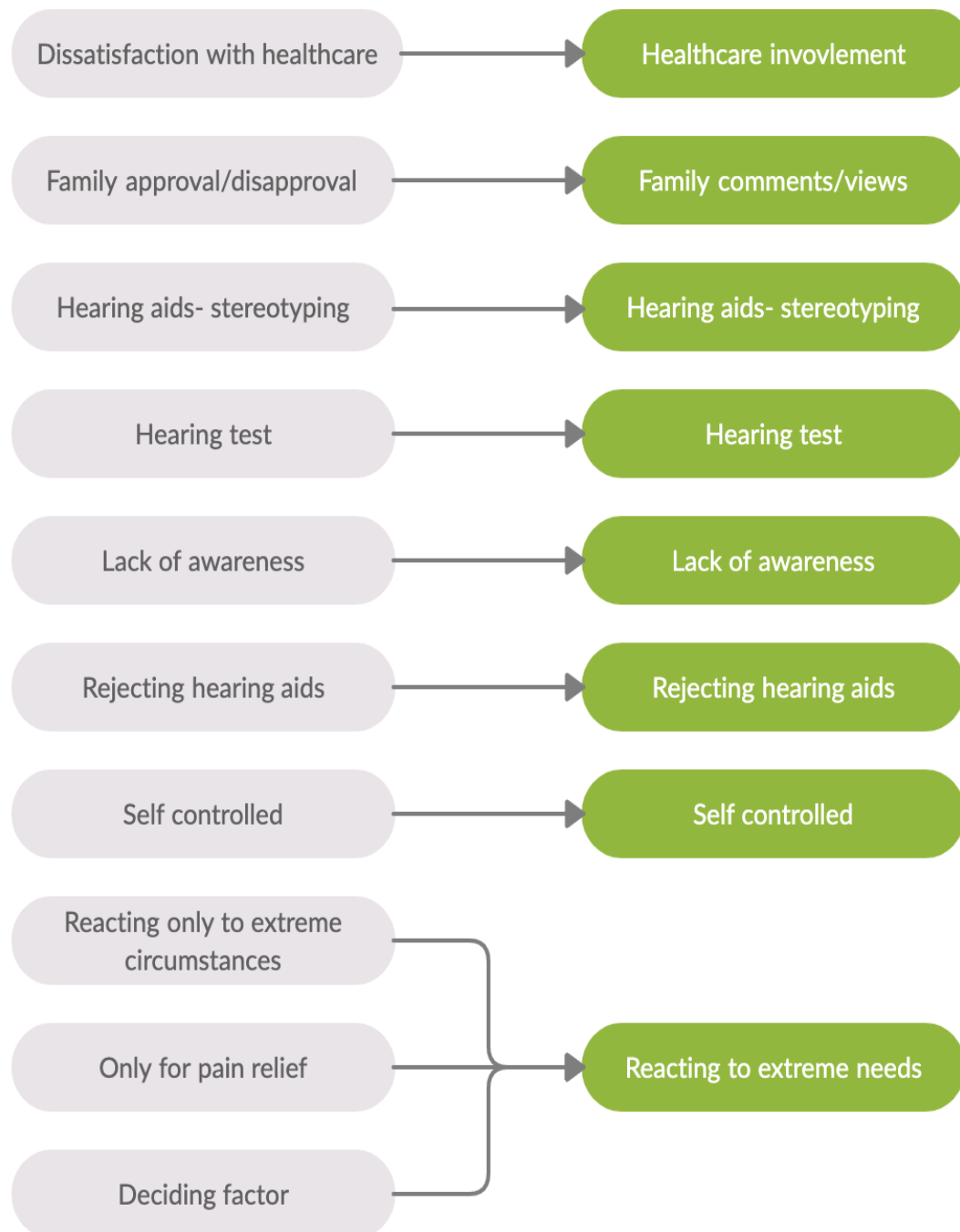


Figure 13 - The 10 initial codes (in grey) resulting in focused codes (in green) related to 'hearing services'



The process of extracting focused codes was coherent with the previous pattern of analysis. The 21 codes (total 23 as two overlapped across both questions) were constantly compared, similarities and

dissimilarities were noted and the relationship between them was identified to move the data analysis forward, towards conceptualisation (Charmaz 2014; Glaser, 2002). Quotes from four participants which expressed homogenous views were attached to four different initial codes in the previous stages of analysis. Advancing towards deriving focused codes, all quotes were revisited, similarities in the implicit meanings were detected and hence merged. Some initial codes (for example, **'avoiding dependency'**, **'fear of being different'**, **'identity – self- image'** and **'preserving self-image'** were merged into one focused code **'preserving self-image'**. The example of the four initial codes leading to one focused code is presented to demonstrate the analysis at this stage. An excerpt from my memos explaining the analysis is also included after each quote. These codes were chosen as examples because they were the highest number of initial codes that were merged into one code. This was to allow the reader to grasp how the focused codes developed.

Initial Code- Avoiding dependency

“Because I thought if I don't, then it can continue to increase and I could end up having paralysis or stroke. And I would then become dependent on other people. I don't like that I don't like being dependent on others. Thinking about that then I do watch out for these things and that's why I wanted to have my hearing checked” (P11)

Memo 1 - Avoiding dependency

Participants spoke about other illnesses such as stroke, heart disease and cancer which may cause dependency on others, especially their family members. The quote above expressed concerns about becoming a burden on others linking hearing loss to paralysis and stroke. He expressed interest in having a hearing test to eliminate the possibility of any serious condition but not with the aim of seeking hearing services for his hearing loss. It was to establish that there was no serious issue which may require some form of dependency on others. This code highlighted people's tendency to seek secondary healthcare only when they fear dependency on others. This also implies the need to remain independent, maintaining their societal image while striving to preserve their identity.

Initial Code: Fear of being different

"They would just pretend like I'm some sort of patient that got some big disease and then start asking me if I'm ok, if my health is ok and (laughs), I don't like that kind of stuff. I'm fine. I'm fine, Ok I may have a hearing issue. I don't need to be, to be treated like, I have some sort of cancer or something (laughs) you know what I'm saying?" (P1)

Memo 2- Fear of being different

This participant clearly demonstrated his fear of being treated differently and compared himself to someone suffering from a more serious life-threatening disease (cancer). He expressed his frustration and paranoia in being treated distinctly and questioned about his hearing loss. Therefore, would prefer to keep it hidden and undetected by others.

Initial Code – Identity self-image

“Well sometimes I say yes when I'm supposed to give an answer. Then, when somebody asks me something, and I haven't heard properly, and I'll just say yes and, then they'll ask me again but I'll just say "really?" (laughing).” (P15)

Memo 3 - Identity self-image

Following her acknowledgment of the struggle due to her hearing loss, this participant explained how she maintained her identity by giving responses likely to be appropriate in general social situations. She did not feel comfortable in declaring her hearing issue and so pretended to hear everything by answering in anticipation. Thinking analytically about the above quote directed attention to an individual's self-image and the importance of maintaining that in social circumstances. It also interlinked with preserving her image as a normal hearing person which could be due to the fear of being treated differently by people in her social circle.

Initial Code – Preserving self-image

“I'm not sure you know because nobody in my family has actually got them (hearing aids). So, they would be surprised if that's something I would be getting but I don't think my hearing is that bad that I need hearing aids. The techniques (lip reading) have been developed over the years, so I think I'm ok.” (P8)

Memo 4 - Preserving self-image

This person (P8) initiated conversation referring to her family and their stance on hearing aids. She expressed how surprising it would be to her family if she was to wear hearing aids, implying disapproval towards them. This negativity towards hearing aids was detected by the comment “I do not think my hearing is that bad” instantly followed by reference to her coping techniques to avoid wearing hearing aids. The analysis highlighted the participant’s efforts for preserving her self-image and not be perceived differently by her family.

However, it can also be noted that preserving self-image is generally from family and people who matter to the individual. This quote also showed the close connections with other codes such as ‘rejecting hearing aids’ and ‘hearing aids stereotyping’ which were categorised under the research question theme ‘hearing services’.

Combining the codes: The four quotes above presented similar notions about a person’s self-identity/image if their hearing issue was discovered. It was implied that disclosing their hearing loss to family around would be perceived negatively and therefore, they preferred to conceal it. Participants frequently spoke about making adjustments to cope with any misunderstanding or mishearing due to their hearing. The quotes indicated that preservation of one’s socially accepted identity was the paramount concern and hearing loss seemed to be associated with disability. Participants were apprehensive of being perceived incapable or being treated differently from the norm amongst their social circle. Therefore, the prominently emerging code ‘preserving self-image’ was chosen as the focused code with the rest of the three initial codes merging within it. The refining of the rest of the initial codes followed the same analysis procedure resulting in 7 focused codes which addressed the ‘hearing issue’ part of the question and 8 focused codes for the ‘hearing services’ part.

5.6 Stage 5 The Focused Codes

Stage five presents the focused coding, which Charmaz (2014) described as the second major phase in data analysis after initial coding. They provided a theoretical direction inclusive of all earlier data, presented in a conceptual dimension. Once focused codes were developed, they were used to analyse large segments of data obtained subsequently (Charmaz, 2014). Focused coding marked the beginning of theoretical saturation, and this was the point where 'remaining open to all possible concepts' shifted the process towards a more analytic phase by focusing the data on certain emergent aspects. Focused codes were not derivatives of grouping similar codes but were deduced from scrutinising and defining the meanings of participants' quotes (Charmaz, 2014). The language used for focused codes was carefully chosen to ensure they resonated with all the aspects of data embedded within them. However, as CGT proposed, the researcher's subjective analytic assumptions are an inevitable part of the coding process, the participants' implicit meaning was explained through my understanding and influenced by my experience and cultural background. The developed focused codes were representative of my perception of what participants had said.

The coding stages (initial and focused) were not considered conclusive and constant comparison between new and old data continued throughout the analysis process (Charmaz, 2014). New data was collected from interviewing a further three participants (14-16) while concentrating on specific areas to investigate the focused codes. This involved revising and developing interview questions to aid precise data collection but by no means restricted the emergence of new codes. Although interview questions were specifically adapted to inquire about the established codes, the participants were not limited to discussing only the developed codes. They were allowed to elaborate and respond according to their personal perceptions to ensure no essential aspects were missed.

The analysis of the three interviews (14-16) was conducted on printed paper, highlighting large chunks of data. A concise number of focused codes became manageable outside of NVivo where physically arranging the transcripts and visualising the highlighted data was possible. I was able to compare the three new transcripts against the analysed codes without using NVivo.

Additional data was gathered to conceptualise and saturate the identified codes. This process is known as theoretical saturation; however, it did not propose to restrict data collection if any new themes seemed to be emerging (Charmaz, 2014). Theoretical sampling encouraged the abstract representation of events, circumstances, actions, and interactions to be established while moving data analysis forward to further condensing the codes into comprehensive focused codes. This required revisiting the established codes and re-checking them against the data (Charmaz, 2014). There was one such code which, after revisiting seemed to require some change of terminology. This code was 'lack of awareness' which is detailed in the next section.

Revisiting the code 'lack of awareness'

While scrutinising focused codes, I realised the title for one of them (lack of awareness) was purely based on my interpretations. Although constructivist grounded theory encouraged inclusion of the researcher's interpretation, it was essential to represent participants' perspectives. 'Lack of awareness' was my discernment of certain aspects discussed by participants, while investigating thoroughly what may have seemed lacking to me, was a comprehensible concept to the participant. Therefore, the label of this code was revised and replaced with 'isn't really a significant problem' which was rooted in the participants' words rather than my interpretation.

5.6.1 Combining the focused codes across both questions

All focused codes were combined at stage five to fully understand the depth of participant views on hearing issues and accessing hearing services. The focused codes were matched against the quotes

which represented them and compared to each other to understand (through memos) the complexity of the interrelated links between them. Each code was fragmented and analysed to “weave the fractured story back together” (Glaser, 1978: 72). Memos were used to review and clarify the overlapping concepts among the focused codes. It was due to these links; the set of 7 and the set of 8 focused codes were combined to give the analysis a holistic view, with principal focus on hearing difficulties. As two of the focused codes ‘family comments/views’ and ‘isn’t really a significant problem’ overlapped across both questions, when combined the total number of codes, it resulted in 13.

I allowed the data to flow naturally and explored all possible connections between focused codes which appeared in my mind (Charmaz’s 2014). Arranging the codes into two distinct divisions (hearing loss and hearing services) seemed to be forcing the data analysis in either direction for the two main points in the qualitative research question. The interlinking concepts could not be categorised in either of the two groups of codes. Therefore, all focused codes were reunited which highlighted four codes emerging prominently above others (see figure 10).

Figure 14 - The links between focused codes resulting in four prominent codes

Four prominent codes (coloured) based on the number of connections originating from them

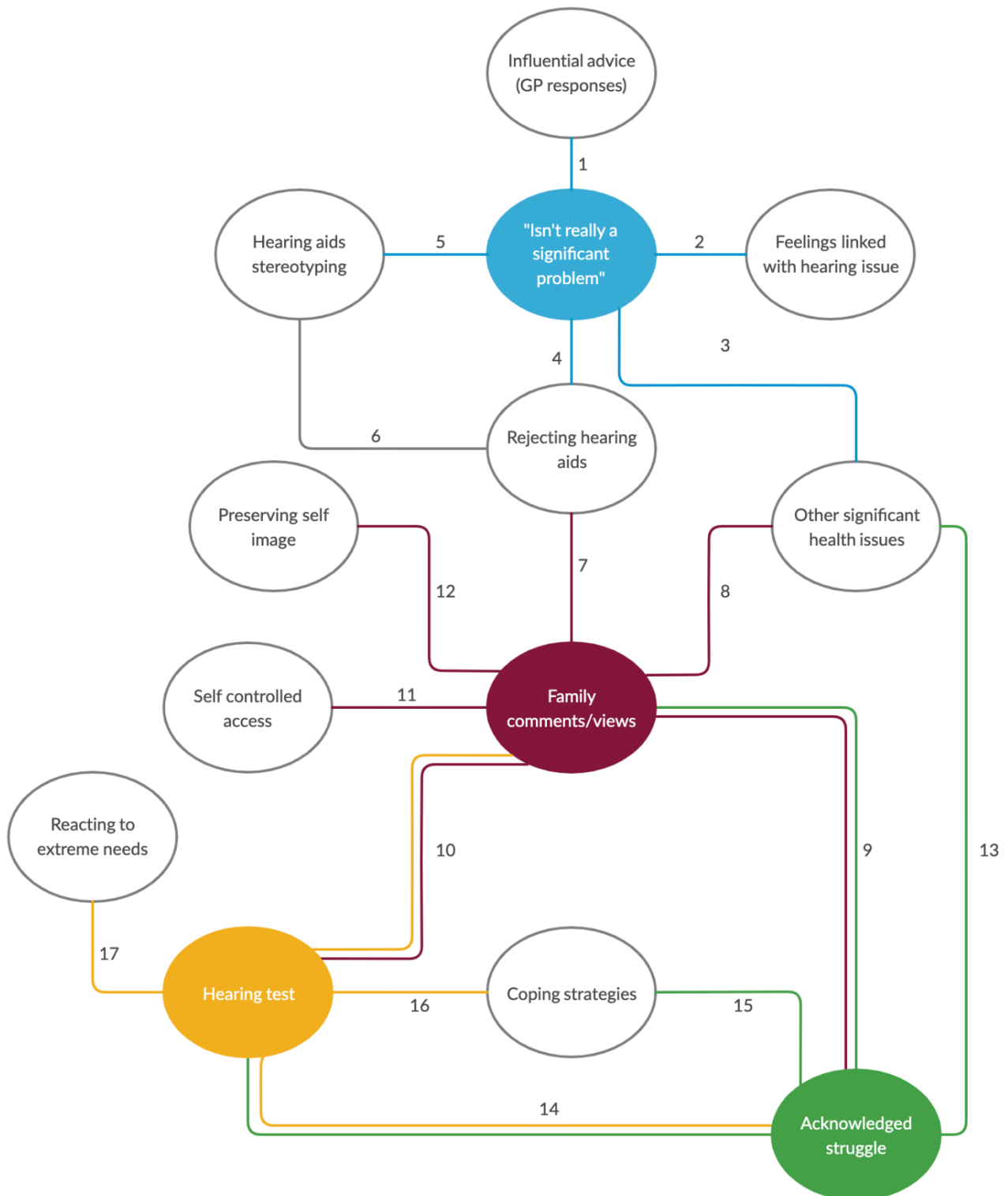


Figure 10 summarises how the 13 focused codes were related to each other. One of the reasons why four codes appeared salient was due to the number of connections formed with other codes. For example, 'isn't really a significant problem' has 5 other codes linked to it, 'family comments/views' has 6 links, 'acknowledged struggle' and 'hearing test' have 4 links each. The double strands between certain codes were drawn and colour coded to represent the exact number of links emerging from each salient code. These links are discussed below with reference to participant quotes. The link numbers do not depict a hierarchy but are allocated only to allow the reader to comprehend the analysis process and clarify the illustrated presentation of codes. The connections emerging from the four salient codes are detailed in the sections below.

Salient focused code **'isn't really a significant problem'** and connected focused codes (links 1-5)

The focused code 'isn't really a significant problem' appeared central to many aspects related to hearing issues and services. Participants' views were indicative of hearing difficulties being construed as a social concern and not a health condition. Therefore, accessing hearing services was not deemed necessary. The notion surrounding accessing hearing services was widely linked with stigma and stereotypical perceptions of hearing aids. Younger participants (under age 60) seemed to believe that hearing loss and hearing aids were only acceptable in old age, while the older participants associated them with disability. Little precedence was given to hearing impairment and thus it was trivialised as not a significant issue. The origination of 'isn't really a significant problem' emerged from a quote by Participant 12 who although acknowledging her hearing issue, didn't consider it to be a real health problem:

"I've got this problem, that it's been a long time, that in this ear (pointing to right ear) I had an infection. And because of the infection I took a lot of medication... So in this ear (pointing to right ear), I have no sound, not at all. it's only very minute. Seems like, like if somebody is far, really far talking. That's what it seems like. And because my other ear is fine and I don't

*have any problem in this, in the left one. Like in this ear, (pointing to the right ear) I don't have much but then in my left ear I don't have any real problem. There is a bit of a difference, little bit like that; it's not really that much, but there **isn't really a significant problem**. It's just that I have no sound in my ear.” (P12)*

This idea of insignificance was not just associated with hearing impairment but also with other hearing issues such as tinnitus. Participant 8 described the sound in her ear “like a rushing sound, like a huge amount of water gushing” but did not acknowledge it as a medical symptom. She explained her condition and said:

“I don't think I told my mum and dad initially... but when I told my mum, she thought, ‘what?’ and said ‘it didn't matter really’, so I just left it at that. But it didn't affect my hearing, you know..., but my biggest fear was when I was at school or college. Is it going to affect my work? Or am I going to be able to hear the lecturers, but I was ok” (P8).

Although she identified her tinnitus during her student years, she grew up with the concept that it was insignificant and therefore seeking medical advice was irrelevant.

This code also aligned with quotes where participants identified other causes contributing to their hearing issue but expressed assurance that hearing was not the main concern. Participant 5, blamed her mobile phone for causing tinnitus:

“Years ago, I always used to have the phone right next to me under the pillow, so I think that there might be, might be some research to indicate that harmful rays from the phone being so direct under your pillow, right underneath your head could affect... I think a couple of years ago

I've completely... either it would be on the floor quite far from me, or it'd be in the cupboard like on a side table. I think that's made a difference as well." (P5)

The above quote indicated the insignificance of tinnitus as she didn't react to seeking medical advice but took measures by placing her mobile phone further away. She reported it "dimmed down" the tinnitus and helped her sleep better. The perceived cause of tinnitus was eradicated rather than acknowledging the existence of her hearing issue and acting to resolve that.

The code 'isn't really a significant problem' was constructed upon various ideas, some of which were directly comprehensible from participant words while others emerged through abstract concepts. The interlinking connections of this code elucidated all aspects which fed into its emergence. Five focused codes were found to be closely related with each link described in detail.

[Link 1](#) – 'Isn't really a significant problem' connected to 'Influential advice (GP responses)'

The focused code 'influential advice (GP responses)' was derived from participants' interactions with their GP and practice nurses regarding hearing issues. Six of the participants reported being given a dismissive response when querying about their hearing problem. Participant 9 stated her GP's reaction when she asked about tinnitus in her ears:

"My doctor said: 'You mention that word tinnitus. It's just blood around your ears. You can just hear that when you're concentrating', and I said, oh can I? (High pitched) can everybody hear that? So, it never used to bother me in my teenage years. So, I never went back to the doctor's again to do with my hearing." (P9)

This quote reflected the high regard for the GP's advice, as she didn't contemplate seeking any further help. Her GP didn't give attach any importance to the symptoms, therefore embedding its insignificance in the participant's mind.

Participant 9 clearly stated the advice given by her GP about her hearing issue and the impact of that on her decision-making.

"...the only appointment that I had with my GP, he just brushed it aside and said no, no, no, it's not that, it's nothing serious. So that for me is a medical professional telling me that there's nothing serious and I'm ok. But if he had said something different, then maybe it might have um... affected me in a different manner but at the moment, it doesn't." (P9).

Although responses from most GPs were similar, not all disregarded their patients' hearing concerns. Participant 3 who presented with a hearing problem, was referred to an ENT specialist by her GP. However, when seen by an ENT consultant and his team, she reported their lack of regard for her hearing:

"To me it's like, if hospital are not too fussed about it (hearing) even though it's affecting me... it's ok. Like the bigger issue is just my brain scan first" (P3).

Her hearing test showed a unilateral loss which raised concerns about other medical conditions requiring urgent interventions. Although the participant's primary issue of hearing loss could have been resolved simultaneously while the ENT investigated the tumour on the back of the ear, the ENT team didn't consider hearing loss as a significant problem and hence no further referral was made to hearing services.

Participants generally didn't present their hearing issue as a medical condition but those 5 participants who sought advice from medical professionals were also reinforced in believing that hearing wasn't a significant problem. The connection between the two codes 'isn't really a significant problem' and 'advice from GP' was built upon the views obtained from the majority of the participants and the responses reported to be given by the GPs of the 6 participants who had contacted their GPs. Therefore, the consensus among participant views and the doctors suggested that hearing issue 'isn't really a significant problem'. It must be noted that this code was a result of the perceptions of my participants and not any health care professionals. The perception of my participants' was that they themselves didn't consider their hearing issue as a significant problem and neither did their GPs.

[Link 2 - 'Isn't really a significant problem' connected with 'Feelings linked with hearing issue'](#)

The code 'feelings linked with hearing issues' stemmed from participants' personal feelings and perceptions about their hearing issues. People seemed to have various ideas and associations with their hearing, such as:

"I think I'm deaf. I think everybody thinks I speak too loud" (P10)

Participant 10 associated speaking loudly with his hearing issue. He implied that the consequence of his hearing problem was his loud voice. Although, speaking loudly could indicate a hearing problem, it can not be considered a definitive aspect of hearing loss. In contrast to this quote, Participant 2 reported:

"My hearing has been lower; I must have missed something. But then I am talking lower, so it is not just about hearing, I feel I'm talking lower" (P2)

She (P2) established a connection between speaking more quietly and the hearing issue while Participant 5 formed a link between her mobile phone and tinnitus (see page 167 for quote). The focused code 'feelings linked to hearing issue' emerged from participants' self-created ideas which implied searching for a cause of the hearing issue. Quotation from another participant further reiterated the need to comprehend the cause of their hearing problem:

"The sound hurts a lot. Feels like it goes right through my ear because you know I do not have an eardrum to protect my ear, so it feels like it hurts right in the inner ear." (P7)

Many people associated various ideas with their hearing problems and seemed to give more importance to those explanations rather than the hearing issue. Hence the connection between 'isn't really a significant problem' and 'feelings linked with hearing issue'.

[Link 3](#) - 'Isn't really a significant problem' connected to 'Other significant health issues'

The connection between 'isn't really a significant problem' and 'other significant health issues' was developed from participants' constant comparison between hearing and other health issues. Twelve out of nineteen participants emphasised the importance of their health concerns compared to the insignificance of their hearing impairment. They stated:

"Things like cancer, heart problems, those are big." (P4)

"You know, if it's like anything major but things like eyesight or hearing, I don't think so... Say if I had, if I was being sick or something physical like that like you know the lumps and things" (P8)

"I'll tell you the example of my kidney stones; I was in lots and lots of pain I was unaware of where the pain is coming from. Why was it coming? A real problem. No diagnosis. Big problem. Go and get it looked at." (P13)

One of the notable aspects emerging from those quotes was the powerful impact of other health problems on people's lives. Participants discussed sprained ankle (P1), diabetes(P11) and pain (P13) which took precedence over hearing loss. The order of significance seemed to be based on the extent of difficulties experienced due to the health condition and the general awareness regarding the health problem.

"No, I just get lazy in going... I think to myself "never mind" at least I'm getting by... (Also) Depends what kind of illness you may have. The most dangerous there's only one... It's cancer. I sometimes have a slight (rubbing chest) in my chest, I went straight to the doctor's" (P7)

"When I do go to my GP it was serious stuff, like this (hearing issue), is not like it has a major impact on my life so I didn't go for this... but last time I had an abscess on my face...Oh my God it was out here" (P17)

"Serious would be kind of that for example the very extreme that affect your life kind of, for example when you are in pain" (P18)

These quotations indicated the participant had constructed a hierarchy of diseases/illnesses that were considered more serious compared to hearing. Some reported that unless they felt physical symptoms such as pain or discomfort, they didn't consider seeking medical advice. Others mentioned observable changes including swellings, weight loss and rashes as serious issues requiring

urgent attention. However, the nature of hearing loss is hidden from sight and intangible. Therefore, the code 'isn't really a significant problem' appeared to be closely related to hearing loss while other health conditions inevitably were perceived as more important. Participants seemed unaware of the testing procedures and the rehabilitation provided by hearing services. This lack of awareness contributed to participants trivialising the hearing issue and developing stereotypical ideas about hearing aids thus leading to rejecting them, which I will cover in the next section.

[Link 4](#) - 'Isn't really a significant problem' connected to 'Rejecting Hearing aids'

My participants' views indicated a general negativity towards hearing aids. Although participants were happy to acknowledge their hearing issues, they preferred to cope without having to wear hearing aids. The nineteen interviewed participants were asked about their views on hearing aids and, if they would wear one: only **two** of them expressed their tentative acceptance and stated:

"I think if I needed it I would probably go ahead and I would need to get used to it. Whether I'm going to get on with it or not that's another question." (P15)

"Well, if there's just that one type of, the one that I know of, as long as I've got to hear better I probably would. If you can't see them." (P2)

Both of these participants, although agreeing to wear hearing aids, expressed reluctance to use them. Participants implied negativity by anticipating that they may not be able to acclimatise to hearing aids and having apprehensions regarding the device's aesthetics. Those participants who had obtained hearing aids previously, also refused to wear them:

"The same day I got them, I wore them and then took them off and never wore them, after that (laughs)." (P6)

"I hear lots of noises, and I don't feel very comfortable. Because when I wear it for a little while, then I just take it out quickly." (P7)

One of the main reasons why people rejected hearing aids despite being prescribed them was their views on the insignificance of hearing loss. When prompted further about their dismissal of hearing aids, the same participants reported:

"I will try and wear them. But I can hear a bit yet it's not like I can't hear anything. If I didn't hear anything then I would definitely wear them." (P6)

"Because at the moment one of my ear is ok, I am getting by ok. I just get lazy in going (to get hearing aids sorted) as the time is passing now. My thinking is like whatever you may have if it doesn't bother you too much then you should have patience and be thankful and spend your life." (P7).

Both of the above quotes demonstrated the idea that hearing loss wasn't significant, provided that some residual hearing was present. None of the participants, when asked about hearing aids, expressed a willingness to wear them unless they exceeded their limits of enduring hearing loss.

"If it affects my ear like it doesn't exist then maybe I would say look I can't hear I need to get something done like a hearing aid then maybe I'll let them know but if it's not such a big thing then there's not really a point." (P4)

The concept of hearing loss not being considered a significant problem seemed to be underpinned by the negativity towards wearing hearing aids. The stereotypical ideas (which are detailed in the section with examples) related to hearing aids contributed to denying the significance of hearing loss and rejecting hearing aids.

[Link 5](#) - 'Isn't really a significant problem' connected to 'Hearing aids – stereotyping'

People generally associate hearing aids with the ageing process. Although some people suffered from hearing impairment in their younger years (below age 60), most participants considered hearing loss to only become a significant issue in old age. They believed hearing aids were acceptable as part of ageing meaning they stereotyped hearing aids as only being appropriate for older people. Hence, those who had some degree of hearing loss in their younger years, denied its significance.

“Mostly I think about them (hearing aids) if I get old, much older. Then by that time it would be better for me. Because when a person gets older these things tend to deteriorate even more.”

(P7 age group 50-55).

“I don't know I think it's because I look normal. Like you're supposed to be old to get hearing issues, you can't be young. Like there's a Mum I've seen at school, and she's got hearing aids.

And I look at her, and I think she's quite young and she's got two hearing aids? (shocked expression)” (P3 age group 35-40)

The participants distinguished between acquiring a hearing loss in younger years and older age. They perceived any hearing loss which wasn't caused by natural deterioration to be abnormal, thereby neglecting its significance. As a corollary, they believed that someone happened to acquire hearing loss in their younger years, it couldn't be severe enough to be aided with hearing devices. Therefore, hearing aids were only accepted as being appropriate for older people.

Interestingly, when the 4 older participants (aged above 60 years) were asked about their views on wearing hearing aids, they also trivialised their hearing loss and stated:

"I have no problem on the phone; only when someone speaks to me sometimes [conversations in person], I have to ask them again...I don't think I need hearing aids." (P11 age 65).

"I am doing fine without hearing aids, it's only my daughter, when she talks I can hear. It's only when everybody talks among themselves, I don't understand" (P6 age 78).

"Nobody has ever complained. My hearing is perfect in one ear. This side (right) I can't hear anything, but I do everything myself...I don't need hearing aids" (P12 age 67).

The older participants in the sample adopted various coping strategies whilst avoiding having to wear hearing aids. The hearing test results obtained for these participants could not be discussed to compare the participant's perception of their hearing loss with the actual degree of impairment. Although stereotypical views about wearing hearing aids were not explicitly made by the older participants, the rejection of hearing aids and not taking hearing loss more seriously was evident from their interviews.

Link 6 - 'Rejecting hearing aids' connected to 'Hearing aids – stereotyping'

Both these codes appeared under the salient code 'isn't really a significant problem' and were found to be interlinked with each other. Hearing aids were rejected based on the stereotypical association with old age and their visual characteristics. Most participants disliked the appearance of hearing aids as one of them said:

"I just know there's this big ugly plastic looking thing that people wear." (P1)

Although many didn't explicitly denounce the aesthetic appeal of hearing aids, they stated:

"Like I wear a scarf and if I was to wear one nobody would ever be able to see it." (P7)

"Like glasses are so much in fashion. You can have fashionable glasses but with hearing aids, you can't really have them within fashion, can you?" (P15)

People were only willing to wear hearing aids if they were not visible and were hidden with other accessories such as a scarf. Participants' negativity towards hearing aids was possibly fuelled by the lack of awareness or media coverage about them. The quotes above indicated participants' reluctance to wear hearing aids as they were not widely accepted within their communities.

Summary of the salient focused code 'isn't really a significant problem' and its connected codes

The code 'Isn't really a significant problem' was framed by participants' perceptions of the views of healthcare professionals who were approached regarding any hearing issue. The link with 'influential advice' from GPs depicted the approach they had towards people presenting with hearing loss. Six of the participants responses suggested a diminution of the importance of hearing loss by the GPs, an attitude that appeared to affirm an existing negative perception of hearing aids. Participants reasoned with themselves, searching for a cause and developed their own diagnosis and causes for their hearing problem. These perceptions were often accompanied by a comparison of hearing issues with other significant health concerns, which tended to trivialise hearing loss. When asked about wearing hearing aids, most refused to wear them, justifying that their hearing loss was not significant enough to require aiding. Hearing aids were rejected based on stereotypical views which included association with disability and ageing. All these aspects regarding hearing loss revolved around the concept that hearing impairment is not considered a significant health condition but rendered as a minor problem unless complete deafness is experienced.

Salient focused code **'family comments/views'** and connected focused codes (links 7-12)

The focused code 'family comments/views' was found to incorporate seven other codes. 'Family comments' represented the explicit and implicit involvement of family members through direct and indirect remarks reflecting the views held by others.

Link 7 - Family comments/views connected to 'Rejecting hearing aids'

Participant data revealed an overall aversion to hearing aids (see previous links 4, 5 and 6). When asked how they would feel about wearing hearing aids, most participants responded with some underlying reference to their family members. Although the majority stated their family would be very supportive if hearing aids were required, they also emphasised hearing aids would be worn only as a last resort. As participant (P1) reported about his hearing difficulties that he:

"Wouldn't do anything unless it gets to a point where I physically can't function. As long as I can go without them (hearing aids). It's just not my thing". (P1)

While another participant acknowledged the benefits of hearing aids, stating:

"if I can hear better with them then obviously (laughs) they (family) would be quite pleased with it." (P7)

But she also implied that her family might not accept her hearing aids and said:

"I wear a scarf and if I was to wear one nobody would ever be able to see it. They (my children) wouldn't be embarrassed about if I'm wearing something in my ear." (P7)

The idea of participants trying to comprehend how they think they would be perceived by relatives seemed to play a big part in their opinion of hearing aids. All participants implied they would wear a hearing aid only when absolutely necessary. As noticed from the above quotes, participants' rejection of hearing aids was not solely based on their views but also stemmed from indirect negative connotations from family views.

Link 8 - 'Family comments/views' related to 'Other significant health issues'

Comments by family members appeared to guide participants' prioritisation of different health concerns. Some statements explicitly demonstrated the link between the two codes whereas others were implied. Participants narrated the involvement of their family members in considering other health issues as being more significant compared to hearing impairment:

"We (me and my family) are concerned about all this MRI stuff and all that. My eldest would come home and he would be like 'Oh mum, did you go today to the appointment or whatever or what happened?' so they do ask. They are concerned about it... with a brain scan and everything, everyone is like it's serious, something's going on. (P3)

"They will say go to the doctor. My brothers are very protective of me they will tell me to go straight to and get myself checked out... when I thought I had a problem with my liver with a fatty liver, even though it's under control my brother pushes me to do right and do right by me." (P4)

Family members showed concern when what they perceived to be a significant issue was detected. They encouraged, supported and even accompanied participants to their appointments. Health problems considered significant were judged by the symptoms presented (e.g. pain, lump, discharge,

rash). However, hearing loss was not acknowledged as a significant problem. There seemed to be a sense of comicality linked with hearing loss, which could be noticed from participants' comments:

"I noticed it myself and then people that I speak with in my family they say to me that your ears need to get tested. They say that you can't hear properly there seems to be a problem with your hearing. You know like they normally make a joke about it and they're the ones who actually bring this up (laughs)". (P16)

"If it is a serious problem, many people (family/friends) come to find out and ask about it. Serious problems like heart problem or stroke. When you speak to someone about your hearing problem, someone says take salt and warm water and soothe the ear with that, some say drink this, put this drop, add this one. But none of it helps." (P11)

The quotes above imply disregard for hearing as a serious issue by family members. It was brought up in casual conversation while socialising and joking. The suggestion of adopting home remedies for hearing loss rather than seeking medical advice, further reiterated the negligent attitude towards it. In contrast, previous quotes (from P3 & P4) demonstrated the concerned approach shown by the family while another health issue was in question. The memo on 'family involvement in decision making' (see memo 6 on next page) clarifies how family comments contributed to the participants' views and actions.

[Link 9 - Family comments/views connected to 'Acknowledged struggle'](#)

Some participants reported that the initial recognition of the hearing issue originated in family comments. Participants realised their struggle to hear when it was pointed out by people around as demonstrated from the following interview excerpts:

“I noticed it myself, and then people that I speak with in my family they say to me that your ears need to get tested.” (P16)

“...like everybody at home like everybody's always complaining like I'm asking people to repeat themselves” (P3)

“...become increasingly frustrating for, for example for like my family members, and it just sometimes gets to me really in terms of sometimes when I can't hear as well as I could at one point in time.” (P1)

Memo 5 - Family involvement in decision making

Several interview transcripts revealed that participants quite often referred to their family, whether it was a close relative or someone they socialised with. Family involvement did not seem limited to just discussing health issues but also other general day to day life. Depending on, whether the family responded positively or negatively regarding an issue, it determined how people proceeded in that specific matter. If the family supported a concept, people would be more willing to embrace it while the same applied in opposite situations. If the family expressed pessimism towards an issue, people were reluctant to even inquire about it.

The code ‘acknowledgement of struggle’ also referred to the settings where hearing difficulties were noticed. Most participants mentioned situations involving family, which highlighted the extent of their hearing problem. Although people were generally aware of their hearing issue, it was comments from their family members that caused acknowledgement of it. Being aware of the problem was distinct from acknowledging its impact on daily life. Participants admitted to knowing they had a hearing issue but didn’t acknowledge the impact it had until family members were

involved. Participants became more conscious of their hearing loss after realising how it affected their interaction with their loved ones. A majority of the quotes comprising of family comments (see quotes in links 10-12) demonstrated participants' acknowledgment of their hearing loss. Where the hearing impairment impacted on what was perceived to be a 'normal' set of interactive behaviours in the family, and where hearing loss was noticed and commented on by family members, the participant was more likely to seek advice for their hearing issue.

[Link 10](#) - 'Family comments/views' connected to 'Hearing test'

Six out of nineteen participants were referred by family members to participate in the current research. Others were either encouraged or prompted by their family to have a hearing test, a tempting motivation for their willingness to participate:

"...everybody was complaining like you know you're deaf. Yeah basically like everyone was like saying that you're deaf and that's coz after I had told them to repeat themselves a number of times and I still didn't get it, and that's what it was. Like, you know what, you need to go to the... get it checked out." (P2)

"No, I told my mum about this, and she said yeah it's about time you get it done." (P10)

"I went there. They were talking in English. I had my daughter with me, and she was saying that get everything checked off (hearing test)." (P12)

The participants' decision to go ahead with a hearing test was triggered by someone in their family. The quotes above show that some of the family members directly suggested a hearing test while others implied it through their comments. For example, P16 reported that his family said: "You have

the TV up too loud” which then instigated his reaction to have his hearing checked. Comments from family and people around became a source of recognition of hearing loss for the participants.

Link 11 - ‘Family comments/views’ connected to ‘Self-controlled access’

Self-controlled access refers to participants’ preference for direct access to hearing services, where participants can control when and where they see an audiologist. Participants spoke about their GPs being a hindrance in accessing the hearing services. Some of the reasons for these barriers were initially trying to get an appointment with their GP and then further being assessed for a referral. They compared the direct access to opticians and dentists with hearing services:

“Where do I go for a hearing test? I don't know. I don't think anyone else in my family knows. It's like you go to your opticians. I know that.” (P10).

“The only thing that I'd like to add, is that like you got your sight. You've got your optician's out there you've got the doctors that are generic so then you've got, you know your teeth issues. You've got your dentist. It's like for hearing is also like a key thing that we all need to function. So it's like, it would be good in local communities if they have their own like little services available which are easily accessible. Whereas for the opticians you do not need someone you just walk into the opticians.” (P2)

The connection between ‘family comments/views’ and ‘self-controlled-access’ was deduced from comments made by my participants and supported by memos. Memo 6 attempts to clarify the link between self-controlled access and family comments. Having audiology appointments in informal setting would increase the possibility of more control, which also increases the possibility of including family views in the rehabilitation process. It would also mean that less practical support would be needed from family members, such as transport and childcare. As hospital appointments

seemed to hold a notion of formal and seriousness, this kind of support is sought from family whilst taking children into appointments at an informal venue would seem more acceptable.

Memo 6 - The connection between 'family comments' and 'self-controlled access'

The connection between these two codes was based on derivatives of participants' implicit preference. It was clear that people preferred to have direct access to hearing services, as is possible for opticians and dentists. The participant data suggested that a direct approach was favoured, due to having control over when and where hearing services can be accessed. This was inclusive of family comments as family could have more input regarding the services and possibly accompany them in the appointments.

Having to attend hospitals for audiology may need help from family as ethnic minority communities, especially South Asians associated hospital appointments with serious health problems and increases concerns among family. Like participant 2 said for opticians "you do not need anybody" implies that help from family is important for hospital appointments but not for appointments in informal community settings. Hearing loss was not considered too serious and therefore the pathway of accessing the hearing services also needed to be non-medical and more personal (self-controlled).

Link 12 - 'Family comments/views' connected to 'Preserving self-image'

The focused code 'preserving self-image' was derived from participants' efforts to adapt and manage with their hearing issue. There were some participants who expressed their fear of being treated differently if they openly declared their hearing problem to others (usually family, but not immediate family):

"I don't like people feeling sorry for me so I probably I'd.., I'd..., I wouldn't bother telling them" (P1)

"...don't want the fuss maybe." (P3)

"pretend like I'm some sort of patient that got some big disease and then start asking me if I'm ok if my health is ok and... (laughs)." (P11)

"But not everybody knows. Don't tell everybody. They feel sorry for me. They assume that I'm completely deaf, tell them that it's not that bad." (P7)

"what's the point in telling somebody about it." (P9)

The effort was to preserve self-image and not be distinguished as having a hearing problem. People were fearful of being treated differently and recognised as deaf. They felt, some family members would not understand the degree of hearing loss and would assume they were completely deaf. Due to these reasons, participants preferred to conceal and cope with it.

Summary of the salient focused code 'family comments/views' and its connected codes

The analysis showed quite substantial involvement from immediate family members in most aspects of an individual's life including their healthcare. Views on which health issues were considered serious and which weren't seemed to be based on a collective perception of the participants and their families. It was the family members who triggered the initial acknowledgment of several participants' hearing loss and encouraged them to have a hearing test. However, despite what the results may have shown, neither the participants nor their family seemed enthusiastic about using hearing aids, consequently rejecting them.

The preference of exercising control over accessing hearing services was not just limited to the location and the timing of the clinics but also included having a more informal and flexible environment where family could be involved. It was also a continuation of the idea that hearing loss was not a medical condition, rather more a personal situation and hence the importance of incorporating family views. Most participants stressed the importance of their family's views when making decisions about anything in their life, unless the medical professionals recommended something. Hearing loss being considered a non-medical condition was more inclined to become a topic of family discussion. All connected codes referred to immediate family, apart from 'preserving self image', which indicated the need to conceal hearing loss from extended family. Nevertheless, the immediate or extended family seemed to be included in several aspects discussed with participants in interviews. As most of the participants in the sample happened to be from South Asian backgrounds (with huge breadth that is contained within that umbrella term), the meaning of immediate family was not just the spouse and children but also included parents, grandparents, siblings, their partners, nieces and nephews. The extended family then might cover the aunts, uncles (both maternal and paternal) and cousins. Family relations are of the utmost significance in many south Asian communities. Definitions of family and extended family are detailed in the discussion chapter.

Salient focused code '**acknowledged struggle**' and connected focused codes (links 13-15)

The interview data suggested that the focused code 'acknowledged struggle' was linked to four other codes. Once participants acknowledged the struggle experienced due to their hearing issue, they expressed interest in having a hearing test to establish the degree of the loss, so suitable coping strategies could be adopted. The link between this salient focused code and 'family comments/views' was previously explained (see link 9). Therefore, in this section the connection

between 'acknowledged struggle' and the other three focused codes; 'other significant health issues' (link 13), 'hearing test' (link 14) and 'coping strategies' (link 15) are presented.

Link 13 - 'Acknowledged struggle' connected to 'Other significant health issues'

The definition for the focused code 'other significant health issues' was provided previously (see link 3 and 6), however in this segment, the implications of different health issues on an individual's life were highlighted through this code. Participants discussed the struggle they experienced due to more troublesome health issues in comparison to their hearing problems. The excerpts below contextualise the relationship between the two focused codes:

"I don't know what they're saying, why the laughing. I don't understand, so I just eventually go quiet... My thinking is like whatever you may have, if it doesn't bother you too much then you should have patience and be thankful and spend your life. But if it affects you more, for example, like my hand you can see a protruding bone, then I do sometimes think that I should go and have it operated on." (P7)

"You know what I've got really bad heartburn and just I have to get it done. With this kind of thing (hearing issue) no maybe, maybe I just been thinking that it's not that bad, you know because it's not pain and it's not something that's unbearable, I can, I can live with it, I have lived with it for the past 3 to 4 years so for that reason, I'm, it's not the same thing as if I was sat there and, and, like when I had the heartburn I had a really, really, bad sort of tummy pain right here (pointing to the abdominal area) and, I had to get it checked out." (P1)

"...like normal conversations at home I used to think that people were mumbling... it was basically speech, and you know even when they repeated themselves I couldn't understand them it's like they were speaking in a different language, even when they repeat themselves I

couldn't really catch on. To be honest...I more wanna get to the bottom of my brain scan rather than my hearing. That's my thing right now, my hearing, I don't think so." (P3)

Although people recognised the difficulties, they faced due to the hearing issue, they instantly reverted to the concern caused by other health problems which presented with visible or tangible symptoms. Although some struggle caused by hearing impairment was acknowledged, it was almost always compared against other health concerns to depreciate the effect it may be having on their lives.

Link 14 - 'Acknowledged struggle' connected to 'Hearing test'

All nineteen participants acknowledged that they had struggled because of their hearing issues. Eighteen of them consented and participated in having a hearing test at the end of their interviews. The majority who had a hearing test discussed situations where they felt their hearing had been impacting their lives. One of the significant motivations for having the hearing test was for them to understand the degree of their hearing loss. Participants' acknowledgment of their struggle provided the impetus for them to participate in the current study and have their hearing tested. The extracts below revealed this aspect in participants' own words:

"I did want to do a hearing test a private one like probably about 6 months ago. The fact that sometimes I can't hear so. Yeah I needed to get this done now you know." (P10)

"The problem that I have with the ears is that the noise in my ears is not clear enough like I can hear but I can't understand and when it's quite noisy then I don't understand any conversation like I can hear everything fine but I just don't understand what they said. I don't really know even I myself struggle to understand whether it's actually my hearing or whether it's not. I will know after I have my hearing tested (with you)." (P16)

Participants' views and observations during the interview process indicated their interest in having their hearing tested. None of the participants had accessed hearing services in their recent past (up to 3 years) and didn't feel they needed to but wanted to know the test results to better understand their hearing loss.

[Link 15](#) - 'Acknowledged struggle' connected to 'Coping strategies'

Subsequently to acknowledging the hearing problem, all participants' instantaneously developed ways of coping with it. In situations where people struggled to hear, they adopted strategies which would help them manage their hearing impairment. Participants reported how they coped when faced with difficulty:

"I had to position my chair very slightly slanted so I could actually hear. I tried to sit on the side of the table where you know my right side is, it's, essentially pointing towards the person the speaker so it does have an impact because you walk into a room and suddenly your thought process isn't just find a chair and sit on it it's more like finding the chair that's appropriate in the right position in order for me to sit so I can listen" (P1)

"I prod and poke my ear and play with my ear and I get to the point where eventually my ear is back to where it needs to be, where, I'm hearing." (P13)

"I normally do is just shut my eyes and (blowing out action) and just do that and then it unblocks like it's unblocked a bit like at the moment." (P14)

People preferred to use their self-developed coping strategies to minimise the effect of their hearing loss. Participants were willing to make amendments to their daily activities to try and resolve the hearing issue they had.

Summary of the salient focused code 'acknowledged struggle' and its connected codes

Despite the awareness of hearing impairment, people seemed hesitant to acknowledge their condition until family members highlighted the impact it was having on them, thus linking the codes 'acknowledged struggle' and 'family comments/views'. Once hearing loss was recognized, participants were keen to have a hearing test to gain awareness of the degree of their hearing impairment. The results would allow them to better understand the hearing struggle acknowledged and to devise coping strategies, hence the connection between 'acknowledged struggle' and both 'hearing test' and 'coping strategies'. However, the struggle caused by hearing loss was compared with symptoms of other significant health problems, which led to hearing being perceived as less important and this noteworthy factor demonstrated the link between 'acknowledged struggle' and 'other significant health problems'.

Salient focused code 'hearing test' and connected focused codes (links 16 and 17)

The code 'hearing test' has been introduced previously in connection with other focused codes (see links 10 and 14). The relationship between 'hearing test' and 'family comments/views' was established from participants' family involvement, encouraging them to have a hearing test. This salient code was also connected with 'acknowledged struggle' where a hearing test was required to clarify those difficulties. In this section, two focused codes, 'reacting to extreme needs' and 'coping strategies' are evaluated in relation to the 'hearing test'.

[Link 16](#) - 'Hearing test' connected to 'Coping strategies'

The link here was not derived from direct participant quotes but was based on analysing data, questioning codes and constructing abstract ideas (Charmaz, 2014). Data was questioned as to why participants wanted to have a hearing test, although they showed little or no interest in accessing hearing services. Comparing codes, exploring the relationships formed, and deducing the implicit meanings from participants' words revealed the connection between the two focused codes. A hearing test would provide necessary information enabling participants to better manage the impact of their hearing loss. For example, P1 said "I put my right ear forward" (implying a loss in his left ear) which the hearing test would have confirmed or rejected, influencing the way he copes. Some participants were sceptical about their hearing loss and needed evidence:

"Even I myself struggle to understand whether it's actually my hearing or whether it's not. I will know after I have my hearing tested." (P16)

One of the participants, when asked why he wanted a hearing test, he replied:

"I don't know, I feel I'm deaf (laughs)." (P10)

The complete narrative was understood when examining people's perception of acquiring hearing aids (see links 4, 5, 6 and 7). If no hearing rehabilitation was considered, even after the test results recommended them, it was appropriate to infer that the test results would have been used to guide coping strategies. Therefore, the connection between 'hearing test' and 'coping strategies' emerged from critically analysing the codes (Charmaz, 2014).

[Link 17](#) 'Hearing test' connected to 'Reacting to extreme needs'

The code 'reacting to extreme needs' aimed to illustrate the idea of how much difficulty people were willing to endure before seeking hearing services. The 'extreme needs' referred to when hearing problems would reach profound or complete deafness, adversely affecting the individual. The majority of participants referred to their hearing issue as not '*a big enough deal*' (P2, P3, P9, P11, P14) and when asked, at what stage they envisaged themselves seeking hearing services they reported:

"Wouldn't do anything unless it gets to a point where I physically can't function" (P1)

"If I would feel that I couldn't, and I wouldn't be able to hear anything then I would run to them (hearing healthcare professionals)." (P7)

"When I really can't hear anything." (P18)

All participants stated that they would only seek professional advice if they couldn't hear anything. People were aware that one of the first steps towards accessing hearing services was a hearing test. However, none of the participants had had a hearing test in at least the previous three years. My study appeared as an informal, direct pathway to a hearing test and hence was taken as an opportunity to have their ears tested. Otherwise, participants implied that they would have only gone for a hearing test when experiencing profound hearing loss.

Conclusion of focused code analysis

The data analysis showed emergence of 13 focused codes from which four appeared more salient; 'isn't really a significant problem', 'family comments/views', 'acknowledged struggle' and 'hearing test'. All salient focused codes were interlinked with other codes through conceptualisation. The participants' general consensus about hearing loss was that it was considered insignificant, especially when compared with other health concerns. The code 'isn't really a significant problem'

was extracted from one of the participant's quotes as it represented all views related to it.

Participants' perceptions of insignificant hearing loss were supported by their GP's responses and negativity towards hearing aids. There appeared to be a general dislike for hearing aids due to stigmatisation and stereotypes linking hearing loss with old age.

The second salient code 'family comments/views' was based on noticeable involvement from family and friends in participants' health-seeking behaviour. This code appeared central to six other focused codes, which included immediate family's engagement in highlighting the hearing loss, encouraging participants to go for a hearing test and emphasising the importance of seeking healthcare for other serious conditions. Family comments implied trivialisation of hearing loss which contributed to participants' ideas about having direct access to hearing services in less formal locations than hospitals. The other aspects were associated with extended family, where participants endeavoured to conceal their hearing issue from them, due to the negativity sensed with regards to hearing aids. In the current study, it was noticed that participants relied heavily on direction and support from immediate family members. Therefore, family comments and views emerged as one of the most prominent codes.

The code 'acknowledging struggle' also appeared prominent where, although participants acknowledged their hearing issue, did not consider it to be as significant as other health issues. Once they acknowledged the hearing loss, people preferred to devise coping strategies to minimise the impact of it on their lives. The fourth salient code was the 'hearing test' which all participants were willing to have in order to understand the extent of their impairment. However, in general, hearing services were not considered or approached for a hearing test unless their hearing loss worsened, or the person was perceived to be completely deaf.

The refined, focused codes were broken down to their components and analysed to “weave the fractured story back together again” (Glaser, 1978: 72). The concepts that emerged from the connectivity amidst focused codes were scrutinised and explored further. The analysis of connections raised the level of abstraction through conceptualisation, progressing to the development of categories. Categories are the main concepts which would hold up what was found in the data (Charmaz, 2021). I detail the development of my categories in the next section.

5.7 - Stage 6 Developing categories

Analysing the focused codes brought forward the salient concepts which were developed into three main categories, while the subcategories were found to be the properties of those. The terminology used for the categories was precisely selected to ensure they represented the true characteristics of the data relatable to the participant’s voice and to address the research question. Charmaz (2014) advocates using gerunds to move “static topics into enacted processes” (p.245). The coding terms used previously described a situation or an event which when refined, shifted towards processual analysis capturing participant actions or behaviours. Figure 11 shows the thirteen refined focused codes which were analysed and re-labelled with gerunds. Two focused codes were kept the same, two were combined whilst the rest moved towards representing enacted processes. The semantically changed codes became the subcategories that developed into three main categories.

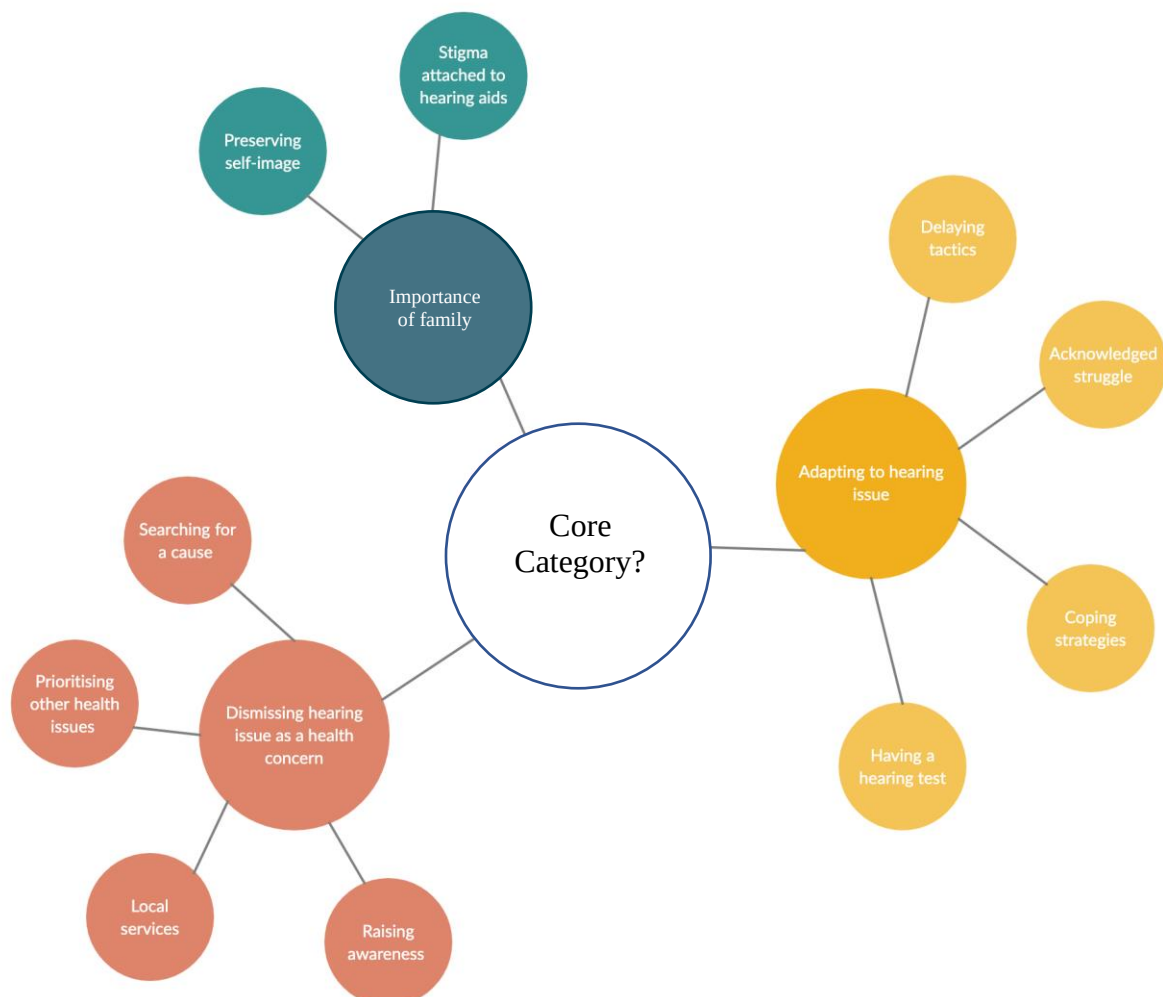
Figure 15 - The transformation from focused codes to subcategories and three main categories



The three main resulting categories were **‘importance of family’**, **‘adapting to hearing issue’** and **‘dismissing hearing issue as a health concern’**. Each category was specified with sub-categories which were also derivatives of the focused codes with raised abstraction and changed terminology. Two sub-categories, ‘importance of family’ and ‘dismissing hearing health issue as a health concern’

retained their label and were used to title the main categories as they sufficiently represented the concepts being expressed. Figure 12 shows the colour-coded sub-categories which represent the distinct components and properties of the main categories. The resulting three main categories address the main aims of the research and explain the views of south Asian participants regarding their hearing issue. The core category was not identified at this stage as it required further analysis of the three categories through theoretical sampling and, delving deeper into their meaning and connection with each other.

Figure 16 - The three main categories and their subcategories



5.7.1 Theoretical sampling for theoretical saturation

Theoretical sampling is a process where additional participants are recruited to achieve data saturation (Charmaz, 2014). In this research, a further three participants were recruited (participant 17-19) to explore and saturate the properties of the three main categories. The relationship between these categories was analysed, strengthening my data and providing more depth and precision to them (Charmaz, 2014). These links between the categories were explicated through analysing their subcategories and also satisfying their properties through further recruitment (Bryant, 2007). The aim was to interpret the participants' ideas with abstract conceptualisation and move the analysis forward to generalisability. This reflected upon Glaser's (1989) classical GT which suggested starting from a specific topic and developing into a more general theory. According to constructivist grounded theory, both the researcher's interpretation and the participant reflection should be combined to formulate a comprehensive theory. In both grounded theory approaches, no rules or guidelines are imposed to direct the data analysis in a certain way. However, Charmaz (2014) recommended remaining fluid and allowing the analysis to flow, unravelling its own unique theory. Each of the three categories and the sub-categories were compared against the new interview transcripts demonstrating theoretical saturation to an extent, with reference to participant quotes. The findings which were established after collecting more data and achieving data saturation are presented in the next chapter.

5.8 Summary

Constructivist grounded theory was used to analyse the interview transcripts. Initial coding, followed by focused codes resulted in the emergence of three main categories and sub-categories. Memos and reflexivity journals were written to clarify my position as a researcher embedded within the field of study and how the data was constructed with my interactions with the participants. Various tools were used to analyse the interview transcripts, starting with manual diagramming, highlighting,

organising tables and using NVivo software. Each tool helped to develop codes which were analysed and refined with every progressing stage. Eventually three main categories were developed with their subcategories. The next chapter presents the process of achieving theoretical saturation through further data gathered from three more participants.

Chapter 6 - Qualitative Findings

6.1 Introduction

This chapter presents the findings of the qualitative data analysis which includes the three main categories and the sub-categories. A category consists of a collection of similar concepts which are then used to generate a theory (Charmaz, 2014). According to Charmaz (2014) a theory can be presented in the form of concepts, a statement, a framework or even a list of solutions. The findings developed from analysing 16 participant interviews in total. In accordance with constructivist grounded theory and aligning with theoretical saturation, further three participants were recruited to ensure that no new data emerged. The already identified categories were inquired in the interviews with three more participants which returned with similar findings and therefore data saturation was assumed. The process of how data saturation was achieved is detailed in the sections below which are separated by each of the main categories. The three main categories are presented with reference to the data of the last three participants. The current study assumed theoretical saturation based upon the last three interviews, which did not produce any new codes, but reaffirmed the established codes as the grounded theory researchers suggest (O'Reilly and Parker, 2013).

6.2 Category 1 – Importance of family

This category highlighted the role of family in influencing the health-seeking behaviour of the participants. The terminology of the focused code 'family comments/views' was developed further, focusing on the perspective of the participants which resulted in one of the main categories and was titled 'importance of family'. Two sub-categories 'preserving self-image' and 'stigma attached to hearing aids' were found to be related closely to this main category. All participants referred to their family members when speaking about various aspects related to their hearing issue.

Most participants indicated that family involvement functioned as a support network for them. Views of family members influenced the participants' perception of their hearing issue and other health concerns. Most people portrayed a selfless attitude, which appeared to be a cyclical, intergenerational process. Middle aged individuals of south Asian descent prioritised their elderly parents' health, while the elderly parents felt they have lived their lives and the younger generation needed to look after themselves. Loved ones were always a priority in seeking healthcare rather than personal care.

"I prioritise with my mum I am quickly on the phone to the doctor's and I don't do that for myself" (P17)

Parents gave precedence to the health of their children while neglecting their own as Participant 19 said:

"I don't go if I need an appointment for myself or book it. I'll be ok. But, when it's about my girls I'd have them treated. I'd have them treated straight away." (P19)

The role of being the carer automatically requires appearing strong and able, hence the need for concealment of any ailment and hearing issue which can easily be hidden. Preserving self-image was identified as one of the aspects which also explains the category 'importance of family' from another aspect.

6.2.1 Sub-category - Preserving self-image

The importance of making strenuous efforts to maintain an image of normality and stability amongst family was expressed by my participants. The definition of normal is directed by what is accepted

and rejected within the social circle. Having a hearing issue impacting life was not considered normal and was therefore trivialised and its impact unrecognised to preserve self-image. However, this category wasn't limited to concealing the hearing issue from others but for some participants, it also meant neglecting it as a health concern. When I inquired about including the participants' family in their hearing issue the response from the three last participants pointed towards preserving their self-image by trivialising its impact among family members:

"I think because obviously I can hear things when somebody calls or I can, it's like at the moment I'm fine I can hear noises... nobody in my family has actually got them (hearing aids). So they would be surprised if that's something I would be getting but I don't think my hearing is that bad that I need hearing aids. There are techniques I have developed (lipreading) over the years so I think I'm ok. I think it's a self-image thing like glasses could make you look cooler but I don't think hearing aids do. I am self-conscious you know like I don't think... I got kids and family and mum and dad, and everybody, I think, I think that I put everybody else's needs first." (P17, Female, Age 35).

"It's not something that's very talked about or taken serious as in the hearing issue... like things that affect your daily life um... uh... in a very obvious way... things that you can feel on a regular basis. The impact is just general conversations it could be just from room to room, but it could be that I haven't been paying attention (laughs). And mainly I'm relying on feedback from my family. They would think (about wearing hearing aids) it is something strange because, because my wife is British and even in her family it's only her nanny (grandmother) who has them and it's not very common and my Maldives side is nobody that I know has them and it's not that common in the Maldives anyway to see people wearing hearing aids." (P18, Male, Age 45).

My hearing, it's not a problem for me. My hearing wasn't really an issue for me it was just the blockage and if the blockage and infections were cleared up then I wasn't bothered...

Well the idea of it is quite scary having a hole drilled in your head (for a bone conduction hearing aid) so my husband, he said no, he said no don't do that. He said you'll be better off if you don't have it." (P19, Female, Age 38)

All three of the participants above trivialised their hearing issue and its impact. They included how their families would react if they acknowledged their hearing loss and needed hearing aids. This was instantly compared against how many others in their family unit (close or extended) had hearing aids. The image of normality would be compromised with hearing aids and so the persistent need to preserve self-image. Participant 20 strived to be a mother and a wife, looking after everyone in the house but she neglected her hearing issue, possibly to avoid being perceived as inadequate in performing her expected role within the family. Therefore, she strove to preserve her self-image which would discernibly be jeopardised by wearing hearing aids. The reasons why hearing aids were rejected was their link to stigmatisation and appearing less capable.

6.2.2 Sub-category - Stigma attached to hearing aids

All participants, apart from two, were not aware of the hearing aid benefits, therefore automatically disapproved of them. The negative attitude stemmed from stigmatising hearing loss as a disability which was apparent from the participant's response on wearing hearing aids:

"...hearing aids, I think are to do with a little bit of an image kind of thing. I think that a certain amount of that disability thing is linked with hearing aids but it's not socially attractive, especially like when you have gatherings, like you go to weddings. It's not like glasses and that, but I think that disability thing is like always in the back of your mind kind of thing." (P17)

"I think it is because, it's (hearing issue) called kind of a disability and there may be something about this thing in society where there are other illnesses which are linked to disability but can be seen as they are more obvious. With hearing you don't have to make it that obvious when you are with a group of people... like family gatherings, where people all talk together... they would be conscious about wearing hearing aids like glasses I think it's not as bigger problem nowadays. Because there are more people wearing glasses but also they can be made to look trendy as well but not with hearing aids" (P18)

"It'll be really, really, hard in that sense because it's quite visual the ones that you get. I would be thinking that you know the stigmatisation you get, I will be thinking that people are looking that they are deaf and things like that because I, as a youngster I did struggle being deaf. But I didn't want to wear hearing aids which people could see. I think they would think like oh, look at her she can't hear me and automatically talk louder or talk differently or slower which makes you feel stupid... and you know you're not actually dumb, you're not actually uh... lacking intelligence that you can't understand, but you just don't have the ability to hear the words. (P19)

The stigma related to hearing aids appears to be prompted by South Asian cultural and societal ideologies where hearing loss was still perceived as a disability to be resented and concealed if possible. The decision to get hearing aids involved engaging with the opinions of family members and was not an individual matter. The views, inseparable from family, caused a stigmatisation of hearing loss and hence negativity towards hearing aids.

The two subcategories were linked to importance of family in different ways where, 'preserving self-image' was to maintain a certain reputation among family. Stigmatising views originated from

associating hearing aids with disability and the need to preserve oneself from that image.

Participants' views of hearing issues and hearing services were based upon what they thought would have been their family member's opinions. The next category gives further insight into these views of participants and their family members. Although three distinct categories were formed based on the most prominent concepts, it must be noted that all categories were interlinked with overlapping concepts.

6.3 Category - Dismissing hearing issue as a health concern

This category was refined from the code, 'isn't really a significant problem' underlined with multifactorial characteristics which were all directed towards dismissing the hearing issue as a health concern. The four sub-categories underpinning this category included 'searching for a cause', 'prioritising other health issues', 'local services' and 'influential advice'. As stated before, the general consensus among participants was that their hearing issue was not a significant health issue. The subcategories within the category of 'dismissing hearing issue as a health concern' are presented in detail with contextual background to support the findings.

6.3.1 Sub-category - Searching for a cause

Participants appeared to be searching for a cause of their hearing problem. They generally emphasised other factors which contribute to their hearing loss but did not acknowledge the hearing impairment itself. Participant 19 felt *"it's probably wax"* (P18), while other participants said:

"I don't know, it's probably not my hearing but I just got into the habit of lipreading since I had my little boy about a year ago" (P17)

"I think it's something because of my dad. I'm not sure but it was there since I was born. The health visitor found out something wasn't right in my right ear. Only the left side works."

(P19)

This is an example of a participant perceiving their hearing loss to be a side effect of other issues and they formed personal opinions about what they thought was the main cause. Most of the reasons given in the interviews were not based on individual perception.

6.3.2 Sub-category - Prioritising other health issues

The complacent attitude towards hearing was reaffirmed by prioritising other health issues above hearing. Participants often compared the effect of a hearing loss to other health concerns implying that hearing wasn't considered a proper health issue. Participants' spoke about other health issues in comparison to their hearing difficulty:

"It's not top of our priority. I would go in for other things like if I was in a lot of pain." (P17).

"When you're having to change, modify your lifestyle and also things that you can feel on a regular basis for example pain and illnesses and diseases." (P18)

"I had fractured my wrist and I went privately to have it seen, but like that hearing is not something which is too big of a problem" (P19)

Other health problems and illnesses seemed to take precedence over any hearing issue. Although hearing difficulties did not always merit immediate need for treatment, the gradual negative impact on the individual's life could not be entirely dismissed. However, hearing issues were not categorised

as a health problem but seemed to be classed as a social concern. Such views were meticulously linked to the participants' preference not to access hearing services through their GPs.

6.3.3 Sub-category - Local services

This subcategory was refined from the code 'self-controlled access' which was based on the concept of participants' preference to be able to access hearing services, in a similar way as opticians, dentists and GPs. Initially, the code self-control pointed towards being able to have direct access to optometrists and dentists without going through a referral process. It was further refined to explain participants' words which indicated they would be willing to access hearing services if they were incorporated in local healthcare. As Participant 18 said:

I think you would have to go through your GP, wouldn't you? If you go through them then they will decide, ok let's send you for a hearing test but getting an appointment sometimes is so difficult and your hearing is not really urgent" (P18)

Going through the GP seemed to be a barrier in accessing hearing services as people assumed their doctors would not consider their hearing as a serious concern. A memo (see memo 7) which was written during data collection regarding this concept highlighted how it aided the development of the subcategory 'local services'. In addition, participants expressed how difficult it was to get an appointment at the GP followed by long waiting lists to be seen at the hospitals. Some people just wanted to have a hearing test while others needed advice regarding hearing care and hearing aids without the feeling of being tied down by hospital obligations.

Memo 7 - Local services - why people preferred the way they access opticians but had not hearing services?

Participants prefer to have control over the services they chose to access. Comparison has been made with other services to show the simple open access policy that other services have adopted.

It could possibly be due to arrangement issues but also may be linked to more psychological aspects. Is it control over appointments and flexibility of access?

OR

Feeling in control over their own hearing tests, eliminating the inclusion of GP who decides whether a referral to hearing services is feasible. Participants have revealed negative experiences with their GP regarding hearing issues. It was almost as if participants felt embarrassed to discuss their hearing problem because it was not considered a real health concern. Some participants spoke about the difficulty of getting an appointment at their GP practices while others who had seen their GP expressed their reluctance to consult them about their hearing “I've been, but I haven't told them about my hearing” (P4). Four of the participants who spoke about their GPs told me that their GPs also belonged to South Asian backgrounds, which could be a contributing factor in reluctance to discuss hearing issues.

Participants would like to have just a hearing test like an eye test without feeling the pressure of being offered hearing aids. Participant data highlighted self-controlled access. How this could be facilitated? Possibly by incorporating hearing tests in local services such as GP practices or community-based locations. Therefore, the label ‘local services’ was chosen to replace the previous terminology used.

6.3.4 Sub-category- Influential advice

This subcategory was previously known as the code 'influential advice' (GP responses), however progressing through analysis, participants' quotes revealed being influenced by advice from others which also included the GPs. Some participants hadn't approached their GPs, but those who had were given a dismissive response. Transcripts of the last three participants demonstrated implicitly being influenced by the GP surgery team, even though it was not a direct dismissal by the GP.

Participant 17, when asked if she had ever expressed her hearing problem to her GP, she responded:

"No. Because I feel like you know, whenever I go to the GP it's like literally, for stuff like, oh my God if I don't go now that I would end up in hospital or something like that so when I do go to my GP it's for serious stuff like this is not... like... that has a major impact on my life so I didn't go for this." (P17)

Participant 18 suggested that he failed to get an appointment at his GP as they did not consider hearing to be an urgent issue:

"I did try to have a hearing test a few months ago but I couldn't. The appointment system, it's very complicated, you have to keep on phoning again and again... and basically they want to give it (appointment) to you if it's urgent." (P18)

Participant 19 expressed similar views:

"I don't unless I am really, really, really unwell, If I'm really desperate otherwise I wouldn't phone the doctor for small things. I just take medication like if I have a headache or something, I'll take paracetamol. GPs are so busy; I don't want to waste their time." (P19)

All three participants suggested apprehensions about seeing their GP for their hearing issues. They implied reservations towards causing inconvenience to their GPs. This led to questioning why people felt that their GPs would not give any precedence to their hearing and the answer for this subcategory was devised by re-visiting previous interview transcripts which revealed some reasons given by previous participants, for example:

“Every time I go to my GP, he just prescribes paracetamol. It’s like he isn’t really interested in knowing anything and I personally think that they don’t have enough time for patients... for my hearing I was told it was just wax and not to worry” (P10)

Participants suggested feeling pressured by the time constraints which resulted in only discussing important health concerns. They visited GPs with preconceived ideas that hearing loss wasn’t a significant issue and therefore excluded it from their priority list. An influential aspect may have been advice from GPs, nurses and other healthcare staff. One participant highlighted that even the information leaflets at the GP surgeries failed to prompt hearing healthcare. She stated:

“I don’t remember ever seeing any advertisement for having a hearing test at my GPs” (P9)

Most participants endorsed the idea that hearing loss was not a concerning health issue and did not require accessing health services in comparison to other medical problems. This category of dismissing hearing issue as a health concern was formulated after initially denying the hearing loss by searching for other causes, prioritising other health issues, and reiterating these points by suggesting that hearing services should be based in the community. According to the interviews of my participants, the lack of prioritisation of their hearing loss was further cemented by attitudes of primary healthcare workers.

6.4 Category - Adapting to hearing issue

The category 'adapting to hearing issue' was developed to encompass four focused codes which had a strong connection but none of the terms used in those codes justified what they entailed.

Therefore, an overarching title was chosen which resulted in this category and four subcategories; 'delaying tactics', 'acknowledged struggle', 'coping strategies' and 'having a hearing test'. Adapting to hearing issues was usually initiated by delaying acknowledging it, moving gradually towards recognising it and once it was established, strategies were devised to help cope with that hearing problem. A hearing test was appreciated to understand the depth of the issue so informed adaptations could be made. The following sections discussed the four subcategories in detail with reference to quotes from the three participants (17-19) chosen in accordance with theoretical sampling.

6.4.1 Sub-category - Delaying tactics

Once the hearing issue was established, seeking help, or gaining further information was not mentioned by the participants. They spoke about strategies which indicated delaying seeking any help with regards to their hearing issue:

"I don't know maybe, I don't know if it's like my hearing, I'm not 100% but I don't think I am that bad so don't need anything yet." (P17)

"...you could go and have your hearing done, when you're having to change, modify your lifestyle. At the moment I'm ok." (P18)

I know I always keep thinking that I'm going to go. I'm going to go back to the hospital to go and have it done now. But at the same time I'm, you know life just gets in the way and you forget about it. It's not a big deal in the sense of that, you know you can't hear." (P19)

Participants set their own benchmarks as to when they would access hearing services. Those interviewed earlier in the study implied reacting to their hearing issue only if extreme difficulty was experienced, such as profound or complete deafness. People preferred not to seek help for any hearing difficulties as long as they were able to cope with it.

6.4.2 Sub-category - Acknowledged struggle

The first step in understanding what hearing loss entailed was to acknowledge it. The following quotes from the last three interviews demonstrate those situations where the participants initially realised their hearing issue:

“I think I, since the past few years, since I had my children, noticed it more... At home it’s the same sometimes like my daughter or someone says to me that I said this to you, and I say I never heard you.” (P19)

“uhhh it’s not kind of established. But sometimes I didn’t hear properly there’s a difference between my left and right. There are times when I have noticed but there have been times when I haven’t noticed and I think sometimes my family has complained.” (P18)

“Yeah if I’m upstairs or if he’s upstairs then I can’t hear him I have to have the doors open between the rooms. I wouldn’t hear him no but if he was crying, I won’t hear him straight away but because I’m aware that I can’t hear I have to go and check.” (P19)

The participants mentioned acknowledgment of hearing loss being initiated by comments of family members. The role of family in acknowledging the hearing issue was in alignment with the views of previously interviewed participants, indicating saturation of this sub-category. Participant 20 discussed the struggle she experienced in looking after her 2-year-old son. She weighed the difficulties against the impact they had on her family. When reflecting on recognition of hearing issue by the participants, memo 8 highlighted the main category emerging from the analysis:

Memo 8 - Recognising hearing issue

Whenever the participants were asked to talk about their hearing issue, most of them began by explaining how they had first noticed it. Participants recognised their hearing issue through involvement of others (usually family members). It seemed like people did not consider their hearing loss to be an issue until it was noticed and raised as a concern by others around. Probably because generally hearing loss was trivialised and not recognised as something that seriously affects a person's life. However, the impact was recognised only when it was seen to affect close family, otherwise it was kept hidden and self-managed in silence.

The sub-category 'acknowledged struggle' was interlinked with the main category 'importance of family' (see memo 9).

6.4.3 Sub-category - Coping Strategies

Participants devised their own strategic plans to overcome their hearing issue as Participant 18 said:

"I lip read a lot. When somebody is not talking loud enough. I automatically look at people's faces. If I can't see them, I feel like I need to watch them to hear what they say." (P17)

Other participants stated, asking people to repeat or speak more loudly (P19), keeping doors open between rooms (P20) and just dealing with the hearing loss on a day-to-day basis, resounded with all participants' views interviewed earlier in the study. All coping strategies signified adaptations made to counteract the impact of hearing loss.

6.4.4 Sub-category - Having a hearing test

This sub-category supported the idea of people wanting to have their hearing tested which seemed convenient through participating in my research. However, two of the last three interviewed participants did not sustain that concept. Although P17 and P19 did opt for the hearing test they were more pleased to have the opportunity to discuss their hearing issue. However, when P17 was asked if she previously had a hearing test, she replied:

"I think we lead a busy life and I'm working full-time and you know there's 100 other things so it's not top of our priority list is it." (P17)

Memo 9 is an excerpt written during analysis which demonstrates the interlinking relationship between categories.

Memo 9 - Analysing the interlinking relationship between categories

Participant 17 spoke about leading a busy life and not having the time to focus on her hearing loss. She mentioned her priorities, using the terms 'we' and 'our' which indicates a collective opinion. The participant automatically included her family which was her husband and children who she had spoken about during the interview. Her comments suggest that her decision for seeking hearing services would be in consideration of her family's views. Although the conversation was about having a hearing test, the link between 'having a hearing test' sub-category and the category 'importance of family' can be understood.

P19 had suffered from a fluctuating hearing issue and infections since her childhood and was seen by the paediatric audiology team. She was fully aware of the degree of her hearing loss and the hearing services offered and hence her participation in my research was not due to the incentive of having a hearing test. When she was asked about the last time she had a hearing test, she reported it was at least 15 years ago and the reason for that was:

"Just time, I think. I think to myself no I'll do it and just something else comes up and you forget about it." (P19)

Participant 18 spoke about having his hearing tested through this participation and reported:

"I did try to have a hearing test a few months ago but it didn't complete because of the wax in my ears or they decided it's better to actually have my ears checked first so then thought when we got to talk it was a good opportunity for me to have my hearing tested." (P18)

Seventeen participants (including the previous 16 and one of the last three) agreed that they wanted to have a hearing test to be better informed of their loss and gain a greater insight by discussing their results with me. The sub-category 'having a hearing test' showed people's willingness to have their ears and hearing checked regardless of their views on having hearing aids.

The main category 'adapting to hearing issue' was supported by four sub-categories, in which people were found to delay the acknowledgement of their hearing loss. However, the struggle was recognised in conjunction with their family views. Subsequently, coping strategies were adopted to minimise the impact of their impairment, while participation in the current study allowed people to become familiar with the extent of their hearing issue by having a hearing test. Two participants highlighted that the hearing test, not only provided the results but also an opportunity to discuss and obtain guidance from an informed outsider.

6.5 Summary

The findings of the qualitative data analysis show that all my participants preferred to adapt to their hearing issue while continuing to delay seeking hearing services. They assess the hearing difficulties and devise coping strategies which help in becoming accustomed to their hearing issue. The hearing test was welcomed by all people, but only to be used as a further tool which aids in adapting to their hearing loss. Amongst all these stages of dealing with hearing loss, participants almost always included their family and their views emphasising the importance of family involvement at all stages of their hearing issues. The general negativity towards deafness in people from south Asian communities resulted in people preferring to conceal their hearing problems while preserving their self-image by staying clear of being stigmatised as being disabled. Therefore, regardless of the degree of hearing issue, it was dismissed as a health concern while searching and focusing on other aspects which may have caused it. Hearing loss was not prioritised in comparison to most other

health issues and so the idea of being able to access hearing services at a local level was suggested by the participants. The dismissive attitude was not limited to the participants and their families but according to four participants it was also endorsed by their GPs.

Although the three categories and their subcategories have been presented in separate sections in this chapter, they are all interlinked through some core concepts. These underpinning core concepts are elaborated on by consulting the extant literature and developing a model, presented in the following chapter.

Chapter 7 - An Explanatory Model: Perceptions of people from South Asian backgrounds about hearing issues and hearing services

7.1 Introduction

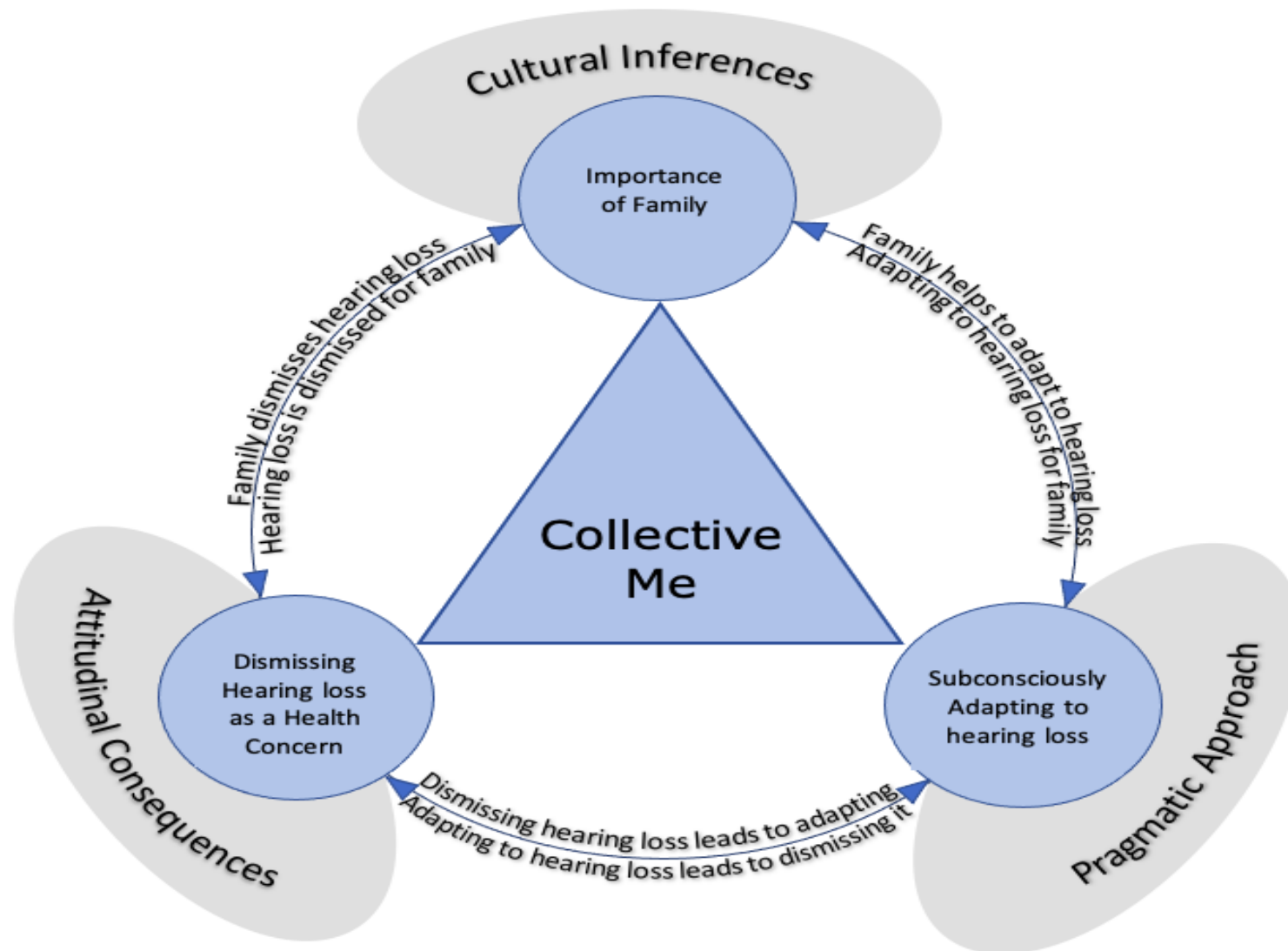
This chapter presents the resulting explanatory model developed to explore and understand how people from South Asian backgrounds perceive their hearing loss and uptake of hearing services. Central to this model is the concept of the 'collective me,' which encapsulates the collectivist culture underpinning the south Asian participants' decision-making and behavioural patterns. The model has been constructed not only to inform South Asian communities but also to guide healthcare professionals and researchers in tailoring culturally relevant interventions. The chapter begins by describing the model's structure, the three main categories, the overarching themes and its core category. Following that, a comparison between the model presented in this thesis and other health-related models is presented to position the new model within the broader healthcare field and highlight the model's unique contribution to knowledge.

7.2 The Explanatory Model of Hearing Healthcare and its Components

The model was structured from the findings of my study, and it provides an understanding of the views of people from South Asian communities on hearing healthcare and why they were reluctant to access hearing services. The three main categories all encompass a 'collective me' underpinning which became the core category of my research and is presented as the central component of this model. The first category, 'Importance of family' was strongly associated with 'collective me', as family formed the initial collective group, whose views were given high priority. The second category, 'dismissing hearing loss as a health concern' was linked to the collective views where hearing loss was trivialised. The dismissive attitude emerged from the collective perceived stigma

and stereotypical views linked to hearing. The third category indicated how family as a collective helped in adapting to the hearing difficulties. The support in coping with hearing loss, although helped in overcoming some hearing problems, also prevented people from seeking professional help. My study draws on three interrelated categories: the importance of family, adapting to hearing loss, and dismissing hearing loss as a health concern to explain participants' perceptions, attitudes and behaviours toward hearing health. Family influence often shaped how individuals evaluated their hearing difficulties, with feedback or assistance from relatives which usually contributed to participants' adaptation strategies. The link between family and dismissing hearing loss was apparent from the comments of participants' family members where hearing loss was trivialised. Additionally, those who had hearing difficulties also considered their hearing loss to be insignificant when compared to the collective health issues of the family. Dismissing hearing loss and adapting were interconnected as people who adapted to hearing loss in their daily lives eventually dismissed it as a health issue. Those who did not acknowledge their hearing loss and any hearing difficulties were then managed through coping and adapting. These links are illustrated in the explanatory model of hearing healthcare.

Figure 17 - The Explanatory Model of Hearing Health in South Asian Communities



The three overarching themes above the three categories; cultural inferences, pragmatic approach and attitudinal consequences represent the functional aspect of the three main categories. I identified the three overarching themes when critically analysing and establishing what causes the three main categories and why the data resulted in their development. The importance of family in South Asian communities was caused by their specific 'cultural inferences'. The 'dismissing of hearing loss as a health concern' was caused by the attitudinal consequences of people towards their hearing loss. Finally, the 'subconsciously adapting to hearing loss' was the pragmatic approach people adopted and the practical choices they made due to their hearing problems. The three overarching themes provide a multi-layered explanation of the three main categories.

My model shows that through cultural inferences, family was an important factor. People from South Asian communities preferred to have their family involved and their family views considered when deciding the course of their hearing healthcare. The involvement of family was a major cultural aspect of South Asian communities (Stud, 2020). In the same manner, dismissing of hearing loss was an attitude which was noted throughout the interviews. This attitude included people who experienced hearing difficulties and also reflected the attitude of close family. Both the cultural inferences and the attitudinal consequences guide how people practically responded (pragmatic approach) to their hearing loss. The participants, at times were not even aware that the practical changes they made in their daily life were to compensate for their hearing loss. Patients with hearing loss subconsciously adapted to different situations without attributing their difficulties to hearing loss. This type of response where people subconsciously adapted, underscored the pragmatic strategies commonly employed by people of South Asian backgrounds.

7.2.1 Category 1 - Importance of family

Importance of family was illustrated in the model as one of the three found main categories. This category captures how family relationships significantly shaped health-seeking behaviours among participants, particularly in the context of hearing issues. The importance of family was identified as multidimensional. It incorporated the views of family, the perceived cultural norms instilled by family and the expectations within a family unit.

The south Asian participants in my study constantly prioritised the health and wellbeing of their family members, especially children and elderly. This type of selfless attitude appeared to reflect intergenerational values and cultural norms within the south Asian families (Vathi, 2015). Young adults often trivialised their hearing problems to maintain an image of strength and normality. Acknowledging hearing loss was seen as incompatible with their roles and potentially undermining their perceived competence.

People dismissed their hearing issues and subconsciously adapted to the hearing difficulties they faced in their daily lives. The role of family was not only important when forming perceptions about hearing loss but also in all other aspects of life when facing day to day hearing difficulties. For example, some family members considered hearing loss as a source of amusement which influenced the perceptions of those who experienced hearing loss, who then downplayed their hearing. Hence, a collective perception developed in which hearing loss was not recognised as a legitimate health concern. In many cases, hearing loss would continue to be dismissed whilst the hearing would deteriorate and would only be noted as a serious issue in two cases; first, if profound hearing loss was experienced and second in old age. The family collectively seemed to hold a perception of hearing loss, which was linked to both stigma and stereotyping. Dismissal was informed by stigma, as hearing loss was viewed as a type of disability, and it was stereotyped as an issue only accepted in elderly people. These views were found to be embedded within the cultural inferences of the south

Asian communities. The pragmatic response to these cultural inferences was for people with hearing loss to adopt coping strategies which subconsciously.

7.2.2 Category 2 - Subconsciously adapting to hearing loss

Participants' attitudes toward hearing loss were primarily characterised by adaptation rather than treatment or health seeking. Individuals made practical adjustments in their daily lives to cope with hearing difficulties, yet often did not recognise these challenges as symptoms warranting medical attention. Notably, these adaptations were typically made subconsciously, without fully acknowledging hearing loss as the underlying issue. Examples of such adjustments included changing seating positions or increasing the volume on telephones/mobile phones, strategies aimed at improving auditory function without confronting the condition directly.

Subconsciously adapting to hearing loss was the pragmatic response to the hearing difficulties, where family also helped to adapt to difficulties by answer phone calls or repeat conversations in social situations, resulting in people subconsciously adapting to their hearing loss with the help of their family. There was a level of adaptation that occurred as a collective group where everyone was aware hearing issues, helped to alleviate the hearing problem by adapting to the situation. As people adapted to their hearing loss, over time it became a normality of life and hence dismissed as a significant health issue. Subconscious changes inevitably resulted in adapting and as stated above, this adaptation was supported by family and was culturally the most accepted response within the south Asian communities.

7.2.3 Category 3 - Dismissing hearing loss as a health concern

This category reflects participants' attitudes toward hearing loss, shaped significantly by family perceptions and adaptive behaviours. Hearing difficulties were often deprioritised and dismissed

throughout individuals' lives. In addition to the points mentioned above regarding the dismissal of hearing loss, the south Asian communities commonly perceived hearing loss as an issue affecting only elderly people. Consequently, any hearing difficulties experienced by younger adults were regarded as minor and manageable, rather than legitimate health concerns requiring attention.

Another collective cultural view was that it was a stigmatised issue and so trivialising and dismissing it maintained that image within the south Asian family. This stigma was related to hearing impaired people and hearing aids being perceived as a sign of disability and incompetence. To protect that self image and the image of the collective unit, dismissing hearing loss was considered the most appropriate attitude. My findings revealed that participants often described their familial roles as a 'mother', 'breadwinner', or 'respected elder' and tended to avoid explicitly acknowledging their hearing difficulties in order to protect their self-image and maintain their perceived position within the family. Overall, all perceptions, attitudes and practical responses were linked to people viewing themselves as a part of the collective group and maintaining a 'collective me' stance.

7.2.4 The Core Category 'Collective Me'

The concept of the 'collective me' emerged as a central theme in understanding identity among participants from South Asian backgrounds. 'Collective me' was developed to answer the research question 'What are the perceptions of people from ethnic minority communities about hearing loss and hearing services?'. The south Asian people perceive themselves through a collective lens and so was their hearing issue. All aspects of hearing loss from initial acknowledgement to, coping and managing and health seeking decisions were all through the 'collective me' view point. The 'collective me' category is multidimensional where the first dimension was participants expressed a strong sense of belonging to a collective group, second, decisions were typically made through collective consultation rather than individually and third, choices were often guided by what was perceived to be in the best interest of the group as a whole. These dimensions together shaped the

formulation of the 'collective me', a term that captures how personal identity is deeply rooted in family and community structures. When asked about their views on hearing loss and engagement with hearing services, participants' responses consistently reflected this collective orientation. Hearing loss was often not seen solely as an individual issue but was interpreted and managed within the context of the broader family network, shaped by the perceptions and expectations of those around them.

The 'collective me' in the three categories

All three aspects (belonging to a collective group, collective decision making and responding according to the betterment of the collective group) were detected in all three categories. The category importance of family was closely related to being part of that collective group. In order to maintain a certain position in the family, all matters (including hearing loss) were consulted with the family. Participants often referenced their family members when considering seeking hearing services or managing with hearing difficulties. A decision to seek professional help would stem from encouragement from family as it was reported for other health issues (e.g. broken ankle). Those who had not sought hearing services often measured up the significance of hearing loss against health issues experienced by their family members. As one participant stated that her children's health was more important, while another said that her elderly mother's health concerns were a priority over her hearing loss.

Similarly, 'dismissing hearing loss' was also reflected in the three collective aspects. Hearing loss was dismissed as a collective unit, by those suffering from it and their family around. The perception that hearing can be managed and does not require treatment emerged from the views of the collective group. Following the dismissive attitude towards hearing loss the decision to not seek hearing services was also based on a collective view. Dismissing hearing loss was considered to be for the betterment of the collective group whilst maintaining a normal self image and avoiding any stigma.

These three aspects were all incorporated within the category of dismissing hearing loss, highlighting the 'collective me' aspect.

The category 'subconsciously adapting to hearing loss' was found to incorporate the three collectivist aspects. People collectively adapted to hearing loss through support from family in overcoming any hearing difficulties. The decision to adapt to hearing loss and not seek hearing services was based on collective perceptions. Adaptation was often the preferred collective response among younger individuals experiencing hearing difficulties. In contrast, older participants, while acknowledging their hearing loss through shared recognition within the family did not perceive it as a significant concern. As a result, a collective decision was commonly made not to pursue hearing services.

Collectivism in south Asian communities

South Asian communities are widely recognised for their collectivist culture, where the well-being and expectations of the group, particularly the family unit are prioritised over individual autonomy (Triandis, 1995). This collectivist worldview has deep historical and sociocultural roots, influencing not only family dynamics and social decision-making but also patterns of healthcare access and utilisation. Understanding collectivism is therefore essential in designing culturally sensitive health services that effectively engage with South Asian populations. My explanatory model draws attention to the collectivist cultural of South Asian communities which has not been linked with hearing loss in any previous studies.

Collectivism refers to a cultural value system in which individuals see themselves as fundamentally connected to others, especially family and community members (Triandis, 1995; Oyserman et al., 2002; Gelfand et al., 2017). In South Asian families, multigenerational households are common, and respect for elders is strongly emphasised. The multigenerational family dynamics are discussed in

detail in the discussion chapter. Each member of the family is recognised as a part of the collective group. For example, my participants referred to themselves as ‘breadwinners’, ‘mother’ and ‘grandmother’ rather than an individual. My study highlighted the collectivist culture within south Asian communities where people perceived themselves as members of a group and all issues were seen through a collective view. Some previous studies have also shown how collectivism influenced health seeking behaviours, where South Asian patients delayed seeking mental health services due to concerns about how it reflected on the family’s reputation (Karasz et al., 2019). In alignment with the collectivist culture, the use of preventive services, such as cancer screenings, are said to be influenced by family encouragement or discouragement (Crawford et al., 2016). People belonging to South Asian ethnicity respond positively to healthcare interventions when family are supportive and involved with the treatment (Devotta et al., 2025). My participants also reported similar views where they sought medical treatment because their family members encouraged them to do so and did not seek hearing services if family members did not believe it to be a real issue. These perspectives reflected a collective culture in how individuals perceived and responded to their hearing problems.

My findings highlighted that people were provided with various forms of support from family for medical issues which were deemed serious or life threatening. It was also apparent that non-stigmatised, more common or socially acceptable health issues were considered important. Other than acute symptoms such as pain, fractures or rashes, some chronic illnesses; for example, diabetes, hypertension and cardiovascular disease (CVD) were given precedence and family strongly encouraged seeking relevant healthcare for them. CVD and diabetes are the two most common illnesses found in south Asian communities (Ali et al., 2025; Ranasinghe et al., 2024). Due to the high prevalence of diabetes and CVD in these communities, these illnesses were socially expected and accepted within family units (Hanif and Suesala, 2018). My study found that hearing loss, especially in younger individuals, was not widely accepted and was often stigmatised. Due to these social

attitudes, people with hearing difficulties tended to adopt their family's perspectives, ultimately downplaying or dismissing hearing loss as a serious health issue.

Previous studies on south Asian participants reported themes similar to my findings. These include dismissing rheumatoid arthritis to preserve sociocultural roles (Kumar et al., 2019), support from family impacting uptake of healthcare (Devotta et al., 2025) and importance of family views when making healthcare decisions (Crawford et al., 2015). However, none of the previous studies identified the link between healthcare and the collectivist culture among south Asian communities, which is what my study establishes.

7.3 Comparison to Existing Health Models

To support the contribution of my model to the existing explanatory models in healthcare, I review some of them in this section. Explanatory models in healthcare were usually designed as tools which could be used for improving health services (Kleinman et al., 1980; Dinos et al., 2018). Originally, an explanatory model was introduced by Arthur Kleinman (1980), to bridge the clinician and patient gap when exploring mental illnesses. Kleinman (1980) identified that healthcare providers often focused strictly on disease pathology, while patients approached illness through personal, social, and cultural meanings. One definition of explanatory models is that it is a conceptual framework that aimed to capture how individuals understand, interpret, and respond to illness based on their cultural, social, and personal contexts (Dinos et al., 2018). The development of explanatory models over the years all aimed to uncover what illness meant to the patient, not just what it meant medically (Ajzen, 1991; Rudell, 2009; Leventhal, 2016). Examples of these models include 'Theory of Planned Behaviour' (Ajzen, 1991), 'The Barts Explanatory Model Inventory (BEMI)' (Rudell, 2009) and 'Common Sense Model of Self Regulation' by Leventhal (2016) which are discussed in detail with regards to my model

7.3.1 Common Sense Model of Self Regulation

Common Sense Model of Self Regulation is an explanatory model which focuses on the perspectives of people suffering an illness (Leventhal, 2016). The Common Sense Model (CSM) was developed by Leventhal in 1980 where the cognitive and psychological aspects were integrated into understanding how people navigate through a health issue. The model proposed that people use their personal beliefs and emotional factors to form a type of 'common sense' about a health issue (Leventhal et al., 2016). These representations guided how they make sense of what is happening to their health, how they cope with the condition, and how they monitor the effectiveness of their coping over time. My model of hearing healthcare also represents the 'common sense' or the internal logic demonstrated by people about their hearing loss. However, Leventhal presents some recommendations for patients to monitor their environment and behaviour in order to improve health outcomes. CSM suggested cognitive and emotional representations are navigated through five main domains: identity, cause, timeline, consequences and control/cure (Leventhal et al., 2016). These components of CSM are compared to my model to evaluate similarities and differences between the two, highlighting new knowledge my model presents.

Identity- Identity referred to the acknowledgment of an issue and how this issue was identified and perceived by people. It was reported that people identified their illness through labels and previous emotional connection with the illness (Hail et al., 2007). My initial themes that were developed into categories reflected the early recognition of hearing loss through labels such as 'not significant' and 'struggle'. Considering hearing loss as insignificant represents the cognitive aspect while struggle highlights the emotional factors. Cognitive and emotional factors by Leventhal (2016) were presented as the most important underlying factors. Although, my model does not explicitly distinguish between the cognitive and the emotional representations, it shows the pragmatic

approach employed as a result of the cognition and emotions. Hearing loss was considered insignificant, so people dismissed it, and did not seek hearing services. When hearing difficulties became frustrating and a struggle, people employed various coping strategies.

Leventhal (2003) also proposed identification as a domain which was based on previous knowledge or experience. For example, chest pain may be identified as serious, not because it was previously experienced but because of observing others with that symptom or existing knowledge about it (Leventhal et al., 2016). Aligning with the concept of identification, my participants identified hearing loss with lack of awareness and limited prior experience. Hearing loss was identified as an unfamiliar issue within the south Asian participants. My model represents a step further by explaining why these labels were given by these communities. My model introduces the concept of collectiveness within south Asian culture and how it formed the basis of all three categories linked to hearing loss. In contrast CSM gives the basis of what role cognitive and emotional factors play when considering a health issue but does not give any specific reasons why these factors are important. This has been one of the main criticisms of CSM where it examines illness representations, coping and outcomes through a general lens and lacks detail that may be specific to a particular illness, context or culture (Hagger and Orbell, 2021).

Cause and Timeline- In addition to the identity of an illness, the Common-Sense Model (CSM) suggests that people's understanding of their health is shaped by what they believe caused the illness and by their expectations about its timeline (Leventhal et al., 2016). These causes are often comprehended through a biomedical perspective, such as stress, genetics, or individual behaviour, while the timeline is typically and more generically framed using terms like acute or chronic. In my study, although participants mentioned situational factors such as other people speaking unclearly or being in overwhelmingly loud environments as contributing to their hearing loss, they did not consistently link their experiences to medical causes. Leventhal's model has been criticised for

presenting illness beliefs as relatively fixed, individually focused, and for lacking sensitivity to cultural influences or more flexible, sometimes conflicting, interpretations of illness (Heijmans, 1998; Cameron and Leventhal, 2003). In contrast, the model I propose highlights culturally rooted and socially shared understandings of hearing loss and its perceived causes within south Asian communities. Some participants, for example, referred to ideas like “mobile phone rays” or “blood rushing in the ears,” which reflected their personal beliefs shaped by everyday observations and conversations. These views often stemmed from what they had heard from family members or people in their communities, showing how cultural narratives play a role in shaping illness understanding. Leventhal (2003) acknowledged that causal beliefs are influenced by context, and the explanations shared by my participants clearly reflect this. Other researchers using the CSM have also noted that it fails to include culturally significant causes such as fate, the evil eye, or karma (Abbo et al., 2008; Topal et al., 2016). One of these studies explored illness beliefs among Ugandan participants (Abbo et al., 2008), and the other focused on Turkish communities (Topal et al., 2016). Both studies emphasised the need to consider culturally meaningful explanations, something my model brings to the forefront when exploring how people make sense of hearing loss.

The concept of timeline in Leventhal’s model (2008), differed considerably from how it was understood by my participants. As mentioned above that CSM categorised illness duration into acute or chronic, my participants viewed hearing loss as something that is temporary during younger years and only becomes a serious concern in older age. This perspective was deeply shaped by South Asian cultural beliefs and was often reinforced by family members. It is precisely this kind of variation that has led to criticism of the Common-Sense Model. Petrie and Weinman (1997), for example, highlighted that many patients do not see their illness timeline in fixed terms, but rather perceive it as uncertain, changeable, or evolving. For my participants, the idea of timeline was closely tied to life stages, they believed that hearing loss progresses naturally and only requires attention in later life. However, when examining the significance of timeline within my own model, it

did not emerge as a major theme. This aligns with findings from other researchers who applied the CSM and found that the timeline dimension was not a strong predictor of health behaviours or outcomes, which has led some to question its overall utility (Hagger and Orbell, 2003; Broadbent et al., 2006).

Consequences and Control/Cure- The final two concepts within the cognitive representations of the Common-Sense Model (CSM) are ‘consequences’ and ‘control/cure’ (Leventhal, 2016). These components explore two central questions: what effect does the illness have on a person’s daily life, and can it be treated or managed? The ‘consequences’ domain specifically refers to how individuals perceive the impact of their illness on various aspects of life, including physical functioning, emotional wellbeing, social roles, and overall quality of life (O’Connor et al., 2022). Researchers who have investigated this dimension often point out that people tend to focus on the negative repercussions of illness. For instance, a well-known study found that patients who believed their heart condition would have severe consequences were significantly less likely to return to work following a heart attack (Broadbent et al., 2006). More recent findings have continued to reinforce this view such as a study in 2024, consequences were among the strongest predictors of illness perceptions in conditions such as gastrointestinal disorders and musculoskeletal pain (Broughton et al., 2024). One of the most important aspects of ‘consequences’ is that it reflects how individuals gauge the seriousness of their illness. Understanding these beliefs allows clinicians to identify which patients may be more vulnerable to psychological distress and in need of further emotional or mental health support (Broughton et al., 2024).

In my research, participants did perceive significant consequences associated with hearing loss and seeking hearing services. While the CSM largely focuses on physical, emotional, and psychological consequences, my study highlighted the social and cultural consequences of hearing loss. For many participants, acknowledging hearing loss as a serious condition meant accepting a form of disability,

which in turn threatened their perceived social standing within their communities. This dynamic between identity and hearing loss emerged as a key theme, with 'self-identity' as one of the major subcategories during my data analysis. My model demonstrates that many individuals chose to cope with hearing loss with support from family rather than access formal hearing services. This coping process often led to the trivialisation of their hearing loss over time. Additionally, even those who had acknowledged their hearing difficulties often avoided seeking hearing services to prevent being prescribed hearing aids. Hearing aids represented a visible marker of disability and, for many, undermined their sense of being capable, socially respected members of the south Asian community. This reluctance reflected not only concerns about physical health but also the broader social and cultural consequences of being seen as hearing impaired. My model shows the 'subconsciously adapting to hearing loss' as one of the main categories which developed from this domain of 'consequences'. My model presents an alternative view from CSM by illustrating how south Asian people responded to their hearing loss after considering the consequences of their hearing issues.

The control and curability domain, which comes soon after consequences in the Common-Sense Model, includes two key beliefs: personal control, which is about how much a person feels they can manage or influence their illness, and treatment control, which reflects their belief in how effective medical treatment will be (Hagger and Orbell, 2003). Many studies using the CSM have shown that people who feel more in control of their condition tend to manage their illness more effectively and cope better overall (Wang et al., 2023; Zhang et al., 2022). When individuals believe they can influence their illness, they are often less focused on their symptoms and experience less emotional distress (Richardson and Broadbent, 2017). In studies using Leventhal's model, the idea of control or curability has mostly focused on the illness itself. For example, people who thought their back pain would continue for a long time were less likely to see improvements in their health (Maria et al., 2022). In another study, patients receiving dialysis who had stronger beliefs in their ability to

manage their condition showed more commitment to treatment and better daily self-care (Feng et al., 2024). One of the main advantages of recognising people's control beliefs early on is the chance to identify those who might be more likely to avoid treatment, and those who might already be equipped with strong coping strategies (Wang et al., 2022).

In my findings, control and coping were also important but they were understood differently than in Leventhal's model. Instead of focusing on the illness itself or the treatment options available, my participants saw control through the lens of their everyday roles within their family and wider community. Their ability to continue functioning in these roles shaped how they dealt with hearing loss. In order to hold onto that control, many developed coping strategies that involved support from family. Perceived control of hearing loss was greater in those who did not need to seek hearing services and were able to cope with it while continuing with their day to day activities. One example of such control was reported as being able to look after the family and do all daily chores while another stated that her sister would make all the phone calls whenever needed. Seeking medical help was not the focus; rather, managing the situation in a way that fit with their cultural values was seen as more important. This type of control formed the basis of one of my main categories of my model where long term coping led to dismissing hearing loss as a significant issue. The collective perception among my south Asian participants was that if they were able to control and cure their hearing issues then there was no need to seek hearing services. The domain of control/curability has been criticised for oversimplification and cultural limitations Hagger and Orbell., 2003; Abbo et al., 2008; Topal, et al., 2016). My study highlights those cultural nuances within the south Asian communities. It also recognised that control is not personal and may be context dependent as highlighted by my study.

7.3.1.1 Enhanced Common Sense Model

Enhancements made to CSM in 2016 reaffirmed the model's core structure but introduced another concept called treatment representation and suggested application of the same 5 domains while

understanding people's perceptions about illness treatment (Leventhal et al., 2016). Representation of treatment is irrelevant in the case of my study as it was based on gaining data from those who had not yet sought any treatment for their hearing problems. However, Leventhal in 2016 did emphasise that CSM is an ongoing, iterative model rather than static measurement of illness as previous versions suggested. This aligns with my model that presents a cyclical, interrelated process between my core categories. My model does not present a process or stages for hearing loss but provides a comprehensive illustration of the categories which explain south Asian people's perception and behaviour about hearing loss and seeking hearing services. It must be noted that my model is presented to address a specific research question about exploring views of south Asian people, while Leventhal's model was formed to understand the stages a person experiences when navigating through an illness. Although some aspects of Leventhal's model align with my developed model, there are some significant differences, as my model approaches hearing loss from a fundamentally different perspective. Rather than conceptualising hearing loss as a medically diagnosed condition, my model explores the meanings and experiences associated with hearing loss **prior to formal diagnosis**. In contrast, Leventhal's model is primarily concerned with how individuals respond to health conditions that have already been clinically identified and labelled as illness.

Although CSM has been applied to people belonging to different cultures (Zhang et al., 2024; Namutebi et al., 2023; Moosa et al., 2021) it has been criticised for its lack of cultural sensitivity (Breland et al., 2020). Studies across diverse cultures such as Singaporean, Ugandan, and South Asian contexts have found that CSM's core domains often fail to capture culturally specific meanings of illness (Teh, 2021; Namutebi et al., 2023; Banerjee et al., 2025). For example, young adults in Singapore described depression in terms of 'a reduced state of being', embedded within social and relational identities, an understanding not accommodated by the standard CSM framework (Teh, 2021). A recent book chapter exploring illness perceptions among South Asian populations through the lens of the Common-Sense Model (CSM) reinforces the findings and theoretical direction of my

study (Banerjee et al., 2025). Like my model, it highlights the importance of cultural context, particularly themes of collectivism, stigma, and community-based coping when individuals interpret and respond to an illness. The convergence of findings across both studies strengthens the validity of my model, which offers a psychosocial and culturally situated explanation of how hearing loss is perceived within South Asian communities. Given the longstanding criticism of CSM for its lack of cultural sensitivity, some researchers have adapted or extended Leventhal's framework to include culturally embedded beliefs. One such example is the Barts Explanatory Model Inventory (BEMI), which was specifically developed to explore culturally grounded explanatory models of illness.

7.3.2 The Barts Explanatory Model Inventory (BEMI)

The Barts Explanatory Model Interview (BEMI) was developed as a culturally sensitive extension and practical application of core ideas from Leventhal's Common-Sense Model of Self-Regulation (CSM) (Rudell et al., 2009). It was designed to explore how people, particularly from diverse ethnic backgrounds understand and explain their symptoms before they enter the biomedical healthcare system. It draws conceptually from the five core domains of CSM (identity, cause, timeline, consequences, and control) but recontextualises them using open-ended, narrative-style interviews, allowing participants to express culturally grounded explanations for their symptoms and experiences. BEMI is a mixed methods tool that consists of a checklist followed by open ended interview schedule whilst focusing on the culturally different perceptions of illness (Rudell et al., 2009). The checklist of BEMI was built upon Leventhal's model and proposed five core checklists: symptoms, causes, timeline, consequences and treatment. Although the core areas were similar to CSM, BEMI was designed for practical clinical use with an emphasis on cross cultural application. In order to include the culturally sensitive data BEMI offered a more flexible, open ended approach compared to Leventhal's model. For example across the five domains similar questions were asked:

symptoms - 'What is wrong?'

cause - 'What do you think caused it?

timeline - How long will it last?

consequences - How does it affect your life?

treatment - Can it be treated or managed?

The three developers of the Barts Explanatory Model Inventory (BEMI) initially applied the tool to Bangladeshi and Caribbean patients experiencing mental health difficulties in England. Their findings closely align with those presented in my model, particularly in demonstrating that mental illness is frequently interpreted through a cultural lens. While the application of BEMI among Bangladeshi participants proved effective in identifying culturally nuanced understandings of mental health, it fell short in explaining the underlying reasons behind those perceptions. For instance, BEMI revealed that Bangladeshi communities commonly attributed mental illness to supernatural causes, rather than biomedical or psychological explanations. My model builds on this insight through the concept of the 'collective me', which offers a theoretical foundation to explain why hearing loss is perceived in culturally specific ways. In both studies, stigma emerged as a key factor influencing service avoidance: BEMI found that stigma discouraged Bangladeshi individuals from accessing mental health services, a pattern mirrored in my findings, where South Asian participants associated hearing loss with stigma and were similarly reluctant to engage with hearing services. While BEMI successfully identified cultural beliefs surrounding illness, my model advances this understanding by situating these beliefs within the broader socio-cultural framework of collective identity, as captured by the 'collective me' category.

The individual components of BEMI are not examined in depth here, as it's five core domains were derived from Leventhal's model, which has already been discussed extensively in the previous section. Instead, the focus in this section is on comparing the proposed application of BEMI with that of my model. BEMI includes a structured checklist for quantitative data collection as well as a semi-structured interview guide for qualitative exploration (Rudell et al., 2009). Both tools were designed to elicit culturally grounded explanations of illness. In contrast, my study centred on understanding how individuals interpret hearing itself, rather than framing it as a loss. After the first few interviews, the term "loss" was deliberately omitted to prevent introducing bias into participants' responses. This allowed individuals to construct their own understanding of hearing based on personal and cultural interpretation. These insights were consistently reflected in the data analysis and became foundational in the development of my model, where hearing issues were often not perceived as a significant problem and therefore dismissed as a health concern. A key distinction lies in the pre-diagnostic focus of my research; all participants were individuals who had not sought hearing services. Although Rudell et al. (2009) also engaged with individuals at the pre-diagnostic stage, their participants were recruited from primary care and community mental health services. This recruitment strategy inherently involved individuals who had already recognised their symptoms as medical in nature and were therefore already within the healthcare system.

A study that employed BEMI to investigate dementia perceptions among South Asian individuals recruited participants from both community settings and medical databases (Giebel et al., 2015). The study identified notable differences in beliefs between those recruited at the pre-diagnostic stage and individuals already receiving medical care. A range of themes emerged, including views on social life, familial roles, and interpersonal relationships some of which mirrored the findings in my research. However, Giebel et al's (2015) study performed statistical analysis to determine significant differences between groups resulted in limited interpretative depth, offering minimal exploration into the reasons underlying those thematic patterns. Although BEMI's combined use of qualitative

and quantitative methods allowed for a multidimensional understanding of South Asian perspectives on memory issues, the approach ultimately restricted participants from articulating the reasoning behind their views. Even Rudell et al. (2009) acknowledged that, despite BEMI checklist offers inclusion of culturally relevant options, its reliance on predefined categories may constrain the richness and nuance of participants' explanations. In contrast, my model is derived directly from participants' narratives and is grounded in their own language and conceptual framing. It not only captures the substance of their beliefs but also provides insight into the underlying reasons for holding those views.

A more recent study applying the Barts Explanatory Model Inventory (BEMI) to South Asian populations explored dementia-related beliefs and reaffirmed that perceptions within these communities are shaped by culturally diverse and complex beliefs, encompassing not only biomedical but also social, emotional, and spiritual explanations (Kampanellou et al., 2020). However, the cultural nuances identified in Kampanellou et al's (2020) study were less prominent than the statistical findings derived from the BEMI checklist. This emphasis on quantitative data arguably produced more generalised results, with limited depth of interpretive explanation. It is reasonable to acknowledge that the generic checklist provided in BEMI, although intended to support researchers and clinicians in gathering culturally diverse information about illness, is likely to have inherent limitations. Additionally, it must be noted that studies that employed BEMI were conducted in collaboration with the model's original developers, which may have introduced a degree of bias in favour of highlighting its strengths while potentially underreporting its limitations (Owiti et al., 2015; Giebel et al., 2016; Kampanellou et al., 2020). Although my findings and thematic outcomes closely reflect those reported in BEMI-based studies involving South Asian participants, the model developed in my research presents a distinctly different perspective. It offers a novel conceptual framework for understanding what hearing loss means to south Asian communities, that has not been identified or addressed by previous explanatory models. My model also highlights the

way people behave to cope and manage with their hearing issues and therefore it is important to consult a model which focuses on human behaviour.

7.3.3 Theory of Planned Behaviour

The 'Theory of Planned Behaviour' (TPB) was developed by Ajzen in 1991, and it was designed to predict and understand human behaviour in specific contexts. TPB was an extension of a previous model called Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975). TRA emerged from psychologists wanting to understand the link between attitudes and behaviour. The inconsistency between the two concepts puzzled psychologists. For example: someone might believe smoking is harmful (negative attitude) yet continue to smoke. Fishbein and Ajzen (1975) proposed that intentions served as the best predictor of actual behaviour. They believed intention acted as a bridge between attitudes and behaviour. TRA proposed two main constructs; attitude toward the behaviour and subjective norms. Attitude towards the behaviour included an individual's evaluation whether the behaviour is positive or negative and subjective norms incorporate a person's perception of social pressure to perform (or not perform) the behaviour.

The Theory of Planned Behaviour was designed to overcome the limitation of TRA that assumed people have full control over their behaviours, without considering the role of other factors such as health, environment, and social domains which are not entirely under personal control. In order to address that gap between attitude and behaviour, TPB introduced a third concept that was 'perceived behavioural control' (PBC). PBC was defined as *an individual's perception of their ability to perform the behaviour, considering both internal and external control factors (Ajzen, 1985). The idea was that people's perception about a certain behaviour includes personal as well as environmental and social factors, and that perception is a better indicator of a behaviour being actioned. Similarly, my model presents the behaviour that resulted from people's perception of their hearing loss. However, there were some fundamental differences between Ajzen's Theory of Planned*

Behaviour and my proposed model. These differences are discussed in detail by delving into each component of TPB; Attitude to behaviour, Subjective norm and Perceived behavioural control.

Ajzen (1991) proposed that behavioural intention leads to actual behaviour, suggesting that by targeting intention, behaviour can be changed. However, a key criticism raised by health researchers is that intention does not always result in behavioural change, highlighting a theoretical gap within TPB (Sniehotta et al., 2014). The Explanatory Model of Hearing Healthcare developed through my research addresses that gap and provides an explanatory framework for why certain behaviours may or may not occur, particularly within a specific cultural group. Unlike Ajzen's generalised model, my model reflects the lived experiences and cultural norms of South Asian communities.

Attitude towards a behaviour- In TPB, the construct of attitude toward a behaviour is defined as the individual's positive or negative evaluation of that behaviour, shaped by beliefs about the outcomes. In the healthcare context, this has been demonstrated in studies such as Norman et al. (1999), which applied TPB to smoking cessation. The study successfully showed how individual attitudes about the risks and benefits of quitting smoking predicted cessation intentions. However, whereas TPB conceptualises attitude as an individually formed evaluation, my model reveals that attitudes in South Asian communities are often collectively formed. Rather than arising from personal reflection alone, these attitudes are heavily influenced by shared beliefs within the family unit. This distinction highlights a limitation in TPB's applicability to collectivist cultures, where group identity and familial influence play a more central role in shaping attitudes.

Subjective norms - The role of culture is partially addressed in TPB through the concept of subjective norms, which refers to perceived social pressure to perform or not perform a behaviour (Ajzen, 1991). Subjective norms are defined as normative beliefs based on society, culture and family (Arnold et al., 2019). In a recent study, Chu and Liu (2021) found that subjective norms were strong predictors of vaccine uptake intention during the COVID-19 pandemic, demonstrating the influence

of social approval and emotional pressure. This aligns with my study findings, where family views were paramount in shaping participants' perspectives about uptake of hearing services. However, subjective norms remain the most criticised construct within TPB, primarily due to their vagueness and lack of specificity (Armitage & Conner, 2001). The theory of planned behaviour acknowledges that people consider views of 'important others' when action of a behaviour is assessed but fails to specify who these referents are. Fishbein and Ajzen (2010) themselves acknowledged, the ambiguity surrounding the term 'important others' allowing respondents to interpret the term in variable ways such as family, friends, religious leaders, or broader society, introducing inconsistency and measurement error. My model, by contrast, explicitly centres around the south Asian family unit as the key influence. Within this cultural context, family includes not only spouses, children, and parents, but also grandparents and extended family members such as uncles, aunts, and cousins who are often viewed as equally influential. While my model does not delineate which specific members hold the most weight, it is contextually grounded in the dynamics of collectivist South Asian cultures (Hofstede, 2001; Shariff, 2009). A detailed discussion about south Asian family dynamics and culture norms surrounding the collectivist beliefs is provided in discussion chapter.

The third construct, **perceived behavioural control (PBC)**, refers to an individual's perception of their capacity to perform a particular behaviour. Although TPB was not originally developed for health-specific contexts (Ajzen, 1991), it was rapidly adopted by health researchers due to its applicability in explaining intention and behaviour in health issues such as exercise, diet, and other chronic diseases. Several studies have identified PBC as a robust predictor of health behaviours (Godin & Kok, 1996; Armitage & Conner, 2001; Conner & Norman, 2005). Researchers established that if an individual perceives they have the ability to carry out a behaviour (e.g. access to a clinic or confidence in managing their health), they are more likely to do it (Conner & Norman, 2024).

Findings from my study similarly confirm that PBC plays a critical role in help-seeking for hearing loss, particularly in terms of how participants perceive their ability to navigate the healthcare system

and access relevant services. However, the most important factor was their collective perception where if people within the south Asian family believed seeking hearing services was beneficial, they were more likely to do it. Conversely, my findings showed the collective perception was hearing loss was manageable without seeking professional help and so hearing services were not accessed.

Furthermore, participants' perception of hearing health services were closely tied to the prospect of wearing hearing aids, which significantly influenced their behaviour in accessing these services.

Among my south Asian participants, wearing hearing aids was closely associated with stigma and perceptions of disability. To avoid being labelled disable, many individuals chose not to engage with hearing services, thereby circumventing the possibility of being prescribed hearing aids. Additionally, participants felt they had greater control over their hearing loss by adapting and coping, without professional intervention. This coping and adapting were also based on the 'collective me' underpinning where close family agree and help with the day to day management of any hearing difficulties. Seeking formal hearing care was often viewed as an area beyond their and their family's control, and this perception contributed to their reluctance to engage with those services.

One significant divergence between TPB and my explanatory model is that according to Ajzen's original TPB formulation (1991), PBC is defined as an individual's perceived control over performing a behaviour, with no explicit consideration of the influence or involvement of others. In my framework, the role of family is not peripheral but integral to shaping perceptions of control, indicating the difference in explanations given by my model compared to Ajzen's (1991).

7.3.3.1 Use of TPB in hearing healthcare

TPB has been applied to hearing loss in two studies (Arnold et al., 2018; Meister et al., 2014). One study that developed a questionnaire based on the TPB constructs, was conducted on people with hearing loss to determine their behaviour towards seeking a hearing test (Arnold et al., 2018). This quantitative study identified people who sought a hearing test scored highly on 'intention', 'PBC'

and attitude towards seeking a hearing test. However, 'subjective norms' did not appear prominent which meant social pressure or approval from others was not found to be a strong enough motivator for participants to seek a hearing test. This reiterates that subjective norms consistently showed weaker correlations with intention (Armitage and Connor, 2001; Kim et al., 2019). The limited impact of subjective norms on intention may be attributed to the vagueness of the term itself, which often leads to imprecise measurement, particularly within quantitative research approaches and hence being recorded as less significant (Kim et al., 2019).

A further element that must be noted about Arnold et al's. (2018) study was that all participants were recruited from audiology clinics and so the focus was more towards the intentions to attend further follow up appointments and or obtaining hearing aids. Contrary to Arnold et al's (2018) study, my research focused on the stages prior to seeking hearing services which highlighted the significant role of cultural norms and family involvement where approval and disapproval was more significant. At the pre-diagnosis stage, people gave precedence to the views of their family members which impacted how they responded to their hearing issues. For example, the younger people often subjected to humorous or comical remarks about their hearing loss than the older generation.

The second study that applied TPB for hearing loss paralleled my findings where people who had not yet sought hearing services prioritised subjective norms over the other TPB constructs (Meister et al., 2014). This contradicts the above study because both participants belonged to the white Western ethnicities and yet showed different results. However, the main difference was the stage at which the studies applied TPB. The reasons for subjective norms to be more prominent before accessing hearing services was because of the stigma related to hearing loss and hearing services (Meister et al., 2014). The same stigma which was found to impact the south Asian people also influenced the health seeking behaviours of the white Western populations. In Meister et al's (2014) study, TPB does not go further to explain why and where that stigma originated. However, my model

explains that very point through the 'collective me' core category while TPB does not account for cultural underpinnings or self-image within a specific society (Tery et al., 1999). This reveals a gap in TPB's ability to model behaviour that is likely to be influenced by culture or social norms. Where TPB assumes behaviour is largely an individual-level decision, my model uncovers how community values, familial expectations, and collective identity shape both attitudes and actions.

Other reported factors that contributed to hearing health seeking behaviour when investigated through TPB were, perceived benefit of hearing aids and self-assessed severity of hearing loss (Meister et al., 2014). These aspects that coincide with my findings where my participants believed self-management of hearing loss outweighs the severity of the condition and obtaining hearings aids. The important point, self-management and coping with hearing loss was all found to be based on the collective views of my participants. My south Asian participants assessed their management or coping according to how much their family complained about their hearing as one person stated, "mainly I am relying on feedback from my family" (P18). Similarly, the practical support offered by relatives played a role in how hearing difficulties were managed, as illustrated by Participant 3's comment: "my sister now makes the phone calls for me." Although using TPB with the context of hearing loss highlighted that all three of its constructs can influence people's health seeking behaviour, it does not explain the underlying reasons. The 'collective me' category which appeared as the central theme of my model explains why people respond a certain and it is this explanation that distinguishes my model from TPB.

Both the above discussed studies in comparison to mine, applied TPB through quantitative investigations (Arnold et al., 2018; Meister et al., 2014). The data obtained was limited as each TPB construct was studied through a survey. For example, in Meister's (2014) study attitude was measured with 3 items, subjective norms and PBC also with 3 or 4 items. The numbered measurements of the TBP constructs does not provide any explanation or highlight human experience. While surveys are useful for quantifying trends, they often fail to capture the depth,

nuance, and context of individual experiences, thereby limiting a comprehensive understanding of participants' perspectives (Creswell & Poth, 2018). Conversely to quantitative data, my findings are grounded within the words and perceptions of south Asian people and my model explains them in simple terms.

7.3.3.2 Use of TPB within other chronic illnesses

Other than hearing loss TPB has been a beneficial tool in understanding health seeking behaviour for chronic illness. Chronic health issues and hearing loss are both longstanding, gradually progressing and require ongoing management (WHO, 2021). When exploring the use of TPB for other chronic illnesses the benefits were demonstrated across a range of health conditions, including mental health, cardiovascular disease, and diabetes (Adams et al., 2021; Plotnikoff et al., 2009; Hwu and Yu, 2007). For example, Adams et al. (2021) applied TPB to understand health seeking behaviour in older adults with various chronic illnesses and identified all three TPB constructs being useful in predicting health seeking intentions. However, Adams et al's., (2021) study employed quantitative methods, which may not allow the fluid, nuanced, and often subconscious nature of human intention and behaviour to be explored. In contrast, my study used qualitative methods to explore these complexities in greater depth. While Adams et al's (2021) study found all three predictors to be influential, it also noted that subjective norms were less impactful, a finding consistent with broader literature (Arimtage and Connor, 2001; Hagger and Chatzisarantis, 2002; Kim et al., 2019). The reasons for the lack of connection found between subjective norms and health related behaviour was identified as methodological issue (Arimtage and Connor, 2001). This error was usually due to the assessment of subjective norms being limited to perceived approval or disapproval from others (Rivis and Sheeran, 2003). The approval or disapproval overlooks the distinction between injunctive norms (perceptions of what others think one should do) and descriptive norms (perceptions of what others actually do) thereby providing an incomplete understanding of subjective norms (Rivis and Sheeran, 2003).

Another aspect which is not explicitly explored through TPB is the type of illness. Chronic illnesses would be responded to with different intentions, PBC and subjective norms compared to acute one time vaccinations (Plotnikoff et al., 2009; Paul et al., 2022). In my study hearing loss was reported as a chronic illness where people's response to it was through adapting to it, dismissing it whilst making sure these responses were approved by the family and with their support. 'Adapting', 'Dismissing' and 'Family' are the three main categories presented in my explanatory model, illustrating a different perspective in which hearing loss was perceived. My findings suggest hearing loss is not widely recognised as a serious health issue within South Asian collectivist communities. This perception has a profound impact on health-seeking behaviour, often resulting in inaction or delay. TPB also fails to account for non-conscious, automatic, or habitual behaviours, which play a significant role in health decision-making. Conner and Sparks (2005) and Sheeran et al. (2013) argue that TPB overlooks these implicit influences. My model explicitly addresses them by identifying how individuals subconsciously adapt to hearing loss, through behaviours such as lip-reading or withdrawal from conversation without recognising these as coping mechanisms. The core category emerging from my study, 'collective me', encapsulates how participants' sense of self was deeply embedded within their family and cultural context. Although participants did not overtly state that their hearing behaviours were shaped by collective identity, their narratives consistently reflected this implicit influence.

7.4 Conclusion

This chapter has introduced a novel explanatory model that articulates how cultural and familial dynamics influence the perceptions and behaviours of South Asian communities toward hearing loss. The model is grounded in the lived experiences of participants and highlights the dominant role of the 'collective me' as a conceptual and functional aspect when considering hearing loss. It demonstrates how family values, societal expectations, and practical adaptations contribute to the

dismissal and under-treatment of hearing issues. By contrasting this model with existing theories like the Common Sense Model (Leventhal, 2016), The Barts Explanatory Inventory (Rudell et al., 2009) and the Theory of Planned Behaviour (Ajzen, 1991) it's value as a culturally sensitive framework becomes clear. It not only adds depth to academic discourse but also holds practical implications for healthcare delivery, professional education, and future research. In acknowledging and working with collectivist views, this model offers a better understanding of hearing loss and accessing hearing services within the south Asian communities which can then be used towards a more inclusive, equitable, and effective hearing healthcare engagement.

Chapter 8 Discussion

8.1 Summary of Findings

This study sought to explore how people from South Asian backgrounds perceive hearing loss and accessing hearing services. By adopting a qualitative approach, the study illuminated the ways in which cultural frameworks, family dynamics, and individual strategies shape experiences of hearing loss and views about seeking hearing services. Three interconnected themes were identified: the pivotal role of family in influencing perceptions and decisions about hearing loss, the tendency to dismiss hearing loss as a legitimate health concern, and the subconscious adaptation to hearing difficulties through coping strategies. Together, these themes converged into the core category of the “*collective me*,” which captures the way participants understood and responded to hearing loss as part of a wider family and community identity rather than as an individual issue. This concept not only sheds light on how hearing loss is conceptualised within South Asian communities but also helps explain patterns of underutilisation of hearing care services. Importantly, the identification of the “*collective me*” represents a novel contribution to knowledge, offering a culturally grounded lens through which to understand health behaviours and service uptake in people belonging to South Asian backgrounds

The first theme, *family involvement*, demonstrated how hearing loss is rarely considered an individual matter. Rather, decisions about acknowledging and addressing hearing difficulties were often filtered through family dynamics, where family members’ views played a decisive role in shaping whether participants sought care. While families were sometimes sources of emotional support, in most cases their influence discouraged engagement with services, reinforcing silence around hearing problems.

The second theme, *dismissing hearing loss as a health concern*, revealed how participants frequently normalised hearing difficulties by attributing them to ageing or by downplaying their seriousness. Hearing loss was not positioned alongside other health conditions that warranted medical attention, but instead seen as part of the natural course of life. This dismissive framing was compounded by stigma, where hearing loss was perceived as a marker of frailty or disability, further discouraging individuals from seeking help.

The third theme, *subconscious adaptation to hearing loss*, captured the strategies that participants employed to manage hearing difficulties without formal care. These included relying on family members to interpret, changing seating position in social gatherings, and lip-reading. Such strategies were often employed as a subconscious response to the hearing difficulties which further reinforced disengagement with hearing care professionals.

Taken together, the three themes highlight the complex interplay between cultural inferences, collective attitudes and collective pragmatic approaches in shaping help-seeking behaviours. The findings emphasise that hearing loss must be understood as a culturally embedded phenomenon, where attitudes, stigma, and coping mechanisms interact to create barriers to care. Decisions about whether to acknowledge hearing problems, seek care, or adopt coping strategies were rarely made in isolation; instead, they reflected shared cultural values, family expectations, and communal perceptions of ageing and disability. This collective orientation in the South Asian participants highlighted that hearing loss was not perceived as a significant health issue especially in the younger population, whilst the older generation perceived it as a disability which may compromise their culturally accepted image. This study proposes that within south Asian groups recognising hearing loss as a collective rather than solely individual experience is therefore critical for understanding why conventional models of service provision often fail to engage these communities.

8.2 Discussion of Findings within the Wider Literature

The findings of this study build on and extend the body of literature reviewed, which highlighted the limited exploration of hearing loss among south Asian ethnic groups and the critical role of cultural factors in shaping health behaviours (Holman, 2019; Bennett, 2016). This study addresses a critical gap in knowledge by focusing on South Asian communities and capturing their perspectives on hearing loss and the use of hearing services.

To provide a structured discussion, the three central themes identified in the analysis will be explored in turn, each situated within the wider literature: family involvement in health decision-making, dismissing hearing loss as a health concern, and unconscious adaptation to hearing difficulties.

8.2.1 Importance of Family

The first major category to emerge was the central role of family in shaping perceptions of hearing loss and hearing services. For all nineteen South Asian participants, family functioned as an automatic point of reference rather than an optional influence. These collectivist values underpinning South Asian cultures align with the broader literature where the family is regarded as the primary source of care, advice, and moral authority (Papadopoulos & Tilki, 2004; Atkin & Ahmad, 2000).

This study interviews demonstrated that family involvement was multi-dimensional: it influenced recognition of hearing difficulties, provided informal coping strategies, and determined the significance of hearing loss within the collective household. Importantly, participants' accounts extended beyond the immediate household to include wider kin networks, such as sons-in-law, aunts, brothers-in-law, and cousins, demonstrating the breadth of familial authority. Several participants noted that referrals to hearing services, and even participation in this study, were prompted by encouragement from relatives. The recruitment process itself reinforced this dynamic,

as advertisements circulated most effectively through word of mouth within family and community networks. Previous researchers have acknowledged that, in South Asian contexts, new behaviours are more likely to be adopted when endorsed by trusted members of the community (Chatterji & Washbrook, 2013).

The first major category to emerge was the central role of family in shaping perceptions of hearing loss and hearing services. For all nineteen South Asian participants, family was an automatic point of reference, extending beyond immediate relatives to include wider kin such as sons-in-law, aunts, and cousins. Many were referred to services or encouraged to participate in this study through family influence, with recruitment most effective via word of mouth. This reflects broader evidence that South Asians adopt new behaviours when endorsed by trusted community members (Chatterji & Washbrook, 2013), consistent with collectivist values that position family as the primary source of care, advice, and authority (Papadopoulos & Tilki, 2004; Atkin & Ahmad, 2000).

A key reason for this influence is the prevalence of joint family systems, particularly among older participants who lived with adult children and extended relatives. Within South Asian families, it is a tradition for adult children to reside with their elderly parents within the same household, even after establishing their own nuclear families (Bailey et al., 2019). In these contexts, making healthcare decisions were almost always based on the collective values and typically included consulting multiple family members before acting on health concerns (Kandula, 2018; Bailey et al., 2019).

Traditional South Asian living arrangements are characterised by well-established gendered roles within the household. Women typically provide day-to-day care, while men are expected to manage external healthcare matters, such as arranging and accompanying elderly parents to medical appointments (Schulz, 2016). As one participant explained, *“My son-in-law always takes me to my appointments”* (P6). However, this pattern cannot be assumed to apply uniformly across all South Asian families. Since the mass migration period of the 1950s–1970s, subsequent second and third

generation South Asians have, in some cases, acculturated to Western nuclear family structures (Brown et al., 2016). Such shifts may reduce the influence of collectivist practices and foster more individualistic ways of living. Nevertheless, the participants in this study consistently reported maintaining a collectivist orientation, supported by regular family gatherings and continued engagement with the extended family.

Family get togethers were described as central to participants' lives, particularly at weekends, bringing together siblings, in-laws, cousins, and children to reinforce extended family ties. These social gatherings form an integral part of the south Asian culture, which are valued for fostering belonging and cultural identity (Iqbal, 2014; Knies, 2016). Although these occasions were often the most challenging for those with hearing loss, they were not missed as absence was seen as culturally unacceptable (Bandari & Titzmann, 2017). Additionally, these gatherings intensified stigma and dismissal of hearing loss as a health concern, further reinforcing the collective views towards hearing issues. These findings highlight how family gatherings function simultaneously as vital sources of connection and as settings where hearing loss becomes noticeable, shaping both support and anxiety within a collectivist framework.

Spouses, parents, and children were often the first to notice and raise concerns about hearing difficulties. This meant that participants were acutely aware of how their hearing loss affected those around them, even before considering the impact on their individual lives. Encouragement from family was a key factor in participants' decision to engage with any hearing services which was also noticed with participation in this study. As one participant noted, "My mum was glad I was coming to see you" (P7). The aspect of motivation was also noted in other ethnic populations, where people were more likely to seek hearing services if prompted by family or spouses (Leeuwen et al., 2021; Hickson & Meyer, 2014; Scarinci et al., 2008). Such examples highlight how hearing difficulties were experienced not only by individuals but also by their families.

This is where the finding of this study diverges from previous literature. South Asian participants tended to evaluate hearing loss in relation to other health issues experienced by family members, frequently placing it lower in a hierarchy of household health priorities. In contrast, studies conducted predominantly with White majority populations emphasise the impact of hearing loss on communication difficulties with spouses, consequently help-seeking initiated once these disruptions became significant. Within collectivist South Asian households, conditions such as diabetes or depression were regarded as more urgent because they directly impaired family functioning and roles, whereas hearing loss was often downplayed unless it jeopardised core responsibilities.

Priority was always given to children's health in a collectivist household, where family adopted the role of primary caregivers (Atkin and Ahmad, 2000). Participants of this study also acknowledged that priority would be given to seeking appropriate services if hearing loss was detected in their children. South Asian families have been shown to prioritise their children's hearing healthcare, even when doing so requires negotiating and resisting the cultural stigma associated with hearing loss (Atkin & Ahmad, 2002). However, the concept of hearing loss was not studied with child participants in this study and so cannot be verified or denied. Within this framework of household roles, several women reported they would consider hearing aids only if hearing difficulties interfered with their ability to hear their children, while male participants expressed concern that hearing aid use might undermine their authority as heads of the household. Earlier literature has linked hearing aid stigma to ageing and dependency (Wallhagen, 2010; David & Werner, 2016), but has not addressed this gendered dimension of family roles. This study therefore offers new insights by demonstrating how stigma and health prioritisation intersect with culturally specific expectations of caregiving and authority in South Asian families.

8.2.1.1 Stigma related to hearing loss and family views

One of the strongest collective views expressed by South Asian participants in this study concerned the stigma associated with deafness. Several participants equated deafness with mental incapacity or disability, which echoes the wider literature that identifies stigma as a persistent barrier to acknowledging and managing hearing loss (Wallhagen, 2010; Gagné et al., 2011; David & Werner, 2016). However, as identified from the literature review much of the previous research was based on Western populations and does not differentiate the perspectives of South Asian communities. My study addresses this gap by demonstrating how stigma surrounding hearing loss is embedded within the collective norms of South Asian culture, where identity and reputation are deeply tied to family and community standing.

Among older participants, stigma manifested through denial of hearing difficulties. Elders, who hold positions of respect and authority within South Asian families, often feared that acknowledging hearing loss would undermine their perceived intelligence and social position. As a result, several participants rejected the notion that hearing loss affected their lives, even when difficulties were apparent. This behaviour is consistent with the broader understanding of stigma as a social construct, where deviation from perceived norms is devalued (Gagné et al., 2009).

The sense of inadequacy associated with hearing difficulties was also reflected in participants' accounts of family interactions. As found in previous studies (Domagała-Zysk, 2019), many reported feelings of humility and frustration when needing to ask others to repeat themselves. However, in collectivist South Asian contexts, this burden appeared amplified by the pressure to maintain group identity and cohesion during social interactions. In family gatherings, participants often concealed their difficulties to avoid being marked as different or abnormal, illustrating how stigma was reinforced through collective expectations rather than individual perceptions alone.

Age also shaped how stigma was experienced. Fourteen participants under the age of 60 suggested they would feel more comfortable using hearing aids in later life, when hearing loss could be attributed to ageing. One participant explained, “if it’s my grandma, we speak louder because she is older. With me I think it’s because I look normal, they just laugh it off” (P3). This reflects the stereotype of hearing aids as symbols of old age, which resonates with findings from the wider literature that associates hearing aid use with ageing (Hickson et al., 2014; WHO, 2012). Yet, my findings extend this literature by highlighting the gendered and cultural dimensions of stigma: younger participants resisted hearing aids to avoid being seen as weak or inadequate, while older participants feared a loss of authority within the family unit.

Taken together, these findings contribute new knowledge by showing how stigma in South Asian communities is collectively produced and sustained through family and community structures. While existing literature identifies stigma as an individual or social barrier, this study demonstrates that, within South Asian contexts, stigma must be understood as relational, bound to cultural expectations of authority, caregiving, and group identity. This collective dimension of stigma provides an important explanation for the reluctance to access hearing services among South Asian populations, and it represents a contribution to knowledge not previously captured in the literature.

8.2.2 Dismissive Attitudes

Participants highlighted the dismissive attitudes towards hearing loss that circulated within families. Milder hearing difficulties were trivialised as temporary or inconsequential, while more severe problems were often hidden due to stigma. These attitudes mirrored participants’ own tendency to downplay their difficulties, showing how individual and collective perceptions reinforced each other. For example, one participant remarked: “My family know I can’t hear very well, but they just think I

am getting over a cold” (P14). Such comments reveal how hearing loss was normalised within family discourse, making it less likely that individuals would seek professional help.

This collective dismissal reflects wider findings that health concerns in South Asian families are influenced significantly by cultural and social norms (Lucas et al., 2013). According to social norms, hearing loss, particularly in its milder forms, was rarely accorded importance. Instead, families supported dismissing it whilst collectively adapting to it by speaking louder, repeating conversations, or providing informal assistance.

One key reason for dismissing hearing loss was failing to perceive it as a real medical condition, instead hearing loss was framed as a social inconvenience. For instance, one older participant, despite a history of ear infections, insisted, “*I am able to hear everything*” (P13), while a younger participant attributed their reluctance to seek help to “*just being lazy*” (P10). Such accounts reveal how hearing loss is deprioritised within a broader hierarchy of health concerns. Conditions perceived as life-threatening or physically debilitating, such as cancer, musculoskeletal pain, and heart disease were consistently ranked higher than hearing difficulties (Mathur et al., 2017; Allison et al., 2002). Two key factors may influence why people from South Asian backgrounds consider certain health issues important. First, there is awareness of the illness within their cultural context. Second, the illness is recognized as a legitimate medical condition that cannot be effectively managed at home (Jain et al., 2025; Patel et al., 2015). In both these cases, the south Asian people collectively respond swiftly in seeking relevant healthcare.

Galdas (2007) found that patients belonging to South Asian backgrounds, particularly of Indian and Pakistani origin, were often quicker than their White British counterparts to seek care when experiencing acute or severe symptoms. This aligns with my participants’ emphasis on life-limiting illnesses, which were deemed non-negotiable in terms of seeking treatment. Whereas, non-life-threatening nature of hearing loss, makes it more easily dismissed, both by individuals and their families.

One recent health concern, the COVID-19 pandemic further illustrates the urgency and perceived severity dynamic. Despite collectivist traditions and the cultural centrality of family gatherings, many South Asians adhered to public health measures when faced with the heightened threat posed by the virus (Abid et al., 2020). Another health issue, cancer, was regarded as the most alarming, reflecting its well-documented association with mortality (Torre et al., 2016). South Asian communities are known to seek GP advice promptly when cancer-related symptoms arise (Singh-Carlson et al., 2013); paradoxically, however, screening uptake remains disproportionately low (Vrinten et al., 2019). This contradiction highlights the collective perception of cancer as a serious threat to life, where the instinct is to protect the lives of family members, yet the reluctance to engage in screening may stem from limited awareness or a fear of confirming the worst (Alam et al., 2022).

Lack of awareness was found to be one of the reasons for dismissing hearing loss. Younger South Asian participants often assumed that “real” hearing loss only occurs in old age, while others who experienced tinnitus were unfamiliar with the term and therefore concealed their symptoms. They had simply learnt to live with the condition, not always as an informed coping strategy but as a result of limited understanding. As Holmes et al. (2017) argue, knowledge about an illness provides individuals with greater control and self-awareness, yet such awareness was limited regarding hearing issues, in my South Asian participants.

Similarly, to my participants, one study identified through the literature review found lack of awareness as an influencing factor in seeking hearing healthcare (Gaeta, 2023). Gaeta’s (2023) study was also based on an ethnic minority population living in USA, whilst lack of awareness did not appear to be a significant issue in the White majority people (Meyer and Hickson, 2012; Cosh et al., 2019).

In contrast to the dismissive attitude towards hearing loss, awareness of highly prevalent conditions such as heart disease and diabetes appears relatively high among South Asians. Bean et al. (2007) noted increasing recognition of these diseases across diverse South Asian groups, including Indian, Pakistani, Bangladeshi, and Sri Lankan populations. Nonetheless, more recent research suggests that while awareness exists, understanding of risk factors and management remains incomplete (Pardhan et al., 2020; Jalal et al., 2019). The collective culture of South Asian families often compounds these challenges, as adopting lifestyle changes, such as dietary restrictions, may conflict with family norms, particularly in the context of social gatherings where food is central. Jager (2019) similarly described the pressures faced by South Asians with diabetes living in large households, who often neglected their own health to conform to social expectations. Watson et al. (2019) and Kenning et al. (2017) likewise emphasised the continuing need for targeted more customised education.

By situating my findings within this broader picture, it becomes clear that hearing loss remains uniquely under-recognised in South Asian communities. Unlike conditions such as diabetes, where awareness campaigns have at least begun to shift understanding, hearing health has received little or no comparable attention. This study therefore contributes new evidence, showing that lack of awareness is not only an individual deficit, but a collective phenomenon reinforced by cultural hierarchies of illness. Addressing this gap requires community-level initiatives that reframe hearing loss as a legitimate health concern, raising awareness not only among those directly affected but within the wider family and cultural networks that shape health priorities.

8.2.2.1 Hearing Loss Not Considered Serious Enough for a Hospital Visit

Dismissing hearing loss was also found to be related to reluctance in attending hospital-based audiology services. A strong preference emerged for community-based hearing tests, comparable to optometry services delivered in high street settings. This preference partly explained participants' willingness to engage in my study, which allowed hearing assessments outside a formalised hospital

environment. Similar patterns have been noted elsewhere, with evidence that people often favour high street opticians over hospital eye clinics (Shickle & Griffin, 2014), suggesting a broader tendency to associate community-based care with accessibility and acceptability. My south Asian participants reinforced this trend, stating that hospital visits were strongly linked only to serious illness, while hearing loss was not viewed as warranting hospital-level attention. This again appeared as a collective view, embedded within their cultural norms.

Community-based provision are being expanded through policy developments, such as the NHS Audiology Improvement Programme *Pushing the Boundaries* (Williamson & Hill, 2017). However, despite some services now being available in local community centres, referral pathways remain tied to the GP, limiting both accessibility and patient choice (Guthrie, 2010). Participants' perspectives therefore extended beyond logistical concerns: their calls for community hearing services reflected a deeper reframing of hearing loss, from a biomedical health issue to a social matter requiring more approachable and less stigmatised access points. Some findings suggested a reluctance to disclose hearing loss to GPs of South Asian ethnicity, as participants assumed they would share the same cultural beliefs, that mild hearing loss is unimportant, while more severe loss is associated with disability.

Accessing hearing services was often compared with optometry, as one participant noted, "there is no way of me just walking in, like optometry" (P1). Although, obtaining hearing aids was perceived as fundamentally different from obtaining glasses, which are seen as fashionable and socially acceptable. Several participants remarked that "hearing aids would stick out, but glasses are trendy" (P19), highlighting how stigma compounds structural barriers. Unlike spectacles, which carry no negative connotations, hearing aids were associated with deficit and decline, reinforcing avoidance of services. This distinction underscores not only issues of service provision but also the cultural meanings attached to different forms of sensory loss.

8.2.2.2 Dismissing Hearing Loss Due to Stigma

Stigma emerged as a pervasive theme across all three categories of findings, shaping participants' tendency to dismiss hearing difficulties. As noted in the literature review, stigma has long been recognised as a barrier to acknowledging and addressing hearing loss (Wallhagen, 2010; Gagné et al., 2011; David & Werner, 2016). A number of studies identified stigma as central to the experiences of people with hearing loss, reporting associations with embarrassment, shame, and a desire to conceal hearing difficulties (Barnett et al., 2001; Heffernan 2016; Powell, 2018). However, none of these studies examined stigma within ethnic minority populations such as South Asian, leaving an important gap that this study begins to address.

Individuals of South Asian descent may minimise or deny stigmatised health conditions due to cultural expectations and social pressures (Jahangir & Meyer, 2020; Augsberger et al., 2015). For example, seeking sexual health services is often considered taboo, particularly among younger unmarried people, as it conflicts with South Asian cultural norms (Jahangir & Meyer, 2020). Likewise, mental illness is heavily stigmatised and frequently dismissed as a legitimate health concern (Augsberger et al., 2015). These negative cultural connotations surrounding sexual health and mental illness discourage individuals from openly acknowledging such conditions or accessing appropriate services (Memon et al., 2016). In line with these findings, participants in the present study described hearing loss as a condition best concealed or downplayed, in order to avoid being perceived as weak, dependent, or incapable.

Taken together, these findings affirm the stigma documented in previous research but extend existing knowledge by situating it within a South Asian cultural framework. Unlike earlier studies that conceptualise stigma primarily at the individual level, this study highlights its operation as a collective phenomenon: stigma was not only internalised by participants but also reinforced through

family and community dynamics. This collective dimension, absent from prior literature, adds a new layer of understanding to how stigma perpetuates the dismissal of hearing loss and impedes engagement with hearing services.

8.2.3 Adapting to a Hearing Issue: Subconsciously Adapting to Hearing Loss

The category of *adapting to a hearing issue* highlighted the practical and habitual strategies individuals employed to cope with hearing difficulties. As discussed in earlier sections, participants frequently preferred to manage their hearing loss informally rather than seek professional services, reflecting an interconnection between adapting, dismissal, and the family's involvement in both. While overlaps with previous categories are inevitable, this section focuses specifically on subconscious adaptation as a distinct process, as this represented the new insight that emerged from the study.

Participants described a range of coping mechanisms that gradually became habitual, embedding hearing loss into the routines of daily life. Over time, these behaviours shifted from deliberate actions to subconscious responses, such that participants themselves were often surprised at the extent of their adaptations when reflecting during interviews. Illustrative comments included: "*I never thought I was missing on so much*" (P3) and "*I do it subconsciously, just move my left ear forward*" (P1). These reflections highlight how coping strategies, once repeated, became normalised and largely invisible to those employing.

In the following sections the terms subconscious and adaptations will be explored in the context of health issues. The role of the subconscious is well documented in behavioural science, where automatic responses develop from repeated patterns of thought and action (Freitag, 2003). In the context of hearing loss, prolonged dismissal and reliance on informal coping mechanisms appeared to push the condition into the subconscious, where behaviours to manage it were enacted without conscious recognition. Examples provided by participants included: "*I have a habit of watching the*

kids' mouth to make sure I am doing the right thing" (P16) and *"I don't like speaking over the phone so I text"* (P4). Such comments demonstrate that adaptation occurred not only at the level of communication strategies but also in the everyday practices.

Subconscious adaptation therefore emerges as an important dimension of how South Asian participants navigated hearing difficulties. It illustrates the interplay between cultural perceptions that minimise the seriousness of hearing loss and the individual strategies that enable continued functioning, albeit at the cost of concealing the true extent of the impairment.

Adaptation to illness refers to positive adjustments that help individuals manage symptoms (Audulv, 2016). In existing literature, *adapting* and *coping* are often used interchangeably, with strategies described as either adaptive/engaging or maladaptive/disengaging (Demorest & Erdman, 1987; Heffernan et al., 2016; Carlsson & Hallberg, 1991). Adaptive strategies involve problem-solving and adjustment, while maladaptive strategies are associated with avoidance behaviours (Gomez & Madey, 1990). The literature review highlighted that people with hearing loss often withdrew from conversations or avoided social situations, suggesting disengagement was a common response (e.g., Scarinci et al., 2008; Heffernan et al., 2016).

In contrast, my findings showed that adaptive behaviours were more prominent among South Asian participants. Many developed strategies that allowed them to sustain everyday roles and responsibilities despite their hearing loss, for example, compensating during family gatherings or modifying the home environment. This suggests that while earlier research has emphasised withdrawal and isolation as key consequences of hearing loss, my study extends knowledge by showing how participants in South Asian cultural contexts frequently adopted adaptive strategies that normalised their difficulties. However, such adaptation also contributed to delaying acknowledgement of hearing problems and reduced the perceived urgency of seeking professional help.

8.2.3.1 Delayed Acknowledgement of Hearing Loss

Delayed acknowledgement emerged as a key feature of adaptive behaviour, with participants frequently trivialising the severity of their difficulties, for example, *“I do not think my hearing is that bad”* (P8) and continuing to dismiss them. As outlined earlier, participants adopted both adaptive and maladaptive strategies, yet in both cases the tendency to postpone acknowledgement meant they gradually became accustomed to their hearing problems. This pattern reflects an element of denial, in which hearing difficulties were attributed to external or temporary causes rather than to deterioration of hearing itself. Freud (1961) describes denial as a defensive response to distress, a mechanism for protecting the self from threatening realities. Although my participants did not appear overtly distressed, denial appeared to function as a means of protecting self-image, particularly in relation to the stigma attached to hearing loss within the south Asian culture.

Delaying acknowledgment of hearing loss due to stigma was also observed in previous literature where people did not disclose it in the attempt to normalise oneself (Svinndal et al., 2020; Hetu et al, 2009). This research shows normality was defined by what was acceptable within the South Asian culture and in agreement with existing studies, hearing loss was not perceived positively (Rawool, 2018). My data showed that people had a tendency to deny their hearing issue, and this could be one of the reasons for their lack of access of hearing services.

8.2.3.2 Ability to Self-Manage

Managing hearing difficulties without seeking professional help further reinforced the delayed acknowledgement of hearing loss as a legitimate health concern. Employing coping strategies to manage not only the physical limitations of hearing loss but also the emotional and social struggles was identified as a significant aspect in the majority White populations (Smith, 2024; Bennett, 2022; Holman, 2019; Gallagher, 2018; Heffernan, 2016; Bennion, 2013; Claesen, 2012). Similarly, in this study the south Asian participants preferred to self-manage not only a practical response to hearing

difficulties but also to preserve a desired self-image. The key difference identified between the majority of previous literature and the current study lies in the reasons for self-management. Existing research on predominantly White populations suggests that individuals often managed their hearing difficulties by avoiding social interactions and conversations due to fear of embarrassment (Smith, 2024; Bennett, 2022; Holman, 2019; Gallagher, 2018; Heffernan, 2016; Bennion, 2013; Claesen, 2012). Conversely, for South Asian participants, avoidance of social gatherings did not appear to be a viable option and they self managed to avoid being labelled deaf. Within these communities, collective events are considered integral to sustaining a shared cultural identity, which is preserved through engaged coping and self-management. While most ethnic groups demonstrated self-management to maintain an image of normality in society, the South Asian participants placed a stronger emphasis on the collective dimension of their identity.

One key form of self-management involved seeking information about the type and degree of hearing loss. Several participants (P1, P2, P3, P11, P18) expressed interest in undergoing a hearing test through my study simply to get their hearing “checked,” yet still declined follow-up services. This suggests that knowledge of hearing thresholds was valued insofar as it enabled individuals to develop personal coping strategies, but it did not translate into service uptake. A comparable finding was reported by Dawes et al. (2021), who showed that 70% of adults participated in an online hearing test, with no significant disparities across ethnic groups. My data helps explain this phenomenon: while South Asian participants were comfortable with self-administered or low stakes hearing checks, they resisted formal clinical pathways, reflecting a preference for self-managed solutions over medicalised intervention.

8.3 Use of the Explanatory Model – An Original Contribution to Knowledge

The findings of this study formed the explanatory model that was developed around the core category of '*collective me*'. It offers a structured way of understanding how collectivist values shape perceptions of hearing loss and engagement with hearing services. This section outlines the practical application and contribution of the model by considering its relevance to three domains: raising awareness among South Asian communities, informing healthcare professionals, and guiding future research. In doing so, it highlights how the model extends existing knowledge by linking cultural values with health-seeking behaviours, while also providing a foundation for practical interventions and further academic inquiry.

8.3.1 Raising Awareness within South Asian Communities

My findings revealed that while participants acknowledged their hearing loss, they were often unaware of their own attitudes and decision-making processes regarding the uptake of hearing services. Disseminating the findings of this study through the proposed model could therefore be valuable in highlighting the role of collectivism in shaping hearing health behaviours. The model offers a means to address the negative perceptions and barriers that currently limit service uptake, while also identifying positive elements that can be leveraged to encourage engagement.

Importantly, the model does not aim to criticise choices made within South Asian communities, but rather to promote awareness of the underlying factors that discourage service use.

Participants themselves expressed an interest in learning about the outcomes of this study, further emphasising the importance of sharing these findings with the community. The model can be presented in educational seminars, community events, and well-being courses, ensuring that it is delivered in a manner consistent with collectivist values. Because collectivism places emphasis on

group perspectives, awareness campaigns should be directed at entire communities rather than only individuals experiencing hearing loss.

One theme that underpinned all categories in this study was the stigma surrounding hearing loss. Tackling this stigma within South Asian communities could improve recognition of hearing loss as a significant medical condition rather than a marker of disability. A clearer understanding that hearing services can provide treatment, whether through interventions to restore hearing or through use of hearing aids. Education about hearing aids is also critical, as several participants highlighted stereotypes associating them exclusively with old age. Involving community leaders or cultural influencers to promote hearing health may shift perceptions, particularly given comments that hearing aids are not viewed as “cool” like glasses. Stigma, however, is not unique to this study: it has been consistently identified in previous literature across different ethnic groups. The distinction lies in the South Asian context, where a collectivist approach, using respected community figures, involving family and engaging GPs to reshape cultural attitudes may prove especially effective.

8.3.2 Informing Health Professionals

The model also serves as a practical tool for healthcare professionals, enabling a deeper understanding of how hearing loss is perceived in South Asian communities. For effective practice, the ‘*collective me*’ should be recognised as a core category by clinicians so that services and interventions are framed in ways that resonate with collectivist values. For example, clinical encounters could accommodate more than one family member, involve family voices when establishing hearing difficulties, and assign family roles in motivating and supporting uptake of services. Such a collective approach aligns service delivery with cultural norms and has the potential to enhance patient satisfaction and engagement.

A further benefit lies in equipping clinicians to recognise that individuals may dismiss hearing loss while simultaneously adapting to it, masking its impact. This insight enables more proactive

identification and support. It also highlights the need to emphasise collective perseverance with hearing aids once sought hearing services.

The model could also be integrated into educational courses for health professionals, addressing broader calls to increase equality and diversity in health provision (NHS Race and Health Observatory, 2022; Marmot Review, 2020). In a city such as Birmingham, where 51.3% of the population belongs to ethnic minority groups, it is vital for healthcare staff to understand cultural influences on health-seeking behaviours. By providing insight into how collectivist perspectives shape the uptake of hearing services, the model contributes to knowledge that can improve cultural competence, equity, and inclusivity in healthcare.

8.3.3 Further Research: Surveys and Questionnaires

The model also provides a foundation for further research. While my study focused on hearing loss, the model has potential application to other health issues, such as mental health, or to other collectivist ethnic minority groups. As a comprehensive and multi-layered framework, it identifies key factors that may be transferable across different populations and health contexts.

It must be acknowledged, however, that this model and its findings are not intended to be generalisable. Instead, they are proposed as a steppingstone for further inquiry. Future research could expand upon these findings with larger samples, using surveys or questionnaires to test each component of the model in greater detail. Such studies could confirm, refine, or challenge the current findings, thereby strengthening the evidence base.

In summary, the model provides a practical and theoretical contribution by offering a culturally grounded explanation of health-seeking behaviour in South Asian communities, while also opening new avenues for comparative and applied research.

8.4 Strengths and Limitations

8.4.1 Strengths

Conceptual originality and contribution.

The study offers a novel, culturally grounded explanation of hearing-health behaviour among South Asian communities through the core category of ‘collective me’. By demonstrating how family-centred decision-making, collective image management and communal obligations shape recognition of hearing loss and engagement with services, the study extends a literature that has largely treated hearing loss as an individual problem within predominantly White populations. The resultant explanatory model translates these insights into a practical framework with clear implications for public engagement, clinical practice and future research.

Methodological fit and rigour.

A constructivist grounded theory approach was well matched to the study aim of exploring meanings and processes. Iterative coding, constant comparison, memo-writing and diagramming enabled theory to be developed inductively from participants’ accounts (Charmaz, 2014). Reflexive notes and an audit trail enhanced transparency and analytic coherence across the study.

Rich, community-based data.

Recruitment outside clinical pathways (e.g., community venues and word-of-mouth) captured the views of people not currently engaged with services, reducing the typical “clinic user” bias. The sample included a wide age range and both women and men, allowing the analysis to surface intergenerational dynamics (e.g., elders’ authority; younger adults’ image concerns) that are rarely discussed in the hearing-care literature.

Cultural and linguistic competence enabling access.

My positionality as a bilingual South Asian audiologist facilitated trust, depth and nuance in

interviews (including the use of Urdu/Punjabi where appropriate). This insider access yielded thick descriptions of family roles, stigma and everyday coping that are difficult to elicit without cultural familiarity.

Practical utility

The study goes beyond description to provide actionable guidance: how to involve families in consultations, how to frame messages for collectivist audiences, and how to locate services in community settings. The model therefore has immediate translational value for awareness campaigns, service design and staff education.

Ethical sensitivity

Interviews were conducted with attention to privacy, cultural norms and participant comfort. Optional hearing checks were used carefully as an engagement tool rather than as a diagnostic intervention, maintaining focus on participants' perceptions while avoiding clinical coercion.

8.4.2 Study Limitations

It is important to reflect on the study's limitations in relation to methodology, data collection and analysis. Recognising constraints is intended to generate constructive debate and identify future research opportunities.

Researcher influence and interpretation

It was difficult to bracket out my professional knowledge of audiology and my personal experience of South Asian culture, which inevitably contributed to how this research was constructed and how data was analysed. The findings are a product of my interpretation, a position sometimes criticised by opponents of constructivist grounded theory (Miller and Fredricks, 1999). To address this, I

provided a thorough trail of the research process alongside memos and reflexivity journals to ensure transparency (Charmaz, 2014).

Generalisability

A limitation of this study is that interview findings cannot be generalised to other populations and settings. However, qualitative methodology does not claim statistical generalisability; rather, it offers contextualised insight and theoretical transferability (Denzin and Lincoln, 2005).

Gender balance

Women comprised the majority of participants (14/19). This may have influenced the data. In grounded theory, however, gender is not assumed to determine processes, particularly in health research where the condition often shapes responses (Glaser, 2002). The analysis therefore remained anchored in participants' words rather than demographics. The majority of participants in this study were female, which does not reflect the general prevalence of hearing loss, as evidence indicates it is more common in men than in women (Akeroyd et al., 2024).

8.5 Conclusion

The findings of this study are situated within South Asian culture, which is deeply underpinned by collectivist values. The three categories developed, family influence, dismissal of hearing loss as a health concern, and subconscious adaptation, capture distinct dimensions of these values. The explanatory model demonstrates that hearing loss is not merely an individual experience, but a phenomenon shaped by family dynamics and communal expectations.

The findings extend existing literature by showing that stigma surrounding hearing loss in South Asian communities is collectively produced, tied to cultural ideals, linking collectivism to specific

barriers in hearing-health behaviours, service uptake, and the persistence of self-management strategies.

The practical contribution of this study lies in its guidance for both awareness-raising and service delivery. Community-focused education, engagement of family members, and involvement of trusted cultural figures may help reposition hearing loss as a legitimate medical concern rather than a marker of disability. For clinicians, recognising the role of the *collective me* can enhance cultural competence, enabling interventions that involve family voices, respect cultural values, and locate care in accessible, non-stigmatised settings.

While the research cannot claim generalisability, its strengths lie in its originality, methodological rigour, and the depth of insight gained from community-based voices. Limitations such as gender imbalance and the interpretive nature of constructivist grounded theory are acknowledged, but they do not detract from the study's ability to illuminate new perspectives. Instead, they highlight avenues for future research: expanding the model to other health conditions, testing it with larger and more diverse samples, and developing interventions tailored to collectivist frameworks.

In conclusion, this study contributes a new lens through which hearing loss can be understood in South Asian communities. By foregrounding the *collective me*, within the explanatory model, this study highlights the pathway toward more inclusive, culturally responsive practices.

References

- Abas, N. F. N. and Hanafiah, N. A. (2019) Profiles of Hearing Help-Seekers at Private Hearing Care Centres in Kuantan, *International Journal Of Allied Health Sciences*, 3(1), pp. 573-573.
- Abbo, C. , Ekblad, S. , Waako, P. , Okello, E. , Muhwezi, W. and Musisi, S. (2008) Local explanations of and preferred treatments for depression among the Baganda in Uganda: A qualitative study, *Transcultural Psychiatry*, 45(2), pp. 216–239.
- Abid, K., Imran, A., Bari, Y., Ziadi, T., Khambati, Z., Younus, M., Billah, A.H.B., Khura, B. and Jabbar, A. (2020) Adherence of facemask during COVID pandemic among South Asian countries -An observational study.
- Abid, Khadijah, Abira Imran, Yashfika Bari, Tooba Ziadi, Zainab Khambati, Maryam Younus, Abul Hasan Baki Billah, Bikash Khura, and Abdul Jabbar. "Adherence of facemask during COVID pandemic among South Asian countries -An observational study." (2020).
- Acheson, D. and Britain, G. (1998) *Independent inquiry into inequalities in health: report*. The Stationery Office.
- Acri, M. , Hooley, C. D. , Richardson, N. and Moaba, L. B. (2017) Peer models in mental health for caregivers and families, *Community mental health journal*, 53, pp. 241-249.
- Adams, C. , Gringart, E. , Strobel, N. , and Masterman, P. (2021). Help-seeking for mental health problems among older adults with chronic disease: an application of the theory of planned behaviour, *Australian Journal of Psychology*, 73(4), 426–437.
- Adler, N.E. and Page, A.E.K. (2008) Committee on psychosocial services to cancer patients/families in a community setting, In *Cancer care for the whole patient: meeting psychosocial health needs*.
- Age, U. K. (2015) Later life in the United Kingdom, *London: Age UK*.
- Ahmad, W. I.-U., Baker, M. R. and Kernohan, E. E. (1991) General practitioners' perceptions of Asian and non-Asian patients, *Family Practice*, 8(1), pp. 52-56.
- Ahmed, F., Abel, G. A., Lloyd, C. E., Burt, J. and Roland, M. (2015) Does the availability of a South Asian language in practices improve reports of doctor-patient communication from South Asian patients? Cross sectional analysis of a national patient survey in English general practices, *BMC family practice*, 16(1), pp. 1-12.
- Ajzen, I. (1991) The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, 50(2), pp.179–211.
- Alam, Z., Deol, H., Dean, J.A. and Janda, M. (2022) Reasons behind Low Cervical Screening Uptake among South Asian Immigrant Women: A Qualitative Exploration, *Int J Environ Res Public Health*, 19(3), pp.26.
- Ali, M., Alam, M.M., Rifat, M.A., Simi, S.M., Sarwar, S., Amin, M.R. and Saha, S. (2025) Prevalence of diabetes and prediabetes in South Asian countries: a systematic review and meta-analysis, *Discover Public Health*, 22(1), pp. 39.

Al-Saadi, H. (2014) Demystifying Ontology and Epistemology in research methods, *Research gate*, 1(1), pp. 1-10.

Alberti, P. W. (2001) The anatomy and physiology of the ear and hearing, *Occupational exposure to noise: Evaluation, prevention, and control*, pp. 53-62.

Aldwin, C. M., Yancura, L. A. and Boeninger, D. K. (2007) Coping, Health, and Aging.

Alford, R. L., Arnos, K. S., Fox, M., Lin, J. W., Palmer, C. G., Pandya, A., Rehm, H. L., Robin, N. H., Scott, D. A. and Yoshinaga-Itano, C. (2014) American College of Medical Genetics and Genomics guideline for the clinical evaluation and etiologic diagnosis of hearing loss, *Genetics in Medicine*, 16(4), pp. 347.

Ali, N. R. (2015) Exploring older South Asian migrant (SAM) women's experiences of old age and ageing.

Allen, S. B. and Goldman, J. (2020) Syndromic Sensorineural Hearing Loss (SSHL), *StatPearls [Internet]*.

Allison, T. R., Symmons, D. P. M., Brammah, T., Haynes, P., Rogers, A., Roxby, M. and Urwin, M. (2002) Musculoskeletal pain is more generalised among people from ethnic minorities than among white people in Greater Manchester, *Annals of the rheumatic diseases*, 61(2), pp. 151-156.

Anderson, L. M., Charles, J. S., Fullilove, M. T., Scrimshaw, S. C., Fielding, J. E., Normand, J. and Task Force on Community Preventive, S. (2003) Providing affordable family housing and reducing residential segregation by income: a systematic review, *American journal of preventive medicine*, 24(3), pp. 47-67.

Anderson, N. B., Bulatao, R. A., Cohen, B., on Race, P. and National Research, C. (2004) Racial and Ethnic Identification, Official Classifications, and Health Disparities, *Critical Perspectives on Racial and Ethnic Differences in Health in Late Life*: National Academies Press (US).

Anguiano, M. C. C., Aragón, A. B., Fernández, D. A. and Küstner, B. M. (2019a) Perceptions about mental illness among general practitioners, *International journal of mental health systems*, 13(1), pp. 1-5.

Anguiano, M. C. C., Aragón, A. B., Fernández, D. A. and Küstner, B. M. (2019b) Perceptions about mental illness among general practitioners, *International journal of mental health systems*, 13(1), pp. 1-5.

Ansari, S. (2013) Subjects or citizens? India, Pakistan and the 1948 British nationality act, *The Journal of Imperial and Commonwealth History*, 41(2), pp. 285-312.

Antwi, S. K. and Hamza, K. (2015) Qualitative and quantitative research paradigms in business research: A philosophical reflection, *European Journal of Business and Management*, 7(3), pp. 217-225.

Appollonio, I., Carabellese, C., Frattola, L. and Trabucchi, M. (1996) Effects of sensory aids on the quality of life and mortality of elderly people: a multivariate analysis, *Age and ageing*, 25(2), pp. 89-96.

- Arksey, H. and O'Malley, L. (2005) Scoping studies: towards a methodological framework, *International journal of social research methodology*, 8(1), pp. 19-32.
- Arlinger, S. (2003) Negative consequences of uncorrected hearing loss-a review, *International journal of audiology*, 42, pp. 2S17-2S20.
- Armitage, C. J. and Conner, M. (2001) Efficacy of the theory of planned behaviour: A meta-analytic review, *British Journal of Social Psychology*, 40(4), pp. 471-499.
- Aromataris, E. and Pearson, A. (2014) The systematic review: an overview. *AJN The American Journal of Nursing*, 114(3), pp.53-58.
- Arnold, M. , Small, B. J. , Hyer, K. , Chisolm, T. , Frederick, M. T. , Silverman, S. C. and Saunders, G. H. (2019) Development of a hearing help-seeking questionnaire based on the theory of planned behavior, *International journal of audiology*, 58(5), pp. 287-295.
- Asghari, A., Farhadi, M., Daneshi, A., Khabazkhoob, M., Mohazzab-Torabi, S., Jaleesi, M. and Emamjomeh, H. (2017) The prevalence of hearing impairment by age and gender in a population-based study, *Iranian journal of public health*, 46(9), pp. 1237.
- ASHA, A. S.-L.-H. A. (1993) *Definitions of communication disorders and variations*. Available at: <http://www.asha.org/policy>. [Accessed 17 June 2017].
- Aspinall, P. J., Song, M. and Hashem, F. (2006) Mixed race in Britain: a survey of the preferences of mixed race people for terminology and classifications.
- Atieno, O. P. (2009) An analysis of the strengths and limitation of qualitative and quantitative research paradigms, *Problems of Education in the 21st Century*, 13(1), pp. 13-38.
- Atkin, K. and Ahmad, W. I. U. (2000) Family care-giving and chronic illness: how parents cope with a child with a sickle cell disorder or thalassaemia, *Health & social care in the community*, 8(1), pp. 57-69.
- Atkin, K., Ahmad, W. I. U. and Jones, L. (2002) Young South Asian deaf people and their families: negotiating relationships and identities 1, *Sociology of Health & Illness*, 24(1), pp. 21-45.
- Audiology, B. A. o. 2016. Guidance for Primary Care: Direct Referral of Adults with Hearing Difficulty to Audiology Services.
- Audulv, Å., Packer, T., Hutchinson, S., Roger, K. S. and Kephart, G. (2016) Coping, adapting or self-managing—what is the difference? A concept review based on the neurological literature, *Journal of advanced nursing*, 72(11), pp. 2629-2643.
- Augsberger, A., Yeung, A., Dougher, M. and Hahm, H. C. (2015) Factors influencing the underutilization of mental health services among Asian American women with a history of depression and suicide, *BMC health services research*, 15(1), pp. 1-11.
- Aziz, V. M. (2009) Cultural aspects of the patient–doctor relationship, *International psychogeriatrics*, 21(2), pp. 415-417.

- Babaei, S. and Abolhasani, S. (2020) Family's supportive behaviors in the care of the patient admitted to the cardiac care unit: A qualitative study. *Journal of Caring Sciences*, 9(2), p.80.
- Bacsu, J. D., Kortzman, A., Fraser, S., Chasteen, A. L., MacDonald, J., & O'Connell, M. E. (2023) Understanding Intersectional Ageism and Stigma of Dementia: Protocol for a Scoping Review. *JMIR research protocols*, 12, e46093.
- Baguley, D., McFerran, D. and Hall, D. (2013) Tinnitus, *The Lancet*, 382(9904), pp. 1600-1607.
- Bahmad, F., Cardoso, C. C., Caldas, F. F., Barreto, M. A. S. C., Hilgenberg, A. M. D. S., Teixeira, M. S. and Serra, L. S. M. (2019) Hearing Rehabilitation through Bone-Conducted Sound Stimulation: Preliminary Results, *Int Arch Otorhinolaryngol*, 23(1), pp. 12-17.
- Bainbridge, K. E. and Ramachandran, V. (2014) Hearing aid use among older United States adults: the National Health and Nutrition Examination Survey, 2005–2006 and 2009–2010, *Ear and hearing*, 35(3), pp. 289.
- Ballard, R. (2003) The South Asian presence in Britain and its transnational connections, In *Culture and economy in the Indian diaspora*, Routledge, pp. 209-234.
- Bhandari, P. and Titzmann, F.M. (2017) Introduction. Family realities in South Asia: adaptations and resilience. *South Asia Multidisciplinary Academic Journal*, (16).
- Bambara, J.K., Wadley, V., Owsley, C., Martin, R.C., Porter, C. and Dreer, L.E. (2009) Family functioning and low vision: a systematic review, *Journal of visual impairment & blindness*, 103(3), pp. 137-149.
- Banton, M. (1998) *Racial theories*. Cambridge University Press.
- Barad, K. (2003) Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of women in culture and society*, 28(3), pp. 801-831.
- Barker, A. B., Leighton, P. and Ferguson, M. A. (2017) Coping together with hearing loss: a qualitative meta-synthesis of the psychosocial experiences of people with hearing loss and their communication partners, *International Journal of Audiology*, 56(5), pp. 297-305.
- Barnett, M., Hixon, B., Okwiri, N., Irungu, C., Ayugi, J., Thompson, R., Shinn, J. B. and Bush, M. L. (2017) Factors involved in access and utilization of adult hearing healthcare: a systematic review, *The Laryngoscope*, 127(5), pp. 1187-1194.
- Barth, F. (2010) Introduction to ethnic groups and boundaries: The social organization of cultural difference, *Selected Studies in International Migration and Immigrant Incorporation*, 1, pp. 407.
- Basner, M. (2015) Auditory and non-auditory effects of noise on health: An ICBEN perspective, *The Journal of the Acoustical Society of America*, 137(4), pp. 2246-2246.
- Bazeley, P. (2010) Conceptualising research performance, *Studies in higher education*, 35(8), pp. 889-903.
- Beauchamp, T. L and Childress, J. F (2013) *Principles of biomedical ethics*, 7th Edition.

- Bazeley, P. and Jackson, K. (2013) *Qualitative data analysis with NVivo*. SAGE publications limited.
- Bean, D., Cundy, T. and Petrie, K. J. (2007) 'Ethnic differences in illness perceptions, self-efficacy and diabetes self-care', *Psychology and Health*, 22(7), pp. 787-811.
- Benderly, B. L. (1990) *Dancing without music: Deafness in America*. Gallaudet University Press.
- Bennett, C. (2016) In focus: NHS sets out plan for hearing loss services. *Optician*, 2016(8), pp.144368-1.
- Bennett, R. J., Fletcher, S., Conway, N. and Barr, C. (2020) The role of the general practitioner in managing age-related hearing loss: perspectives of general practitioners, patients and practice staff, *BMC family practice*, 21, pp. 1-10.
- Benova, L., Grundy, E. and Ploubidis, G. B. (2015) Socioeconomic position and health-seeking behavior for hearing loss among older adults in England, *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 70(3), pp. 443-452.
- Benton, T. (2001) *Philosophy of social science: The philosophical foundations of social thought*.
- Bergeson, S. C. and Dean, J. D. (2006) A systems approach to patient-centered care, *Jama*, 296(23), pp. 2848-2851.
- Bhamjee, A., Le Roux, T., Swanepoel, D.W., Graham, M.A., Schlemmer, K. and Mahomed-Asmail, F. (2022) Perceptions of telehealth services for hearing loss in South Africa's public healthcare system. *International Journal of Environmental Research and Public Health*, 19(13), p.7780.
- Bhat, J. (2022) *South Asian Relationship Status: Complicated. The pressures of marriage-seeking on South Asian women*. Available at: <https://www.psychologytoday.com/gb/blog/the-psychology-the-south-asian-diaspora/202203/south-asian-relationship-status-complicated> [Accessed 14 May 2023].
- Bhatt, J. M., Lin, H. W. and Bhattacharyya, N. (2016) Prevalence, severity, exposures, and treatment patterns of tinnitus in the United States, *JAMA Otolaryngology–Head & Neck Surgery*, 142(10), pp. 959-965.
- BIHIMA (2024) *Increase in UK private hearing instrument sales and overall sales in the republic of Ireland for quarter three*. Available at: https://www.bihima.com/increase-in-uk-private-hearing-instrument-sales-and-overall-sales-in-the-republic-of-ireland-for-quarter-three/?utm_source=chatgpt.com [Accessed 17 March 2025]
- Birmingham City Council (2023) *Population and census*, Retrieved from *BMJ Evidence-Based Medicine*, 28, pp. 213-217.
- Bhogal, B. S. (2017) Fate (Destiny), Sikhism, in Mandair, A.-P.S. (ed.) *Sikhism*. Dordrecht: Springer Netherlands, pp. 137-142.
- Bhopal, R. (2004) Glossary of terms relating to ethnicity and race: for reflection and debate, *Journal of Epidemiology & Community Health*, 58(6), pp. 441-445.
- Bhopal, R. S. (2014) *Migration, ethnicity, race, and health in multicultural societies*. Oxford University Press.

Bhui, K., Stansfeld, S., Hull, S., Priebe, S., Mole, F. and Feder, G. (2003) Ethnic variations in pathways to and use of specialist mental health services in the UK: systematic review, *The British Journal of Psychiatry*, 182(2), pp. 105-116.

Biondo, P. D., Kalia, R., Khan, R. A., Asghar, N., Banerjee, C., Boulton, D., Marlett, N., Shklarov, S. and Simon, J. E. (2017) Understanding advance care planning within the South Asian community, *Health Expectations*, 20(5), pp. 911-919.

Birks, M., Hoare, K. and Mills, J. (2019) Grounded theory: the FAQs, *International Journal of Qualitative Methods*, 18, pp. 1609406919882535.

Birks, M. and Mills, J. (2015) *Grounded theory: A practical guide*. Sage.

Birmingham City, C. 2013. Population and Migration Topic Report. Birmingham City Council Birmingham.

Black, D., Morris, J. N., Smith, C. and Townsend, P. (1999) Better benefits for health: plan to implement the central recommendation of the Acheson report, *Bmj*, 318(7185), pp. 724-727.

Blazer, D. G., Domnitz, S. and Liverman, C. T. (2016) Hearing health care for adults: Priorities for improving access and affordability.

Bloor, M. and Wood, F. (2006) *Keywords in Qualitative Methods, in Naturalism* [Online]. Version. Available at: <https://methods.sagepub.com/book/keywords-in-qualitative-methods>.

Blumer, H. (1986) *Symbolic interactionism: Perspective and method*. Univ of California Press.

Blumer, H. (2004) *George Herbert Mead and human conduct*. Rowman Altamira.

Bowl, M. R. and Dawson, S. J. (2019) Age-related hearing loss, *Cold Spring Harbor perspectives in medicine*, 9(8), pp. a033217.

Braakman, J. and Sterkenburg, P. S. (2023) Needed adaptations in psychological treatments for people with vision impairment: A Delphi study, including clients, relatives, and professionals, *Frontiers in Psychology*, 14, p. 1028084.

Bradford, B. (2006) Who are the 'mixed' ethnic group, *London: Office for National Statistics*, pp. 1-39.

Brattain, M. (2007) Race, racism, and antiracism: UNESCO and the politics of presenting science to the postwar public, *The American Historical Review*, 112(5), pp. 1386-1413.

Bratzke, L. C., Muehrer, R. J., Kehl, K. A., Lee, K. S., Ward, E. C. and Kwekkeboom, K. L. (2015) Self-management priority setting and decision-making in adults with multimorbidity: a narrative review of literature, *International Journal of Nursing Studies*, 52(3), pp. 744-755.

Braunack-Mayer, A. J. and Mulligan, E. C. (2003) Sharing patient information between professionals: confidentiality and ethics, *Medical journal of Australia*, 178(6), pp. 277-279.

Breland, J.Y., Wong, J.J. and McAndrew, L.M. (2020) Are common sense model constructs and self-efficacy simultaneously correlated with self-management behaviors and health outcomes: A systematic review, *Health psychology open*, 7(1), p.2055102919898846.

- Broadbent, E., Petrie, K. J., Main, J. and Weinman, J. (2006) The brief illness perception questionnaire, *Journal of psychosomatic research*, 60(6), pp. 631-637.
- Brown, R., Zagefka, H. and Tip, L. K. (2016) Acculturation in the United Kingdom. In: D. Sam and J. Berry, ed. *Cambridge Handbook of Acculturation Psychology*. Norway: Cambridge University Press, pp. 375-395.
- Brice, P. J., Plotkin, R. M. and Reesman, J. (2016) On the home front: Parent personality, support, and deaf children.
- Brien, S. E., Lorenzetti, D. L., Lewis, S., Kennedy, J. and Ghali, W. A. (2010) Overview of a formal scoping review on health system report cards, *Implementation Science*, 5(1), pp. 1-12.
- Bright, T., Mulwafu, W., Thindwa, R., Zuurmond, M. and Polack, S. (2017) Reasons for low uptake of referrals to ear and hearing services for children in Malawi, *PloS one*, 12(12).
- Broughton, J., Irving, D. and Daniels, J. (2024) The common sense model in Raynaud's phenomenon: do illness perceptions account for variance in symptom severity and quality of life? *The Cognitive Behaviour Therapist*, 17(1), pp. 24.
- Brunes, A., B. Hansen, M. and Heir, T. (2019) Loneliness among adults with visual impairment: prevalence, associated factors, and relationship to life satisfaction, *Health and quality of life outcomes*, 17(1), pp. 24.
- Bryant, A. and Charmaz, K. (2007) *The Sage handbook of grounded theory*. Sage.
- Bryman, A. (2021) *Social Research Methods 6E*. Oxford University Press.
- BSA (2024) *British Society of Audiology Guiding Principles of Person-Centred Care in Adult Hearing Rehabilitation*. Available at: <https://www.thebsa.org.uk/wp-content/uploads/2024/10/Guiding-Principles-of-Person-Centred-Care-in-Adult-Hearing-Rehabilitation-2024.pdf> [Accessed: 19 May 2025]
- BAA (2023) *British Academy of Audiology Curriculum Guidance Document : Audiologist*. Available at: <https://www.baaudiology.org/wp-content/uploads/2023/05/BAA-Curriculum-Guidance-Document-Audiologist-May-2023.pdf> [Accessed: 12 May 2025].
- BSA (2023) *British Society of Audiology Guidance and resources*. Available at: <https://www.thebsa.org.uk/guidance-and-resources/> [Accessed: 10 May 2025].
- BSA (2011) *British Society of Audiology Pure-tone air-conduction and bone-conduction threshold audiometry with and without masking*. Available at: http://www.thebsa.org.uk/wpcontent/uploads/2014/04/BSA_RP_PTA_FINAL_24Sept11_MinorAme nd06Feb12.pdf [Accessed 23 June 2017].
- BSA (2018a) *British Society of Audiology Recommended Procedure*. Available at: <https://www.thebsa.org.uk/wp-content/uploads/2018/11/Recommended-Procedure-Pure-Tone-Audiometry-August-2018-FINAL.pdf> [Accessed 25 June 2017].

- Bulatao, R. A. and Anderson, N. B. (2004) *Bulatao, R. A. and Anderson, N. B. (Eds.2004). Understanding racial and ethnic differences in health in late life: A research agenda. Washington, DC: National Academies Press.*
- Bulmer, M. (1979) Concepts in the analysis of qualitative data, *The Sociological Review*, 27(4), pp. 651-677.
- Burchard, E. G., Ziv, E., Coyle, N., Gomez, S. L., Tang, H., Karter, A. J., Mountain, J. L., Pérez-Stable, E. J., Sheppard, D. and Risch, N. (2003) The importance of race and ethnic background in biomedical research and clinical practice, *New England Journal of Medicine*, 348(12), pp. 1170-1175.
- Burholt, V., Dobbs, C. and Victor, C. (2018) Social support networks of older migrants in England and Wales: the role of collectivist culture, *Ageing & Society*, 38(7), pp. 1453-1477.
- Burnham, J. and Shearer, B. (1993) Comparison of CINAHL, EMBASE, and MEDLINE databases for the nurse researcher, *Medical Reference Services Quarterly*, 12(3), pp. 45-57.
- Burt, J., Abel, G., Elmore, N., Lloyd, C., Benson, J., Sarson, L., Carluccio, A., Campbell, J., Elliott, M. N. and Roland, M. (2016) Understanding negative feedback from South Asian patients: an experimental vignette study, *BMJ open*, 6(9), pp. e011256-e011256.
- Butler, A. E., Copnell, B. and Hall, H. (2018) The development of theoretical sampling in practice, *Collegian*, 25(5), pp. 561-566.
- Byrne, B., Alexander, C., Khan, O., Nazroo, J. and Shankley, W. (2020) *Ethnicity, Race and Inequality in the UK: State of the Nation.*
- Bäckman, M. (2023) Living with an iconic aid: The case of the white cane, *Culture unbound*, 15(2).
- Bécares, L. and Das-Munshi, J. (2013) Ethnic density, health care seeking behaviour and expected discrimination from health services among ethnic minority people in England, *Health & place*, 22, pp. 48-55.
- Cameron, L. D. and Leventhal, H. (2003) *The self-regulation of health and illness behaviour.* London: Routledge.
- Carabellese, C., Appollonio, I., Rozzini, R., Bianchetti, A., Frisoni, G. B., Frattola, L. and Trabucchi, M. (1993) Sensory impairment and quality of life in a community elderly population, *Journal of the American Geriatrics Society*, 41(4), pp. 401-407.
- Carmin, C.N., Ownby, R.L., Fontanella, C., Steelesmith, D. and Binkley, P.F. (2024) Impact of mental health treatment on outcomes in patients with heart failure and ischemic heart disease, *Journal of the American Heart Association*, 13(7), p.e031117.
- Cary, L.A. and Chasteen, A.L. (2015) Age stereotypes and age stigma: Connections to research on subjective aging. *Annual review of gerontology and geriatrics*, 35(1), pp.99-119.
- Chaney, K. E., Sanchez, D. T. and Maimon, M. R. (2019) Stigmatized-identity cues in consumer spaces, *Journal of Consumer Psychology*, 29(1), pp. 130-141.

Chang, L.C., Sun, C.C., Lee, T.C., Wang, Y.N. and Liao, L.L. (2024) Shared decision-making, treatment decision regret, and vision-related quality of life among parents of children with myopia: An online survey in Taiwan, *Contact Lens and Anterior Eye*, 47(6), pp. 102283.

Chang, J. T., Morton, S. C., Rubenstein, L. Z., Mojica, W. A., Maglione, M., Suttorp, M. J., Roth, E. A. and Shekelle, P. G. (2004) Interventions for the prevention of falls in older adults: systematic review and meta-analysis of randomised clinical trials, *Bmj*, 328(7441), pp. 680.

Chang, V., Wang, Y. and Wills, G. (2020) Research investigations on the use or non-use of hearing aids in the smart cities, *Technological Forecasting and Social Change*, 153, 119231.

Charsley, K., Bolognani, M., Ersanilli, E., Spencer, S., Charsley, K., Bolognani, M., Ersanilli, E. and Spencer, S. (2020) British South Asian Transnational Marriage, *Marriage Migration and Integration*, pp.83-121.

Charmaz, K. (1990) Discovering' chronic illness: using grounded theory, *Social science & medicine*, 30(11), pp. 1161-1172.

Charmaz, K. (2000) Grounded theory: Objectivist and constructivist methods, *Handbook of qualitative research*, 2, pp. 509-535.

Charmaz, K. (2006) *Constructing grounded theory: A practical guide through qualitative analysis*. sage.

Charmaz, K. (2011) Grounded theory methods in social justice research, *The Sage handbook of qualitative research*, 4(1), pp. 359-380.

Charmaz, K. (2014) *Constructing grounded theory*. Sage.

Charmaz, K. and Belgrave, L. L. (2007) Grounded theory, *The Blackwell encyclopedia of sociology*.

Charmaz, K. and Bryant, A. (2011) Grounded theory and credibility, *Qualitative research*, 3, pp. 291-309.

Charmaz, K. and Thornberg, R. (2020) The pursuit of quality in grounded theory, *Qualitative Research in Psychology*, pp. 1-23.

Cheng, E (2020) *Design for different cultures with Hofstede's cultural dimensions theory*. Available at: <https://medium.com/@eviecheng/designing-for-different-cultures-hofstedes-cultural-dimensions-5d5a369e99ee> [Accessed 21 May 2025].

Chase, S. E. (2008) Narrative inquiry: Multiple lenses, approaches, voices.

Chatterji, J. and Washbrook, D. A. (2013) *Routledge handbook of the South Asian diaspora*. Routledge London.

Chaturvedi, N., Rai, H. and Ben-Shlomo, Y. (1997) Lay diagnosis and health-care-seeking behaviour for chest pain in south Asians and Europeans, *The Lancet*, 350(9091), pp. 1578-1583.

Chesney, M. (2001) Dilemmas of self in the method, *Qualitative Health Research*, 11(1), pp. 127-135.

- Chia, E. M., Wang, J. J., Rochtchina, E., Cumming, R. R., Newall, P., & Mitchell, P. 2007. Hearing impairment and health-related quality of life: the Blue Mountains Hearing Study.: *Ear and hearing*.
- Chien, W. and Lin, F. R. (2012) Prevalence of hearing aid use among older adults in the United States, *Archives of internal medicine*, 172(3), pp. 292-293.
- Choi, J. S., Shim, K. S., Shin, N. E., Nieman, C. L., Mamo, S. K., Han, H. R. and Lin, F. R. (2019) Cultural adaptation of a community-based hearing health intervention for Korean American older adults with hearing loss, *Journal of cross-cultural gerontology*, 34, pp. 223-243.
- Choudhury, S. M., Brophy, S. and Williams, R. (2009) Understanding and beliefs of diabetes in the UK Bangladeshi population, *Diabetic Medicine*, 26(6), pp. 636-640.
- Christman, J. (2004) Relational autonomy, liberal individualism, and the social constitution of selves, *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 117(1/2), pp. 143-164.
- Chu, H. , and Liu, S. (2021) Integrating health behavior theories to predict COVID-19 vaccine acceptance. *Human Vaccines and Immunotherapeutics*, 17(5), pp. 1630-1636.
- Chun Tie, Y., Birks, M. and Francis, K. (2019) Grounded theory research: A design framework for novice researchers, *SAGE open medicine*, 7, pp. 2050312118822927.
- Clark, R. and Clark, V. P. (2022) The use of mixed methods to advance positive psychology: A methodological review, *International Journal of Wellbeing*, 12(3).
- Clarke, A. and Friese, C. (2014) Grounded Theorizing Using Situational Analysis. In. Clarke, Adele–Charmaz, Kathy, *Grounded theory and situational analysis. situational analysis: Essentials and exemplars*, 4, pp. 67-90.
- Clarke, G., Pariza, P. and Wolters, A. (2020) How has COVID-19 affected service delivery in GP practices that offered remote consultations before the pandemic?, *The Health Foundation*. Retrieved August, 15 (1), pp. 2020.
- Clark, J. (2023) How covid-19 bolstered an already perverse publishing system, *bmj*, 380.
- Cloake, J. A. and Tudor, M. R. (2001) *Multicultural Britain*. Oxford University Press.
- Clément, R. and Noels, K. A. (1992) Towards a situated approach to ethnolinguistic identity: The effects of status on individuals and groups, *Journal of Language and Social Psychology*, 11(4), pp. 203-232.
- Coffey, B. (2022) *Tackling Health Inequalities in England A selected chronology up to December*. Available at: <https://www.rsm.ac.uk/media/5477719/tackling-inequalities-final-timeline-jan2023-v2.pdf> [Accessed 05 February 2024].
- Cohen, L., Manion, L. and Morrison, K. (2002) *Research methods in education*. Routledge.
- Cohen, L., Mannion, L. and Morrison, K. (2007) *Research Methods in Education*. 6th edn. London: Routledge.

Cohen, R. (1978) Ethnicity: Problem and focus in anthropology, *Annual review of anthropology*, 7(1), pp. 379-403.

Conner, M. and Norman, P. (2024) Why do even strong intenders sometimes fail to act? Evidence from protection, detection, and risk health behaviors, *Health Psychology*.

Conner, M. and Sparks, P. (2005) *Conner, M. and Sparks, P (Eds.2005) Theory of Planned Behaviour and health behaviour. In: Predicting Health Behaviour. Maidenhead: Open University Press.*

Connelly, F. M. and Clandinin, D. J. (1990) Stories of experience and narrative inquiry, *Educational researcher*, 19(5), pp. 2-14.

Corrigan, P. W., Druss, B. G. and Perlick, D. A. (2016) Reducing stigma to improve mental health treatment engagement. *American Journal of Psychiatry*.

Cooke, M. and Matarasso, B. (2005) Promoting reflection in mental health nursing practice: a case illustration using problem-based learning, *International Journal of Mental Health Nursing*, 14(4), pp. 243-248.

Cooney, A. (2011) Rigour and grounded theory, *Nurse researcher*, 18(4).

Corbin, J. and Morse, J. M. (2003) The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics, *Qualitative inquiry*, 9(3), pp. 335-354.

Corbin, J. and Strauss, A. (2008) Strategies for qualitative data analysis, *Basics of Qualitative Research. Techniques and procedures for developing grounded theory*, 3.

Cornell, S. and Hartmann, D. (2006) *Ethnicity and race: Making identities in a changing world*. Sage Publications.

Corry, P. C. (2014) Consanguinity and prevalence patterns of inherited disease in the UK Pakistani community, *Human Heredity*, 77(1-4), pp. 207-216.

Cox, C. and Monk, A. (1996) Strain among caregivers: Comparing the experiences of African American and Hispanic caregivers of Alzheimer's relatives, *The International Journal of Aging and Human Development*, 43(2), pp. 93-105.

Craig, S. L., Eaton, A. D., McInroy, L. B., D'Souza, S. A., Krishnan, S., Wells, G. A., Twum-Siaw, L. and Leung, V. W. Y. (2020) Navigating negativity: a grounded theory and integrative mixed methods investigation of how sexual and gender minority youth cope with negative comments online, *Psychology & Sexuality*, 11(3), pp. 161-179.

Crawford, J., Ahmad, F., Beaton, D. and Bierman, A.S. (2016) Cancer screening behaviours among south Asian immigrants in the UK, US and Canada: a scoping study, *Health Soc Care Community*, 24(1), pp. 123-53.

Creswell, J. W. (2014) *A concise introduction to mixed methods research*. SAGE publications.

Creswell, J. W. and Creswell, J. D. (2017) *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

- Creswell, J.W. and Poth, C.N. (2016) *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Creswell, J. W. and Garrett, A. L. (2008) The “movement” of mixed methods research and the role of educators, *South African journal of education*, 28(3), pp. 321-333.
- Creswell, J. W. and Poth, C. N. (2017) *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Creswell, J. W. and Zhang, W. (2009) The application of mixed methods designs to trauma research, *Journal of Traumatic Stress: Official publication of the international society for traumatic stress studies*, 22(6), pp. 612-621.
- Crisafulli, B., Wasil, M., Singh, J. and Benoit, S. (2019) Managing patient expectations through understanding health service experiences.
- Crotty, M. (1998) *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Crouch, M. and McKenzie, H. (2006) The logic of small samples in interview-based qualitative research, *Social science information*, 45(4), pp. 483-499.
- Cunliffe, A. L. (2003) Reflexive inquiry in organizational research: Questions and possibilities, *Human relations*, 56(8), pp. 983-1003.
- Curd, M. and Psillos, S. (2013) *The Routledge companion to philosophy of science*. Routledge.
- Danby, S. and Farrell, A. (2004) Accounting for young children’s competence in educational research: New perspectives on research ethics, *The Australian Educational Researcher*, 31(3), pp. 35-49.
- Danker, A. N., Lee, J. C., Wong, Y. H. and Lim, M. Y. (2017) Hearing loss amongst the elderly in a Southeast Asian population-a community-based study, *Annals of the Academy of Medicine, Singapore*, 46(4), pp. 145-54.
- Dauncey, S. (2013) A face in the crowd: imagining individual and collective disabled identities in contemporary China, *Modern Chinese Literature and Culture*, 25(2), pp. 130-165.
- David, D. and Werner, P. (2016) Stigma regarding hearing loss and hearing aids: A scoping review, *Stigma and Health*, 1(2), pp. 59.
- Davis, A., Smith, P. A., Booth, M. and Martin, M. (2012) Diagnosing patients with age-related hearing loss and tinnitus: Supporting GP clinical engagement through innovation and pathway redesign in audiology services, *International Journal of Otolaryngology*, 2012.
- Davis, H., Schlundt, D., Bonnet, K., Camarata, S., Bess, F. H. and Hornsby, B. (2020) Understanding Listening-Related Fatigue: Perspectives of Adults with Hearing Loss, *International Journal of Audiology*, pp. 1-11.
- Dawes, P., Emsley, R., Cruickshanks, K. J., Moore, D. R., Fortnum, H., Edmondson-Jones, M., McCormack, A. and Munro, K. J. (2015) Hearing loss and cognition: the role of hearing AIDS, social isolation and depression, *PloS one*, 10(3), pp. e0119616.

- Dawes, P., Fortnum, H., Moore, D. R., Emsley, R., Norman, P., Cruickshanks, K., Davis, A., Edmondson-Jones, M., McCormack, A., Lutman, M. and Munro, K. (2014) Hearing in middle age: a population snapshot of 40- to 69-year olds in the United Kingdom, *Ear Hear*, 35(3), pp. e44-51.
- Dawes, P., Munro, K.J., Frank, T.L., Moore, D.R., Armitage, C., Marsden, A., Lees, J. and Dillon, H. (2021). Uptake of internet-delivered UK adult hearing assessment. *International Journal of Audiology*, 60(11), pp.885-889.
- Dawson, L. L. (2004) Religion and the quest for virtual community, *Religion online: Finding faith on the Internet*, pp. 75-89.
- de Graaff, F. M., Mistiaen, P., Devillé, W. L. J. M. and Francke, A. L. (2012) Perspectives on care and communication involving incurably ill Turkish and Moroccan patients, relatives and professionals: a systematic literature review, *BMC palliative care*, 11(1), pp. 17.
- De Lepervanche, M. (1980) From race to ethnicity, *The Australian and New Zealand Journal of Sociology*, 16(1), pp. 24-37.
- Delhez, A., Lefebvre, P., Péqueux, C., Malgrange, B. and Delacroix, L. (2020) Auditory function and dysfunction: estrogen makes a difference, *Cellular and Molecular Life Sciences*, 77(4), pp. 619-635.
- Demorest, M. E. and Erdman, S. A. (1987) Development of the communication profile for the hearing impaired, *Journal of Speech and Hearing Disorders*, 52(2), pp. 129-143.
- Denktaş, S. (2011) *Health and health care use of elderly immigrants in the Netherlands: A comparative study*.
- Denzin, N. K. (2004) Symbolic interactionism, *A companion to qualitative research*, pp. 81-87.
- Denzin, N. K. and Lincoln, Y. S. (2008) *Collecting and interpreting qualitative materials*. Sage.
- Department of, H. and Great Britain. Dept. of, H. (2006) *Our health, our care, our say: A new direction for community services*. The Stationery Office.
- Desai, P. L. (1930) The deaf and dumb in India and abroad, *American Annals of the Deaf*, pp. 137-145.
- Devotta, K., Lofters, A., Bender, J. and O'Campo, P. (2025) Perceptions of cervical screening uptake amongst South Asian women in Ontario, Canada: a concept mapping study, *BMC Public Health*, 25(1), pp. 265.
- Dillard, L. K., Mishra, P., Der, C. M. and Chadha, S. (2024) Perceptions of hearing loss and hearing technology among the general public and healthcare providers: A scoping review, *BMJ Public Health*, 2.
- Domagała-Zyśk, E. (2019) Older Persons With Subjectively Assessed Hearing Problems in Poland, *American annals of the deaf*, 164(3), pp. 381-394.
- Donchin, A. (2001) Understanding autonomy relationally: toward a reconfiguration of bioethical principles, *The Journal of medicine and philosophy*, 26(4), pp. 365-386.

Dosani, N., Bhargava, R., Arya, A., Pang, C., Tut, P., Sharma, A. and Chasen, M. (2020) Perceptions of palliative care in a South Asian community: findings from an observational study, *BMC palliative care*, 19(1), pp. 1-10.

Dosanji, S., Bains, P. and Barlow, J. (2001) A qualitative study of the views of South Asian patients with rheumatoid arthritis, *Rheumatology*, 40(3), pp. 295–300.

Doshani, A., Pitchforth, E., Mayne, C. J. and Tincello, D. G. (2007) Culturally sensitive continence care: a qualitative study among South Asian Indian women in Leicester, *Family Practice*, 24(6), pp. 585-593.

Dowling, M. (2006) Approaches to reflexivity in qualitative research, *Nurse researcher*, 13(3).

Duijvestijn, J. A., Anteunis, L. J. C., Hoek, C. J., Van Den Brink, R. H. S., Chenault, M. N. and Manni, J. J. (2003) Help-seeking behaviour of hearing-impaired persons aged ≥ 55 years; effect of complaints, significant others and hearing aid image, *Acta Oto-Laryngologica*, 123(7), pp. 846-850.

Dyson, S. and Brown, B. (2005) *Social theory and applied health research*. McGraw-Hill Education (UK).

Edwards, M. L. (1997) Deaf and dumb in ancient Greece, *The disability studies reader*, 29(29), pp. 35-36.

Ekberg, K. & Hickson, L. (2023) To tell or not to tell? Exploring the social process of stigma for adults with hearing loss and their families: Introduction to the special issue, *International Journal of Audiology*, 64(suppl. 1), pp. 1–11.

Ekberg, K., Meyer, C., Scarinci, N., Grenness, C. and Hickson, L. (2015) Family member involvement in audiology appointments with older people with hearing impairment, *International Journal of Audiology*, 54(1), pp. 70–76.

Emmett, S. D. and Francis, H. W. (2015) The socioeconomic impact of hearing loss in US adults, *Otology & neurotology: official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 36(3), pp. 545.

Emmett, S. D., Schmitz, J., Pillion, J., Wu, L., Khatry, S. K., Karna, S. L., LeClerq, S. C. and West, K. P., Jr. (2015) Hearing loss is associated with decreased nonverbal intelligence in rural Nepal, *Otology & neurotology : official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 36(1), pp. 86-92.

England, N. (2016) *Prevalence of hearing loss by Local Authority area (2014 ONS estimates)*. Available at: <https://www.england.nhs.uk/publication/prevalence-of-hearing-loss-by-local-authority-area-2014-ons-estimates/> [Accessed 12 January 2017].

England, N. (2017) *Improving access for all: reducing inequalities in access to general practice services*. Available at: <https://www.england.nhs.uk/publication/improving-access-for-all-reducing-inequalities-in-access-to-general-practice-services/> [Accessed 12 January 2017].

England, P. H. (2020) *COVID-19: understanding the impact on BAME communities*. Available at: <https://www.gov.uk/government/publications/covid-19-understanding-the-impact-on-bame-communities> [Accessed 20 December 2020].

Enoch, J., Dickinson, C., Potts, J. and Subramanian, A. (2022) An exploratory study on support for caregivers of people with vision impairment in the UK, *Ophthalmic and Physiological Optics*, 42(4), pp. 858–871.

Esmail, J. (2011) "I Listened With My Eyes": Writing Speech and Reading Deafness in the Fiction of Charles Dickens and Wilkie Collins, *ELH*, 78(4), pp. 991-1020.

Evans, J., Sahgal, N., Salazar, A. M., Starr, K. J. and Corichi, M. (2022) *How Indians view gender roles in families and society*, Pew Research Center. Available at: <https://www.pewresearch.org/religion/2022/03/02/how-indiansview-gender-roles-in-families-and-society/> [Accessed 15 January 2022].

Feder, G., Crook, A. M., Magee, P., Banerjee, S., Timmis, A. D. and Hemingway, H. (2002) Ethnic differences in invasive management of coronary disease: prospective cohort study of patients undergoing angiography, *Bmj*, 324(7336), pp. 511-516.

Feldmann, H. (1970) *A History of Audiology: A Comprehensive Report and Bibliography from the Earliest Beginnings to the Present: with 40 Illustrations in the Text*. Beltone Institute for Hearing Research.

Feng, X., Zhao, Y., Liu, L., Wang, J. and Li, H. (2024) Effects of illness perception and coping style on self-management in peritoneal dialysis patients: a cross-sectional study, *BMC Nephrology*, 25, 112.

Ferguson, M. A., Kitterick, P. T., Chong, L. Y., Edmondson-Jones, M., Barker, F. and Hoare, D. J. (2017) Hearing aids for mild to moderate hearing loss in adults, *Cochrane Database of Systematic Reviews*, (9).

Ferguson, M., Maidment, D., Russell, N., Gregory, M. and Nicholson, R. (2016) Motivational engagement in first-time hearing aid users: A feasibility study, *International Journal of Audiology*, 55(3), pp. S23–S33.

Fikree, F. F. and Pasha, O. (2004) Role of gender in health disparity: the South Asian context, *BMJ (Clinical research ed.)*, 328(7443), pp. 823-826.

Filep, B. (2009) Interview and translation strategies: coping with multilingual settings and data, *Social Geography*, 4(1), pp. 59-70.

Finney, N., Lymperopoulou, K., Kapoor, N., Marshall, A., Sabater, A. and Simpson, L. (2014) Local ethnic inequalities: ethnic differences in education, employment, health and housing in districts of England and Wales, 2001-2011.

Fishbein, M. and Ajzen, I. (2010) *Predicting and Changing Behavior: The Reasoned Action Approach*. New York: Psychology Press.

Fisher, M. (2015) *A Short History of the Mughal Empire*. Bloomsbury Publishing.

Fisher, M. H. (2006) Working across the seas: Indian maritime labourers in India, Britain, and in between, 1600–1857, *International Review of Social History*, 51(S14), pp. 21-45.

Fisher, P. and Nandi, A. (2015) *Poverty across ethnic groups through recession and austerity*. York: Joseph Rowntree Foundation.

Forouhi, N. G., Sattar, N., Tillin, T., McKeigue, P. M. and Chaturvedi, N. (2006) Do known risk factors explain the higher coronary heart disease mortality in South Asian compared with European men? Prospective follow-up of the Southall and Brent studies, UK, *Diabetologia*, 49(11), pp. 2580-2588.

Fox, N. J. (2008) Post-positivism, *The SAGE encyclopedia of qualitative research methods*, 2, pp. 659-664.

Fraenkel, J. R., Wallen, N. E. and Hyun, H. H. (2012) How to design and evaluate research in education.

Freeland, A., Jones, J. and Mohammed, N. K. (2010) Sensorineural deafness in Tanzanian children—Is ototoxicity a significant cause? A pilot study, *International journal of pediatric otorhinolaryngology*, 74(5), pp. 516-519.

Freitag, E. F. (2003) *The Subconscious Mind: A Source of Unlimited Power*. Personhood Press.

Freud, S., Freud, A., Strachey, A., Strachey, J. and Tyson, A.W. (1961). *The Ego and the Id, and Other Works; Translated Under the General Editorship of James Strachey in Collaboration with Anna Freud, Assisted by Alix Strachey and Alan Tyson. [With Plates.]*. Hogarth Press.

Gagné, J.-P., Jennings, M. B. and Southall, K. (2009) Understanding the stigma associated with hearing loss in older adults, *Hearing care for adults*, pp. 203-12.

Gagné, J.-P., Southall, K. and Jennings, M. B. (2011) Stigma and self-stigma associated with acquired hearing loss in adults, *Hearing review*, 18(8), pp. 16-22.

Galdas, P., Cheater, F. and Marshall, P. (2007) What is the role of masculinity in white and South Asian men's decisions to seek medical help for cardiac chest pain?, *Journal of Health Services Research & Policy*, 12(4), pp. 223-229.

Gamage, B., Do, T. T., Price, N. S. C., Lowery, A. and Marriott, K. (2023) What do blind and low-vision people really want from assistive smart devices? Comparison of the literature with a focus study, *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility*, pp. 1–21.

Gatehouse, S. (1999) Glasgow Hearing Aid Benefit Profile: Derivation and validation of a client-centered outcome measure for hearing aid services, *Journal of the American academy of audiology*, 10(2), pp. 80-103.

Gates, G. A., Cooper Jr, J. C., Kannel, W. B. and Miller, N. J. (1990) Hearing in the elderly: the Framingham cohort, 1983-1985. Part I. Basic audiometric test results, *Ear and hearing*, 11(4), pp. 247-256.

Gay, L. R., Mills, G. E. and Airasian, P. W. (2009) *Educational research: Competencies for analysis and applications*. Merrill/Pearson.

Gelfand, M.J., Harrington, J.R. and Jackson, J.C. (2017) The strength of social norms across human groups, *Perspectives on Psychological Science*, 12(5), pp. 800–809.

Gentles, S. J., Jack, S. M., Nicholas, D. B. and McKibbin, K. (2014) A Critical Approach to Reflexivity in Grounded Theory, *Qualitative Report*, 19(44).

George, S., Duran, N. and Norris, K. (2014) A systematic review of barriers and facilitators to minority research participation among African Americans, Latinos, Asian Americans, and Pacific Islanders, *American journal of public health*, 104(2), pp. e16-e31.

Gerhard, G. S., Fisher, S. G. and Feldman, A. M. (2018) Genetic testing for inherited cardiac diseases in underserved populations of non-European ancestry: double disparity, *JAMA cardiology*, 3(4), pp. 273-274.

Ghiara, V. (2020) Disambiguating the role of paradigms in mixed methods research. *Journal of mixed methods research*, 14(1), pp.11-25.

Ghosh, S. (2013) Am I a south Asian, really? constructing south Asians in Canada and being south Asian in Toronto, *South Asian Diaspora*, 5(1), pp. 35-55.

Gibbons, E. (2024) ‘The three shifts are already happening’, *NHS Providers*. Available at: <https://nhsproviders.org/news-blogs/blogs/the-three-shifts-are-already-happening> [Accessed: 14 January 2025].

Giebel, C., Zubair, M., Jolley, D., Bhui, K., Challis, D., Purandare, N. and Worden, A. (2016) Perceptions of self-defined memory problems vary in South Asian minority older people who consult a GP and those who do not: A mixed-method pilot study, *International Journal of Geriatric Psychiatry*, 31(4), pp. 375–383.

Giebel, C. M., Zubair, M., Jolley, D., Bhui, K. S., Purandare, N., Worden, A. and Challis, D. (2015) South Asian older adults with memory impairment: improving assessment and access to dementia care, *International Journal of Geriatric Psychiatry*, 30(4), pp. 345-356.

Glaser, B. G. (1978) Theoretical sensitivity. mill valley.

Glaser, B. G. (1992) *Emergence vs forcing: Basics of grounded theory analysis*. Sociology Press.

Glaser, B. G. (1998) *Doing grounded theory: Issues and discussions*. Sociology Press.

Glaser, B. G. (1999) The future of grounded theory, *Qualitative health research*, 9(6), pp. 836-845.

Glaser, B. G. Constructivist grounded theory?. *Forum qualitative sozialforschung/forum: Qualitative social research*.

Glaser, B. G. (2007) Constructivist grounded theory?, *Historical Social Research/Historische Sozialforschung. Supplement*, pp. 93-105.

Glaser, B. G. and Holton, J. (1967) Discovery of grounded theory.

- Glaser, B. G. and Strauss, A. L. (2017) *Discovery of grounded theory: Strategies for qualitative research*. Routledge.
- Gomez, R. G. and Madey, S. F. (2001) Coping-with-hearing-loss model for older adults, *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(4), pp. 223-225.
- Gorlin, R. J. and Toriello, H. V. (1995) *Hereditary Hearing Loss and Its Syndromes* (No. 28). Oxford: Oxford University Press.
- Goodhart, D. (2013) *The British dream: Successes and failures of post-war immigration*. Atlantic Books Ltd.
- GOV.UK (2019) *Patient experience of primary care: GP services* Available at: <https://www.ethnicity-facts-figures.service.gov.uk/health/patient-experience/patient-experience-of-primary-care-gp-services/latest> [Accessed 7 January 2022].
- Government, U. K. (2020) Quarterly report on progress to address COVID-19 health inequalities, *Race Disparity Unit, Cabinet Office*.
- Gracer, B. (2003) What the rabbis heard: deafness in the Mishnah, *Disability Studies Quarterly*, 23(2).
- Green, J. and Thorogood, N. (2018) *Qualitative methods for health research*. Sage.
- Greener, M. (2015) Intranasal flu vaccines: Not to be sniffed at, *British Journal of School Nursing*, 10(4), pp. 168-170.
- Gregg, J. and Saha, S. (2006) Losing culture on the way to competence: the use and misuse of culture in medical education, *Academic Medicine*, 81(6), pp. 542-547.
- Gretchen Stevens, S. F., Emma Brunskill, Maya Mascarenhas, Colin D. Mathers (2013) Global and regional hearing impairment prevalence: an analysis of 42 studies in 29 countries.
- Grewal, S., Bottorff, J. L. and Hilton, B. A. (2005) The influence of family on immigrant South Asian women's health, *Journal of Family Nursing*, 11(3), pp. 242-263.
- Grewal, M. and Golub, J. (2023) Association between hearing loss and multiple negative emotional states in the US Hispanic population. *Otolaryngology–Head and Neck Surgery*, 168(5).
- Griffith, D. C. (1993) *Jones's minimal: Low-wage labor in the United States*. SUNY Press.
- Groleau, D. and Kirmayer, L. J. (2004) Sociosomatic theory in Vietnamese immigrants narratives of distress, *Anthropology & Medicine*, 11(2), pp. 117-133.
- Gros, A., Vatovec, J., Zargi, M. and Jenko, K. (2005) Success rate in revision stapes surgery for otosclerosis, *Otol Neurotol*, 26(6), pp. 1143-8.
- Guba, E. G. and Lincoln, Y. S. (1989) *Fourth generation evaluation*. Sage.
- Guba, E. G. and Lincoln, Y. S. (1994) Competing paradigms in qualitative research, *Handbook of qualitative research*, 2(163-194), pp. 105.

Guba, E. G. and Lincoln, Y. S. (2005) Paradigmatic controversies, contradictions, and emerging confluences.

Guest, G., Bunce, A. and Johnson, L. (2006) How many interviews are enough? An experiment with data saturation and variability, *Field methods*, 18(1), pp. 59-82.

Gunn, S. (2010) The rise and fall of British urban modernism: planning Bradford, circa 1945–1970, *Journal of British Studies*, 49(4), pp. 849-869.

Haber, M., Platt, D. E., Ashrafian Bonab, M., Youhanna, S. C., Soria-Hernanz, D. F., Martínez-Cruz, B., Douaihy, B., Ghassibe-Sabbagh, M., Rafatpanah, H., Ghanbari, M. and Whale, J. (2012) Afghanistan's ethnic groups share a Y-chromosomal heritage structured by historical events. *PloS one*, 7(3), e34288.

Haile, L. M., Kamenov, K., Briant, P. S., Orji, A. U., Steinmetz, J. D., Abdoli, A., Abdollahi, M., Abu-Gharbieh, E., Afshin, A. and Ahmed, H. (2021) Hearing loss prevalence and years lived with disability, 1990–2019: findings from the Global Burden of Disease Study 2019, *The Lancet*, 397(10278), pp. 996-1009.

Hain, T. (2023) *Hearing Loss*. Available at: <http://www.dizziness-and-balance.com/disorders/hearing/hearing.html> [Accessed 17 March 2023].

Hagger, M. S., Chatzisarantis, N. L. and Biddle, S. J. (2002). A meta-analytic review of the theories of reasoned action and planned behavior in physical activity: Predictive validity and the contribution of additional variables, *Journal of Sport & Exercise Psychology*, 24(1), pp. 3–32.

Hagger, M. S. and Orbell, S. (2003) A meta-analytic review of the common-sense model of illness representations, *Psychology and Health*, 18(2), pp. 141–184.

Hagger, M. S. and Orbell, S. (2022) The common-sense model of illness self-regulation: A conceptual review and proposed extended model, *Health Psychology Review*, 16(3), pp. 347–377.

Hale, E. D., Treharne, G. J. and Kitas, G. D. (2007) The Common-Sense Model of self-regulation of health and illness: how can we use it to understand and respond to our patients' needs? *Rheumatology*, 46(6), pp. 904–906.

Hall, H., Griffiths, D. and McKenna, L. (2013) From Darwin to constructivism: The evolution of grounded theory, *Nurse researcher*, 20(3).

Hallberg, L. R. M. and Carlsson, S. G. (1991) A qualitative study of strategies for managing a hearing impairment, *British journal of audiology*, 25(3), pp. 201-211.

Hammersley, M. (2012) *What is qualitative research?:* A&C Black.

Hammersley, M. and Atkinson, P. (2007) *Ethnography: Principles in practice*. Routledge.

Hanna, K., Lomas, E., Rimmer, S. and Rowe, F. (2024) Perceptions of vision care following neurological impairment: a qualitative study, *BMC Health Services Research*, 24(1), pp. 626.

Handtke, O., Schilgen, B. and Mösko, M. (2019) Culturally competent healthcare—A scoping review of strategies implemented in healthcare organizations and a model of culturally competent healthcare provision, *PloS one*, 14(7), pp. e0219971.

Hanif, R. S. W. and Susarla, R. (2018) Diabetes and cardiovascular risk in UK South Asians: an overview, *Br. J. Cardiol.*, 25, pp. 8-13.

Hanssens, L. G. M., Detollenaere, J., Hardyns, W. and Willems, S. J. T. (2016) Access, treatment and outcomes of care: a study of ethnic minorities in Europe, *International journal of public health*, 61(4), pp. 443-454.

Hatfield, E., Cacioppo, J. T. and Rapson, R. L. (1992) Primitive emotional contagion, *Review of personality and social psychology*, 14, pp. 151-177.

Haynes, D. S., Gifford, R. H., Wanna, G. B. and Rivas, A. C. (2020) *Cochlear Implants: From Principles to Practice*. London: JP Medical Ltd.

Hazard Jr, A. Q. (2011) A Racialized Deconstruction? Ashley Montagu and the 1950 UNESCO Statement on Race, *Transforming Anthropology*, 19(2), pp. 174-186.

He, P., Wen, X., Hu, X., Gong, R., Luo, Y., Guo, C., Chen, G. and Zheng, X. (2018) Hearing Aid Acquisition in Chinese Older Adults With Hearing Loss, *American journal of public health*, 108(2), pp. 241-247.

Heffernan, E., Coulson, N. S., Henshaw, H., Barry, J. G. and Ferguson, M. A. (2016) Understanding the psychosocial experiences of adults with mild-moderate hearing loss: An application of Leventhals self-regulatory model, *International Journal of Audiology*, 55(sup3), pp. S3-S12.

Heffernan, E., Withanachchi, C. M. and Ferguson, M. A. (2022) 'The worse my hearing got, the less sociable I got': a qualitative study of patient and professional views of the management of social isolation and hearing loss, *Age and Ageing*, 51(2).

Heijmans, M. (1998) Coping and adaptive outcome in chronic fatigue syndrome: Importance of illness cognitions, *Journal of Psychosomatic Research*, 45(1), pp. 39–51.

Heine, C. and Browning, C. J. (2002) Communication and psychosocial consequences of sensory loss in older adults: overview and rehabilitation directions, *Disability and rehabilitation*, 24(15), pp. 763-773.

Heinze, N., Jones, L., Bertiz, F., Saunders, E. and Gomes, R. S. (2024) How does the UK public think and feel about people with visual impairment: a review of existing evidence, *Frontiers in Psychology*, 15(1), pp. 1359074.

Hennekam, S., Bacouel-Jentjens, S. and Yang, I. (2020) Perceptions of diversity management practices among first-versus second-generation migrants, *Work, Employment and Society*, 34(5), pp. 844-863.

Hetu, R., Riverin, L., Getty, L., Lalande, N.M. and St-Cyr, C. (1990). The reluctance to acknowledge hearing difficulties among hearing-impaired workers. *British journal of audiology*, 24(4), pp.265-276.

Hickson, L., Meyer, C., Lovelock, K., Lampert, M. and Khan, A. (2014) An investigation of factors that influence help-seeking for hearing impairment in older adults, *International journal of audiology*, 53(sup1), pp. S3-S17.

Hinrichsen, G. (2021) Age equity: a framework for addressing ageism, stigma, and bias. *Innovation in Aging*, 5(S1), p.431.

Hiranandani, V., Kumar, A. and Sonpal, D. (2014) Making community inclusion work for persons with disabilities: drawing lessons from the field, *Community Development*, 45(2), pp. 151-165.

Hirschman, C. (1987) The meaning and measurement of ethnicity in Malaysia: An analysis of census classifications, *The Journal of Asian Studies*, 46(3), pp. 555-582.

Hofstede, G. (2001) *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. 2nd ed. Thousand Oaks, CA: Sage Publications.

Hogg, M. A. and Williams, K. D. (2000) From I to we: Social identity and the collective self, *Group dynamics: Theory, research, and practice*, 4(1), pp. 81.

Holmes, B. J., Best, A., Davies, H., Hunter, D., Kelly, M. P., Marshall, M. and Rycroft-Malone, J. (2017) Mobilising knowledge in complex health systems: a call to action, *Evidence & Policy*.

Holton, J. A. and Walsh, I. (2016) *Classic grounded theory: Applications with qualitative and quantitative data*. Sage Publications.

Homans, N. C., Metselaar, R. M., Dingemanse, J. G., van der Schroeff, M. P., Brocaar, M. P., Wieringa, M. H., Baatenburg de Jong, R. J., Hofman, A. and Goedegebure, A. (2017) Prevalence of age-related hearing loss, including sex differences, in older adults in a large cohort study, *Laryngoscope*, 127(3), pp. 725-730.

Hong, Y. R., Tauscher, J. and Cardel, M. (2018) Distrust in health care and cultural factors are associated with uptake of colorectal cancer screening in Hispanic and Asian Americans, *Cancer*, 124(2), pp. 335-345.

Hossain, S. M. M., Bhuiya, A., Khan, A. R. and Uhaa, I. (2004) Community development and its impact on health: South Asian experience, *Bmj*, 328(7443), pp. 830-833.

Hu, R.X. (2021) Effects of Self-Perceptions of Aging on Social Disconnectedness and Loneliness in Older Adults, *Innovation in Aging*, 5(Suppl 1), pp.38.

Huang, Q. and Tang, J. (2010) Age-related hearing loss or presbycusis, *European Archives of Otorhino-laryngology*, 267(8), pp. 1179-1191.

Huljev, D. and Pandak, T. (2016) Holistic and team approach in health care, *Signa Vitae*, 11(2), pp. 66–69.

Hudson, N., Culley, L., Johnson, M., McFeeters, M., Robertson, N., Angell, E. and Lakhanpaul, M. (2016) Asthma management in British South Asian children: an application of the candidacy

framework to a qualitative understanding of barriers to effective and accessible asthma care, *BMC Public Health*, 16(1), pp. 1-11.

Hughes, J., Naqvi, H., Saul, K., Williamson, H., Johnson, M. R. D., Rumsey, N. and Charlton, R. (2009) South Asian community views about individuals with a disfigurement, *Diversity in Health & Care*, 6(4).

Humes, L.E. (2021) Differences between older adults who do and do not try hearing aids and between those who keep and return the devices. *Trends in Hearing*, 25, p.23312165211014329.

Hummell, E. (2014) Standing the test of time—Barth and ethnicity, *Coolabah*, (13), pp. 46-60.

Hussain, Y. (2017) *Writing diaspora: South Asian women, culture and ethnicity*. Routledge.

Hwu, Y.-J. and Yu, C.-C. (2006) Exploring health behavior determinants for people with chronic illness using the constructs of planned behavior theory, *Journal of Nursing Research*, 14(4), pp. 261–270.

Ibraheem, O. (2017) CAUSES OF HEARING AID REJECTION IN GERIATRIC POPULATION OF EGYPTIAN RURAL AREAS, *Zagazig University Medical Journal*, 23(2), pp. 1-10.

Ingleby, D. (2012) Ethnicity, migration and the ‘social determinants of health’ agenda, *Psychosocial Intervention*, 21(3), pp. 331-341.

Iqbal, H. (2014) Multicultural parenting: Preparation for bias socialisation in British South Asian and White families in the UK, *International Journal of Intercultural Relations*, 43, pp. 215-226.

Jager, M. J., van der Sande, R., Essink-Bot, M.-L. and van den Muijsenbergh, M. E. T. C. (2019) Views and experiences of ethnic minority diabetes patients on dietetic care in the Netherlands—a qualitative study, *European journal of public health*, 29(2), pp. 208-213.

Jahangir, Y. T. and Meyer, S. B. (2020) Understanding access to and utilisation of sexual health services by south asian immigrant men in western countries: a scoping review, *Journal of immigrant and minority health*, 22(3), pp. 621-633.

Jain, R., Kakuma, R., Singla, D.R., Andresen, K., Bahkali, K. and Nadkarni, A. (2025) Explanatory models of common mental disorders among South Asians in high-income countries: A systematic review. *Transcultural psychiatry*, 62(2), pp. 241-264.

Jeffery, H., Jennings, S. and Turton, L. (2016) Guidance for Audiologists: Onward Referral of Adults with Hearing Difficulty Directly Referred to Audiology Services.

Jenkins, R. (2008) *Rethinking ethnicity*. Sage.

Jenstad, L. and Moon, J. (2011) Systematic review of barriers and facilitators to hearing aid uptake in older adults, *Audiology Research*, 1(1), pp. 91-96.

Jimenez, D. E., Bartels, S. J., Cardenas, V., Dhaliwal, S. S. and Alegría, M. (2012) Cultural beliefs and mental health treatment preferences of ethnically diverse older adult consumers in primary care, *The American Journal of Geriatric Psychiatry*, 20(6), pp. 533-542.

Jin, I., Tang, D., Gengaroli, J., Perry, K. N., Burlutsky, G., Craig, A., Liew, G., Mitchell, P. and Gopinath, B. (2021) Cross-sectional study evaluating burden and depressive symptoms in family carers of persons with age-related macular degeneration in Australia, *BMJ Open*, 11(9).

Johnson, B., Abraham, M., Conway, J., Simmons, L., Edgman-Levitan, S., Sodomka, P. and Ford, D. (2008) Partnering with patients and families to design a patient-and family-centered health care system, *Institute for Patient-and Family-Centered Care and Institute for Healthcare Improvement*.

Johnson, J. S. (2015) Qualitative sales research: An exposition of grounded theory, *Journal of Personal Selling & Sales Management*, 35(3), pp. 262-273.

Johnson, M. (2012) Making diversity count: equality & diversity monitoring.

Jongen, C., McCalman, J. and Bainbridge, R. (2018) Health workforce cultural competency interventions: a systematic scoping review, *BMC health services research*, 18(1), pp. 1-15.

Joseph-Williams, N., Elwyn, G. and Edwards, A. (2014) Knowledge is not power for patients: A systematic review and thematic synthesis of patient-reported barriers and facilitators to shared decision making, *Patient Education and Counseling*, 94(3), pp. 291–309.

Joseph-Williams, N., Lloyd, A., Edwards, A., Stobbart, L., Tomson, D., Macphail, S., Dodd, C., Brain, K., Elwyn, G. and Thomson, R. (2017) Implementing shared decision making in the NHS: lessons from the MAGIC programme. *Bmj*, 357.

Junius-Walker, U., Schleef, T., Vogelsang, U. and Dierks, M.-L. (2019) How older patients prioritise their multiple health problems: a qualitative study, *BMC geriatrics*, 19(1), pp. 1-8.

Kaegi, W. E. (1969) Byzantine Philanthropy and Social Welfare. By Demetrios J. Constantelos. New Brunswick, NJ: Rutgers University Press, 1968. xxviii+ 356 pp. \$17.50, *Church History*, 38(3), pp. 373-374.

Kaihlanen, A.-M., Hietapakka, L. and Heponiemi, T. (2019) Increasing cultural awareness: qualitative study of nurses perceptions about cultural competence training, *BMC nursing*, 18(1), pp. 1-9.

Kalim, Z. (2012) UK Project Tailors Support for Deaf Children of Minority Families, *The Hearing Journal*, 65(8).

Kampanellou, E., Wilberforce, M., Worden, A., Giebel, C., Challis, D. and Bhui, K. (2020) The Barts Explanatory Model Inventory for Dementia: An item reduction approach based on responses from South Asian communities, *International journal of geriatric psychiatry*, 35(8), pp. 916-925.

Kandula, N. R., Cooper, A. J., Schneider, J. A., Fujimoto, K., Kanaya, A. M., Van Horn, L., Dekoning, L. and Siddique, J. (2018) Personal social networks and organizational affiliation of South Asians in the United States, *BMC Public Health*, 18(1), pp. 1-12.

Kandula, N. R. and Kanaya, A. M. (2021) The South Asian enigma: solving a puzzle of global importance, *Circulation*, 144(6), pp. 423-425.

Karasz, A., Patel, V., Kabita, M. and Shimu, P. (2019) Community perspectives on mental health care in South Asian populations: A qualitative study, *Transcultural Psychiatry*, 56(1), pp. 158–179.

Karin, D., Nyström, M. and Dahlberg, H. (2007) *Reflective lifeworld research*. Studentlitteratur, Lund.

Kaspar, A., Figao, F., Driscoll, C. and Pifeleti, S. (2023) Knowledge and attitudes of female caregivers in Samoa to childhood hearing loss and hearing services, *International Journal of Pediatric Otorhinolaryngology*, 169, pp. 111557.

Kawamura, K. and Rice, T. (2008) Body image among Asian Americans, *Asian American Psychology*: Psychology Press, pp. 587-608.

Kelly, M. M., Tyrka, A. R., Price, L. H. and Carpenter, L. L. (2008) Sex differences in the use of coping strategies: predictors of anxiety and depressive symptoms, *Depression and anxiety*, 25(10), pp. 839-846.

Kenning, C., Daker-White, G., Blakemore, A., Panagioti, M. and Waheed, W. (2017) Barriers and facilitators in accessing dementia care by ethnic minority groups: a meta-synthesis of qualitative studies, *BMC psychiatry*, 17(1), pp. 1-13.

Kestens, K., Degeest, S. and Keppler, H. (2021) The effect of cognition on the aided benefit in terms of speech understanding and listening effort obtained with digital hearing aids: A systematic review, *American Journal of Audiology*, 30(1), pp. 190–210.

Khatib, N. and Hlayisi, V.G. (2022). Is a hybrid of online and face-to-face services feasible for audiological rehabilitation post COVID-19? Findings from three public health patients. *South African Journal of Communication Disorders*, 69(2), pp. 907.

Khorrami-Nejad, M., Sarabandi, A., Akbari, M.-R. and Askarizadeh, F. (2016) The impact of visual impairment on quality of life, *Medical Hypothesis Discovery and Innovation in Ophthalmology*, 5(3), pp. 96–103.

Khunti, K., Kumar, S. and Brodie, J. (2009) Diabetes UK and South Asian health Foundation recommendations on diabetes research priorities for British South Asians. *London: Diabetes UK*.

Khunti, K., Platt, L., Routen, A. and Abbasi, K. 2020. Covid-19 and ethnic minorities: an urgent agenda for overdue action. British Medical Journal Publishing Group.

Khunti, K., Pollock, A. M. and Pareek, M. 2020. Find, test, trace, isolate and support programmes need to be localised and culturally tailored to reach ethnic minority populations.

Kidney, E., Greenfield, S., Berkman, L., Dowswell, G., Hamilton, W., Wood, S. and Marshall, T. (2017) Cancer suspicion in general practice, urgent referral, and time to diagnosis: a population-based GP survey nested within a feasibility study using information technology to flag-up patients with symptoms of colorectal cancer, *BJGP open*, 1(3).

Kiliç, A., Gül, Ü., Uğur, M. and Aslan, E. (2011) Illness perceptions and health-related quality of life in Turkish vitiligo patients, *International Journal of Dermatology*, 50(8), pp. 979–984.

Killam, L. (2013) *Research terminology simplified: Paradigms, axiology, ontology, epistemology and methodology*. Laura Killam.

Killeen, O. J., Cho, J., Raven, S. A., Wang, G. M., Mubeen, A., Kim, L., Claus, A., Woodward, M. A., Newman-Casey, P. A. and Chang, T. (2023) A qualitative assessment of the experiences with eye health and barriers to eyeglasses among US youth, *Optometry and Vision Science*, 100(4), pp. 255–260.

Kim, E., Mark, E. Y. and Robertson-Wilson, J. (2019) Injunctive norms matter for physical activity intentions more than previously thought: Reconsidering measurement and analytical approaches, *Journal of Sport and Exercise Psychology*, 41(5), pp. 285–298.

Kleinman, A., Eisenberg, L., & Good, B. (1978) Culture, illness, and care: clinical lessons from anthropologic and cross-cultural research, *Annals of internal medicine*, 88(2), pp. 251-258.

Kleinman, A. (1980) *Patients and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry*. Berkeley: University of California Press.

Knies, G., Nandi, A. and Platt, L. (2016) Life satisfaction, ethnicity and neighbourhoods: Is there an effect of neighbourhood ethnic composition on life satisfaction?, *Social science research*, 60, pp. 110-124.

Knifton, L., Gervais, M., Newbigging, K., Mirza, N., Quinn, N., Wilson, N. and Hunkins-Hutchison, E. (2010) Community conversation: addressing mental health stigma with ethnic minority communities, *Social psychiatry and psychiatric epidemiology*, 45(4), pp. 497-504.

Kochkin, S. (2009) MarkeTrak VIII: 25-year trends in the hearing health market, *Hearing review*, 16(11), pp. 12-31.

Knoetze, M., Manchaiah, V., Mothemela, B. and Swanepoel, D.W. (2023) Factors influencing hearing help-seeking and hearing aid uptake in adults: a systematic review of the past decade. *Trends in Hearing*, 27, p.23312165231157255.

Krauss, S. E. (2005) Research paradigms and meaning making: A primer, *The qualitative report*, 10(4), pp. 758-770.

Kramer, S. E., Kapteyn, T. S. and Houtgast, T. (2006) Occupational performance: Comparing normally-hearing and hearing-impaired employees using the Amsterdam Checklist for Hearing and Work, *International Journal of Audiology*, 45, pp. 503–512.

Kumar, K., Greenfield, S., Raza, K., Gill, P. and Stack, R. (2016) Understanding adherence-related beliefs about medicine amongst patients of South Asian origin with diabetes and cardiovascular disease patients: a qualitative synthesis, *BMC endocrine disorders*, 16(1), pp. 1-11.

Kumar, K., Reehal, J., Stack, R.J., Adebajo, A. and Adams, J. (2019) Experiences of South Asian patients in early inflammatory arthritis clinic: a qualitative interview study, *Rheumatol Adv Pract*, 3(2).

Labaree, R. V. (2002) The Risk of ‘Going Observationalist’: Negotiating the Hidden Dilemmas of Being an Insider Participant Observer. *Qualitative Research*, (2) pp. 97-122.

Laes, C. (2018) *Disabilities and the disabled in the Roman world: a social and cultural history*. Cambridge University Press.

- Lahelma, E., Arber, S., Rahkonen, O. and Silventoinen, K. (2000) Widening or narrowing inequalities in health? Comparing Britain and Finland from the 1980s to the 1990s. *Sociology of Health & Illness*, 22(1), pp. 110-136.
- Lakhanpaul, M., Culley, L., Huq, T., Bird, D., Hudson, N., Robertson, N., McFeeters, M., Manikam, L., Johal, N. and Hamlyn-Williams, C. (2019) Qualitative study to identify ethnicity-specific perceptions of and barriers to asthma management in South Asian and White British children with asthma, *BMJ open*, 9(2), pp. e024545.
- Lane, D., Beevers, D. G. and Lip, G. Y. H. (2002) Ethnic differences in blood pressure and the prevalence of hypertension in England, *Journal of human hypertension*, 16(4), pp. 267-273.
- Laplante-Lévesque, A., Hickson, L. and Worrall, L. (2010) Factors influencing rehabilitation decisions of adults with acquired hearing impairment, *International journal of audiology*, 49(7), pp. 497-507.
- Laplante-Lévesque, A., Knudsen, L. V., Preminger, J. E., Jones, L., Nielsen, C., Öberg, M., Lunner, T., Hickson, L., Naylor, G. and Kramer, S. E. (2012) Hearing help-seeking and rehabilitation: Perspectives of adults with hearing impairment, *International journal of audiology*, 51(2), pp. 93-102.
- Lebuffe, F. P. and Lebuffe, L. A. (1979) Psychiatric aspects of deafness, *Primary Care: Clinics in Office Practice*, 6(2), pp. 295-310.
- Lee, F.-S., Matthews, L. J., Dubno, J. R. and Mills, J. H. (2005) Longitudinal study of pure-tone thresholds in older persons, *Ear and hearing*, 26(1), pp. 1-11.
- Leonowicz-Bukała, I. (2012) Ethnic Minorities Media in Great Britain, pp. 159-196.
- Lesica, N. A. (2018) Why do hearing aids fail to restore normal auditory perception? *Trends in Neurosciences*.
- Levac, D., Colquhoun, H. and O'Brien, K. K. (2010) Scoping studies: advancing the methodology, *Implementation science*, 5, pp. 1-9.
- Leventhal, H., Phillips, L. A. and Burns, E. (2016) The Common-Sense Model of Self-Regulation (CSM): a dynamic framework for understanding illness self-management, *Journal of behavioral medicine*, 39, pp. 935-946.
- Lewis, N. and Reinhold, M. (1990) *Roman civilization: selected readings*. Columbia University Press.
- Lichter, D. T. and Qian, Z. (2018) Boundary blurring? Racial identification among the children of interracial couples, *The Annals of the American Academy of Political and Social Science*, 677(1), pp. 81-94.
- Lie, A., Skogstad, M., Johnsen, T. S., Engdahl, B. and Tambs, K. (2014) A cross-sectional study of hearing thresholds among 4627 Norwegian train and track maintenance workers, *BMJ open*, 4(10), pp. e005529.
- Liljeström, R. (1982) *Young children in China*. Multilingual Matters.
- Lim, C. Y., Berry, A. B. L., Hirsch, T., Hartzler, A. L., Wagner, E. H., Ludman, E. J. and Ralston, J. D. (2017) Understanding what is most important to individuals with multiple chronic conditions: a

qualitative study of patients' perspectives, *Journal of general internal medicine*, 32(12), pp. 1278-1284.

Lin, F. R., Yaffe, K., Xia, J., Xue, Q.-L., Harris, T. B., Purchase-Helzner, E., Satterfield, S., Ayonayon, H. N., Ferrucci, L. and Simonsick, E. M. (2013) Hearing loss and cognitive decline in older adults, *JAMA internal medicine*, 173(4), pp. 293-299.

Lincoln, Y. S., Lynham, S. A. and Guba, E. G. (2011) Paradigmatic controversies, contradictions, and emerging confluences, revisited, *The Sage handbook of qualitative research*, 4, pp. 97-128.

Linell, P. (2015) Mishearing's are occasioned by contextual assumptions and situational affordances, *Language & Communication*, 40, pp.24-37.

Liu, C.-M. and Lee, C. T.-C. (2019) Association of hearing loss with dementia, *JAMA network open*, 2(7), pp. 198112-198112.

Livingston, J. D., Milne, T., Fang, M. L. and Amari, E. (2012) The effectiveness of interventions for reducing stigma related to substance use disorders: A systematic review, *Addiction*, 107(1), pp. 39–50.

Lloyd, C. E., Wilson, A., Holt, R. I. G., Whicher, C., Kar, P., Language Matters, G., Kar, P., Cooper, A., Kanumilli, N. and Hill, J. (2018) Language matters: a UK perspective, *Diabetic Medicine*, 35(12), pp. 1635-1641.

Londono, Y. and McMillan, D. E. (2015) Psychosocial adaptation: an evolutionary concept analysis exploring a common multidisciplinary language, *Journal of Advanced Nursing*, 71(11), pp. 2504-2519.

Long, T. and Johnson, M. (2007) *Long, T and Johnson, M. (Eds.2007) Research ethics in the real world: issues and solutions for health and social care professionals. Churchill Livingstone, Elsevier Health Sciences.*

Loss, A. o. H. *Facts and Figures*. Available at: <https://www.actiononhearingloss.org.uk/about-us/our-research-and-evidence/facts-and-figures/> [Accessed 7 January 2019].

Loss, C. H. (1990) A Historical Perspective of Hearing lbsts of Peripheral Auditory Function, *Journal of the American Academy of Audiology*, 1(4), pp. 209-216.

Lucas, A., Murray, E. and Kinra, S. (2013) Heath beliefs of UK South Asians related to lifestyle diseases: a review of qualitative literature, *Journal of obesity*, 2013.

Luker, K. (2009) *Salsa dancing into the social sciences*. Harvard University Press.

Lutman, M. E. (1990) Degradations in frequency and temporal resolution with age and their impact on speech identification, *Acta Otolaryngol Suppl*, 476, pp. 120-5; discussion 126.

Mackenbach, J. P. (2011) Can we reduce health inequalities? An analysis of the English strategy *Journal of Epidemiology & Community Health*, 65(7), pp. 568-575.

Magadi, J.P. and Magadi, M.A. (2022) Ethnic inequalities in patient satisfaction with primary health care in England: Evidence from recent General Practitioner Patient Surveys (GPPS) 17(12), e0270775.

- Main, C., Thomas, S., Ogilvie, D., Stirk, L., Petticrew, M., Whitehead, M. and Sowden, A. (2008) Population tobacco control interventions and their effects on social inequalities in smoking: placing an equity lens on existing systematic reviews. *BMC Public Health*, 8, pp. 1-6.
- Maio, M. C. and Santos, R. V. (2015) Antiracism and the uses of science in the post-World War II: An analysis of UNESCO's first statements on race (1950 and 1951), *Vibrant: Virtual Brazilian Anthropology*, 12(2), pp. 1-26.
- Maiter, S. and George, U. (2003) Understanding context and culture in the parenting approaches of immigrant South Asian mothers, *Affilia*, 18(4), pp. 411-428.
- Malinowski, B. (1922) Ethnology and the Study of Society, *Economica*, (6), pp. 208-219.
- Manchaiah, V., Gomersall, P. A., Tomé, D., Ahmadi, T. and Krishna, R. (2014) Audiologists' preferences for patient-centredness: a cross-sectional questionnaire study of cross-cultural differences and similarities among professionals in Portugal, India and Iran, *BMJ open*, 4(10).
- Manchaiah, V. K. C. and Stephens, D. (2012) The 'patient journey' of adults with sudden-onset acquired hearing impairment: a pilot study, *The Journal of Laryngology & Otology*, 126(5), pp. 475-481.
- Mandair, A. (2004) The unbearable proximity of the orient: Political religion, multiculturalism and the retrieval of South Asian identities, *Social Identities*, 10(5), pp. 647-663.
- Monnapula-Mazabane, P. & Petersen, I. (2023) Mental health stigma experiences among caregivers and service users in South Africa: a qualitative investigation, *Current Psychology*, 42(11), pp. 9427–9439.
- Mansour, R., Tsamakis, K., Rizos, E., Perera, G., Das-Munshi, J., Stewart, R. and Mueller, C. (2020) Late-life depression in people from ethnic minority backgrounds: Differences in presentation and management, *Journal of affective disorders*, 264, pp. 340-347.
- Maradiegue, A. and Edwards, Q. T. (2006) An overview of ethnicity and assessment of family history in primary care settings, *Journal of the American Academy of Nurse Practitioners*, 18(10), pp. 447-456.
- Marmot, M. (2008) Fair Society, Healthy Life. The Marmot Review.
- Marmot, M. (2020) Health equity in England: the Marmot review 10 years on, *Bmj*, 368.
- Martin, C. A., Jenkins, D. R., Minhas, J. S., Gray, L. J., Tang, J., Williams, C., Sze, S., Pan, D., Jones, W. and Verma, R. (2020) Socio-demographic heterogeneity in the prevalence of COVID-19 during lockdown is associated with ethnicity and household size: Results from an observational cohort study, *EClinicalMedicine*, 25, pp. 100466.
- Marx, K. (2021) *The eighteenth brumaire of Louis Napoleon*. Good Press.
- Mason, J. 2002. Qualitative researching 2nd edition Sage. London.
- Masterson, D. W. (1976) The ancient Greek origins of sports medicine, *British journal of sports medicine*, 10(4), pp. 196.

- Mathur, R., Bhaskaran, K., Edwards, E., Lee, H., Chaturvedi, N., Smeeth, L. and Douglas, I. (2017) Population trends in the 10-year incidence and prevalence of diabetic retinopathy in the UK: a cohort study in the Clinical Practice Research Datalink 2004–2014, *BMJ open*, 7(2), pp. e014444.
- Matthews, A., Brennan, G., Kelly, P., McAdam, C., Mutrie, N. and Foster, C. (2012) “Don’t wait for them to come to you, you go to them”. A qualitative study of recruitment approaches in community based walking programmes in the UK, *BMC Public Health*, 12(1), pp. 635.
- Matud, M. P. (2004) Gender differences in stress and coping styles, *Personality and individual differences*, 37(7), pp. 1401-1415.
- Maxwell, R. 2016. Response to reviews of Ethnic minority migrants in Britain and France: integration trade-offs. Taylor & Francis.
- McBride, D. I. and Williams, S. (2001) Audiometric notch as a sign of noise induced hearing loss, *Occupational and environmental medicine*, 58(1), pp. 46-51.
- McCallin, A. (2003) Grappling with the literature in a grounded theory study, *Contemporary Nurse*, 15(1-2), pp. 61-69.
- McCormack, A. and Fortnum, H. (2013) Why do people fitted with hearing aids not wear them?, *International journal of audiology*, 52(5), pp.360-368.
- McCuistian, C., Peteet, B., Burlew, K. and Jacquez, F. (2021) Sexual Health Interventions for Racial/Ethnic Minorities Using Community-Based Participatory Research: A Systematic Review, *Health Education & Behavior*, pp. 10901981211008378.
- McGhee, G., Marland, G. R. and Atkinson, J. (2007) Grounded theory research: literature reviewing and reflexivity, *Journal of advanced nursing*, 60(3), pp. 334-342.
- McIlvane, J. M. and Reinhardt, J. P. (2001) Interactive effect of support from family and friends in visually impaired elders, *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 56(6), pp. P374–P382.
- McMenamin, I. (2006) Process and text: Teaching students to review the literature, *PS: Political Science and Politics*, 39(1), pp. 133-135.
- McNamara, K. P., Breken, B. D., Alzubaidi, H. T., Bell, J. S., Dunbar, J. A., Walker, C. and Hernan, A. (2017) Health professional perspectives on the management of multimorbidity and polypharmacy for older patients in Australia, *Age and ageing*, 46(2), pp. 291-299.
- Meinzen-Derr, J., Lim, L. H., Choo, D. I., Buyniski, S. and Wiley, S. (2008) Pediatric hearing impairment caregiver experience: Impact of duration of hearing loss on parental stress, *International Journal of Pediatric Otorhinolaryngology*, 72(11), pp. 1693–1703.
- Meister, H., Grugel, L. and Meis, M. (2014) Intention to use hearing aids: A survey based on the theory of planned behavior. *Patient Preference and Adherence*, 8, pp. 1265–1275.
- Mener, D. J., Betz, J., Genther, D. J., Chen, D. and Lin, F. R. (2013) Hearing loss and depression in older adults, *Journal of the American Geriatrics Society*, 61(9), pp. 1627.

- Mertler, C. A. and Reinhart, R. V. (2016) *Advanced and multivariate statistical methods: Practical application and interpretation*. Taylor & Francis.
- Messina, A. M. (2001) The impacts of post-WWII migration to Britain: Policy constraints, political opportunism and the alteration of representational politics, *The Review of Politics*, pp. 259-285.
- Michail, M. and Tait, L. (2016) Exploring general practitioners' views and experiences on suicide risk assessment and management of young people in primary care: a qualitative study in the UK, *BMJ open*, 6(1).
- Mick, P., Kawachi, I. and Lin, F. R. (2014) The association between hearing loss and social isolation in older adults, *Otolaryngology–Head and Neck Surgery*, 150(3), pp. 378-384.
- Miles, M. (2002) Some influences of religions on attitudes towards disabilities and people with disabilities, *Journal of Religion, Disability & Health*, 6(2-3), pp. 117-129.
- Miller, S. I. and Fredericks, M. (1999) How does grounded theory explain?, *Qualitative Health Research*, 9(4), pp. 538-551.
- Mills, J., Bonner, A. and Francis, K. (2006) Adopting a constructivist approach to grounded theory: Implications for research design, *International journal of nursing practice*, 12(1), pp. 8-13.
- Misra, S., Jackson, V. W., Chong, J., Choe, K., Tay, C., Wong, J. and Yang, L. H. (2021) Systematic review of cultural aspects of stigma and mental illness among racial and ethnic minority groups in the United States: Implications for interventions, *American Journal of Community Psychology*, 68(3–4), pp. 486–512.
- Mkansi, M. and Acheampong, E. A. (2012) Research philosophy debates and classifications: students' dilemma, *Electronic Journal of Business Research Methods*, 10(2), pp. 132-140.
- Mohebbi, M., Farhadi, M., Daneshi, A. and Mahmoudian, S. (2019) Toward an exploration of habituating to tinnitus: Perspectives on sensory gating, *Journal of the American Academy of Audiology*, 30(10), pp. 896-903.
- Monitor (2015) *Making the health sector work for patients*. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/409273/Adult_hearing_services_-_Monitor_s_report.pdf [Accessed 18 January 2023].
- Monroy, C., Shafto, C., Castellanos, I., Bergeson, T. and Houston, D. (2019) Visual habituation in deaf and hearing infants, *PloS one*, 14(2), pp. e0209265.
- Montaruli, E., Bourhis, R. Y. and Azurmendi, M. J. (2011) Identity, language, and ethnic relations in the Bilingual Autonomous Communities of Spain 1, *Journal of Sociolinguistics*, 15(1), pp. 94-121.
- Monzani, D., Galeazzi, G. M., Genovese, E., Marrara, A. and Martini, A. (2008) Psychological profile and social behaviour of working adults with mild or moderate hearing loss, *Acta Otorhinolaryngologica Italica*, 28(2), pp. 61.
- Moore, J. (2009) An exploration of the origin of classic grounded theory, *Nurse researcher*, 17(1).

- Moosa, A. S., Leng, N. S. Y., Kum, C. L. and Tan, N. C. (2021) A qualitative research study on the illness perception of chronic pruritus in older Asian adults based on the common-sense model of self-regulation, *Health Expectations*, 24(5), pp. 1801–1811.
- Morris, H. S. (1968) Ethnic groups, *International encyclopedia of the social sciences*, 5, pp. 167-172.
- Morris, R. L., Sanders, C., Kennedy, A. P. and Rogers, A. (2011) Shifting priorities in multimorbidity: a longitudinal qualitative study of patient's prioritization of multiple conditions, *Chronic illness*, 7(2), pp. 147-161.
- Morse, J. M., Stern, P. N., Corbin, J., Bowers, B., Charmaz, K. and Clarke, A. E. (2016) *Developing grounded theory: The second generation*. Routledge.
- Moss, R. (2013) Hearing aid. *Optometry Today*, 53(22), pp.38-40.
- Moteki, H., Azaiez, H., Booth, K. T., Shearer, A. E., Sloan, C. M., Kolbe, D. L., Nishio, S.-y., Hattori, M., Usami, S.-i. and Smith, R. J. H. (2016) Comprehensive genetic testing with ethnic-specific filtering by allele frequency in a Japanese hearing-loss population, *Clinical genetics*, 89(4), pp. 466-472.
- Moustakas, C. (1994) *Phenomenological research methods*. Sage.
- Moynihan, R., Sanders, S., Michaleff, Z. A., Scott, A. M., Clark, J., To, E. J., Jones, M., Kitchener, E., Fox, M. and Johansson, M. (2021) Impact of COVID-19 pandemic on utilisation of healthcare services: a systematic review, *BMJ open*, 11(3), pp. e045343.
- Munoz-Baell, I. M. and Ruiz, M. T. (2000) Empowering the deaf. Let the deaf be deaf, *Journal of Epidemiology & Community Health*, 54(1), pp. 40-44.
- Munyi, C. W. (2012) Past and present perceptions towards disability: A historical perspective, *Disability studies quarterly*, 32(2).
- Müller-Wille, S. (2014) Race and history: Comments from an epistemological point of view, *Science, technology, & human values*, 39(4), pp. 597-606.
- Murie, A., Beazley, M. and Carter, D. (2005) The Birmingham case In *Metropolitan Governance and Spatial Planning*. Routledge. pp. 71-90
- Nachtegaal, J., Smit, J. H., Smits, C. A. S., Bezemer, P. D., Van Beek, J. H. M., Festen, J. M. and Kramer, S. E. (2009) The association between hearing status and psychosocial health before the age of 70 years: results from an internet-based national survey on hearing, *Ear and hearing*, 30(3), pp. 302-312.
- Nagel, J. (1997) *American Indian ethnic renewal: Red power and the resurgence of identity and culture*. Oxford University Press on Demand.
- Nair, L. and Adetayo, O. A. (2019) Cultural competence and ethnic diversity in healthcare, *Plastic and Reconstructive Surgery Global Open*, 7(5).

- Namutebi, M., Nalwadda, G. K., Kasasa, S., Muwanguzi, P. A. and Kaye, D. K. (2023) Midwives' perceptions towards the Ministry of Health guidelines for the provision of immediate postpartum care in rural health facilities in Uganda, *BMC Pregnancy and Childbirth*, 23(1), pp. 261.
- Naples, J. and Valdez, T. A. (2020) Letters to the Deaf: Present-Day Relevance of History's Earliest Social Analysis of Deafness, *Otolaryngology–Head and Neck Surgery*, 162(3), pp. 319-321.
- National Academies of Sciences, Engineering, and Medicine (2020) *Social Isolation and Loneliness in Older Adults: Opportunities for the Health Care System*. Washington, DC: National Academies Press.
- Neal, R. D., Ali, N., Atkin, K., Allgar, V. L., Ali, S. and Coleman, T. (2006) Communication between South Asian patients and GPs: comparative study using the Roter interactional analysis system, *British journal of general practice*, 56(532), pp. 869-875.
- Neher, T., Laugesen, S., Jensen, N. S. and Kragelund, L. (2011) Can basic auditory and cognitive measures predict hearing-impaired listeners localization and spatial speech recognition abilities?, *J Acoust Soc Am*, 130(3), pp. 1542-58.
- Nesterova, A. P., Yuryev, A., Klimov, E. A., Zharkova, M., Shkrob, M., Ivanikova, N. V., Sozin, S. and Sobolev, V. (2019) *Disease pathways: an atlas of human disease signaling pathways*. Elsevier.
- Neubauer, B. E., Witkop, C. T. and Varpio, L. (2019) How phenomenology can help us learn from the experiences of others, *Perspectives on medical education*, 8, pp. 90-97.
- Nickbakht, M., Meyer, C., Scarinci, N. and Beswick, R. (2021) Family-centered care in the transition to early hearing intervention, *Journal of Deaf Studies and Deaf Education*, 26(1), pp. 21–45.
- Nielsen, T. R., Vogel, A., Phung, T. K. T., Gade, A. and Waldemar, G. (2011) Over-and under-diagnosis of dementia in ethnic minorities: a nationwide register-based study, *International Journal of Geriatric Psychiatry*, 26(11), pp. 1128-1135.
- Nieman, C. L., Marrone, N., Mamo, S. K., Betz, J., Choi, J. S., Contrera, K. J., Thorpe Jr, R. J., Gitlin, L. N., Tanner, E. K. and Han, H.-R. (2017) The Baltimore HEARS Pilot Study: an affordable, accessible, community-delivered hearing care intervention, *The Gerontologist*, 57(6), pp. 1173-1186.
- Nieman, C. L., Marrone, N., Szanton, S. L., Thorpe Jr, R. J. and Lin, F. R. (2016) Racial/ethnic and socioeconomic disparities in hearing health care among older Americans, *Journal of aging and health*, 28(1), pp. 68-94.
- Njobvu, P., Hunt, I., Pope, D. and MacFarlane, G. (1999) Pain amongst ethnic minority groups of South Asian origin in the United Kingdom: a review, *Rheumatology*, 38(12), pp. 1184-1187.
- Noels, K. A. (2014) Language variation and ethnic identity: A social psychological perspective, *Language & Communication*, 35, pp. 88-96.
- Noghani, F., Seyedfatemi, N., Karimirad, M. R., Akbarzadeh, A. and Hasanpour-Dehkordi, A. (2016) Health-related quality of life in family caregivers of patients suffering from mental disorders, *Journal of Clinical and Diagnostic Research*, 10(11), VC05.

Nomikos, N. N., Nomikos, G. N., Korres, D. S., Lalloos, S. N. and Efstathopoulos, N. E. (2012) Boxing trauma in ancient games, *European Journal of Orthopaedic Surgery & Traumatology*, 22(6), pp. 433-436.

Nondahl, D. M., Cruickshanks, K. J., Wiley, T. L., Tweed, T. S., Klein, R. and Klein, B. E. K. (1998) Accuracy of self-reported hearing loss, *Audiology*, 37(5), pp. 295-301.

Noormohammadpour, P., Rostami, M., Nourian, R., Mansournia, M. A., Farahani, S. S., Farahbakhsh, F. and Kordi, R. (2015) Association between hearing loss and cauliflower ear in wrestlers, a case control study employing hearing tests, *Asian journal of sports medicine*, 6(2).

Norman, P., Conner, M. and Bell, R. (1999) The theory of planned behavior and smoking cessation, *Health Psychology*, 18(1), pp. 89–94.

Nudelman, C. J., D’Orazio, D. and Bottalico, P. (2023) Reducing noise in restaurants: Feasibility and recommendations, *The Hearing Journal*, 76(2), pp. 6–7.

Nyblade, L., Stockton, M., Travasso, S. and Krishnan, S. (2017) A qualitative exploration of cervical and breast cancer stigma in Karnataka, India, *BMC women’s health*, 17(1), pp. 1-15.

Ocloo, J., Garfield, S., Franklin, B.D. and Dawson, S., 2021. Exploring the theory, barriers and enablers for patient and public involvement across health, social care and patient safety: a systematic review of reviews. *Health research policy and systems*, 19(1), pp.8.

O’Connor, S., Hevey, D. and O’Keeffe, F. (2023) Illness perceptions, coping, health-related quality of life and psychological outcomes in cervical dystonia, *Journal of Clinical Psychology in Medical Settings*, 30(1), pp. 129–142.

O’Dowd, A. (2021) Flawed NHS records skew ethnic health data, says study.

Ollerenshaw, J. A. and Creswell, J. W. (2002) Narrative research: A comparison of two restorying data analysis approaches, *Qualitative inquiry*, 8(3), pp. 329-347.

Omi, M. and Winant, H. (2014) *Racial formation in the United States*. Routledge.

ONS (2018) *Office for National Statistics Local area migration indicators UK*. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/migrationwithintheuk/datasets/localareamigrationindicatorsunitedkingdom> [Accessed 19 March 2020].

Orji, A., Kamenov, K., Dirac, M., Davis, A., Chadha, S. and Vos, T. (2020) Global and regional needs, unmet needs and access to hearing aids, *International journal of audiology*, 59(3), pp. 166-172.

Osgood, R. (2006) Language, Labels, and Lingering (Re) considerations: The Evolution and Function of Terminology in Special Education, *Philosophical studies in education*, 37, pp. 135-145.

O’Reilly, M. and Parker, N. (2013) ‘Unsatisfactory Saturation’: a critical exploration of the notion of saturated sample sizes in qualitative research, *Qualitative research*, 13(2), pp. 190-197.

Orr, A. L. and Rogers, P. (2006) *Aging and vision loss: A handbook for families*. American Foundation for the Blind.

Otu, A., Ahinkorah, B.O., Ameyaw, E.K., Seidu, A.A. and Yaya, S. (2020) One country, two crises: what Covid-19 reveals about health inequalities among BAME communities in the United Kingdom and the sustainability of its health system?, *International journal for Equity in Health*, 19(1), pp. 1-6.

Owiti, J. A., Palinski, A., Ajaz, A., Ascoli, M., De Jongh, B. and Bhui, K. (2015) Explanations of illness experiences among community mental health patients, *International Review of Psychiatry*, 27(1), pp. 23–38.

Oyserman, D., Coon, H.M. and Kemmelmeier, M. (2002) Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses, *Psychological Bulletin*, 128(1), pp. 3–72.

Padden, C. A. and Humphries, T. (1988) *Deaf in America: Voices from a culture*. Harvard University Press.

Paglialonga, A., Cleveland Nielsen, A., Ingo, E., Barr, C. and Laplante-Lévesque, A. (2018) eHealth and the hearing aid adult patient journey: a state-of-the-art review. *Biomedical engineering online*, 17(1), pp.1-26.

Palmer, C. K., Thomas, M. C., McGregor, L. M., von Wagner, C. and Raine, R. (2015) Understanding low colorectal cancer screening uptake in South Asian faith communities in England—a qualitative study, *BMC Public Health*, 15(1), pp. 1-7.

Pandit, J.J. (2020) Demand–capacity modelling and COVID-19 disease: identifying themes for future NHS planning. *Anaesthesia*, 75(10), p.1278.

Papadopoulos, I. (2018) *Culturally competent compassion: A guide for healthcare students and practitioners*. Routledge.

Papadopoulos, L., Bor, R. and Legg, C. (1999) Coping with the disfiguring effects of vitiligo: a preliminary investigation into the effects of cognitive-behavioural therapy, *British Journal of Medical Psychology*, 72(3), pp. 385-396.

Pardhan, S., Nakafero, G., Raman, R. and Sapkota, R. (2020) Barriers to diabetes awareness and self-help are influenced by people's demographics: perspectives of South Asians with type 2 diabetes, *Ethnicity & health*, 25(6), pp. 843-861.

Park, Y. S., Konge, L. and Artino, A. R. (2020) The positivism paradigm of research, *Academic Medicine*, 95(5), pp. 690-694.

Parving, A., Christensen, B. and Sørensen, M. S. (1996) Primary Physicians and the Elderly Hearing-impaired Actions and Attitudes, *Scandinavian Audiology*, 25(4), pp. 253-257.

Patel, M., Phillips-Caesar, E. and Boutin-Foster, C. (2012) Barriers to lifestyle behavioral change in migrant South Asian populations, *J Immigr Minor Health*, 14(5), pp. 774-85.

Patton, M. Q. (2015) Sampling, qualitative (purposive), *The Blackwell encyclopedia of sociology*.

Pettys, G. L. and Balgopal, P. R. (1998) Multigenerational conflicts and new immigrants: An Indo-American experience, *Families in Society*, 79(4), pp. 410-423.

Paul, B., Kirubakaran, R., Isaac, R., Dozier, M., Grant, L., Weller, D. and RESPIRE collaboration (2022) Theory of planned behaviour-based interventions in chronic diseases among low health-literacy population: protocol for a systematic review, *Systematic reviews*, 11(1), pp. 127.

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A. and McEwen, S. A. (2014) A scoping review of scoping reviews: advancing the approach and enhancing the consistency, *Research synthesis methods*, 5(4), pp. 371-385.

Phenice, L. A. and Griffore, R. J. (2000) Social identity of ethnic minority families: An ecological approach for the new millennium, *Michigan Family Review*, 5(1).

Pickles, J. (2013) *An introduction to the physiology of hearing*. Brill.

Picou, E. M. MarkeTrak 10 (MT10) survey results demonstrate high satisfaction with and benefits from hearing aids. 2020: Thieme Medical Publishers, 021-036.

Pijpe, J., de Voogt, A., van Oven, M., Henneman, P., van der Gaag, K. J., Kayser, M. and de Knijff, P. (2013) Indian Ocean crossroads: human genetic origin and population structure in the Maldives, *American journal of physical anthropology*, 151(1), pp. 58-67.

Pineda-Moncusí, M., Allery, F., Delmestri, A., Bolton, T., Nolan, J., Thygesen, J.H., Handy, A., Banerjee, A., Denaxas, S., Tomlinson, C. and Denniston, A.K. (2024) Ethnicity data resource in population-wide health records: completeness, coverage and granularity of diversity, *Scientific data*, 11(1), pp. 221.

Pinder, R. J., Ferguson, J. and Møller, H. (2016) Minority ethnicity patient satisfaction and experience: results of the National Cancer Patient Experience Survey in England, *BMJ open*, 6(6), pp. e011938.

Pinnegar, S. and Daynes, J. G. (2007) Locating narrative inquiry historically, *Handbook of narrative inquiry: Mapping a methodology*, pp. 3-34.

Plotnikoff, R. C., Trinh, L., Courneya, K. S., Karunamuni, N. and Sigal, R. J. (2009) Predicting physical activity behavior in adults with type 1 or type 2 diabetes, *Psychology & Health*, 24(1), pp. 1–17.

Pollner, M. (1991) Left of ethnomethodology: The rise and decline of radical reflexivity, *American Sociological Review*, pp. 370-380.

Pollock, D., Davies, E. L., Peters, M. D., Tricco, A. C., Alexander, L., McInerney, P., Godfrey, C.M., Khalil, H and Munn, Z. (2021) Undertaking a scoping review: A practical guide for nursing and midwifery students, clinicians, researchers, and academics, *Journal of advanced nursing*, 77(4), pp. 2102-2113.

Pollock, Danielle, Ellen L. Davies, Micah DJ Peters, Andrea C. Tricco, Lyndsay Alexander, Patricia McInerney, Christina M. Godfrey, Hanan Khalil, and Zachary Munn. "Undertaking a scoping review: A practical guide for nursing and midwifery students, clinicians, researchers, and academics." *Journal of advanced nursing* 77, no. 4 (2021): 2102-2113.

Prajapati, R. and Liebling, H. (2022) Accessing mental health services: A systematic review and meta-ethnography of the experiences of South Asian service users in the UK, *Journal of racial and ethnic health disparities*, 9(2), pp.598-619.

Pronk, M., Deeg, D. J. H., Smits, C., Twisk, J. W., van Tilburg, T. G., Festen, J. M. and Kramer, S. E. (2014) Hearing loss in older persons: does the rate of decline affect psychosocial health?, *Journal of Aging and Health*, 26(5), pp. 703-723.

Pur, D. R. , Bassi, A. and Malvankar-Mehta, M. S. (2023) Impact on caregivers of patients with eye diseases: systematic review and meta-analysis, *Canadian Journal of Ophthalmology*, 58(5), pp. 433-442.

Pursnani, S. and Merchant, M. (2020) South Asian ethnicity as a risk factor for coronary heart disease, *Atherosclerosis*, 315, pp. 126-130.

Quindemil, K., Nagl-Cupal, M., Anderson, K. H. and Mayer, H. (2013) Migrant and minority family members in the intensive care unit. A review of the literature, *HeilberufeScience*, 4(4), pp. 128-135.

Quintero, G.A. (2014) Medical education and the healthcare system-why does the curriculum need to be reformed?, *BMC medicine*, 12(1), pp. 213.

Radhakrishnan, K., Saxena, S., Jillapalli, R., Jang, Y. and Kim, M. (2017) Barriers to and facilitators of South Asian Indian-Americans' engagement in advanced care planning behaviors, *Journal of Nursing Scholarship*, 49(3), pp. 294-302.

Rajan, G. (2006) *New cosmopolitanisms: South Asians in the US*. Stanford University Press.

Ramos, M. D. (2020) Attitudes, perceived competence, and social limitation among older adults with hearing problems, *Educational Gerontology*, 46(7), pp. 431-438.

Ranasinghe, P., Rathnayake, N., Wijayawardhana, S., Jeyapragasam, H., Meegoda, V.J., Jayawardena, R. and Misra, A. (2024) Rising trends of diabetes in South Asia: A systematic review and meta-analysis, *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 18(11), pp.103160.

Randhawa, G. and Owens, A. (2004) The meanings of cancer and perceptions of cancer services among South Asians in Luton, UK, *British journal of cancer*, 91(1), pp. 62-68.

Rankin, C. H., Abrams, T., Barry, R. J., Bhatnagar, S., Clayton, D. F., Colombo, J., Coppola, G., Geyer, M. A., Glanzman, D. L. and Marsland, S. (2009) Habituation revisited: an updated and revised description of the behavioral characteristics of habituation, *Neurobiology of learning and memory*, 92(2), pp. 135-138.

Raphael, J., Price, O., Hartley, S., Haddock, G., Bucci, S. and Berry, K. (2021) Overcoming barriers to implementing ward-based psychosocial interventions in acute inpatient mental health settings: A meta-synthesis, *International journal of nursing studies*, 115(1), pp. 103870.

Rassokha, I. M. (2021) Relativism as an Ontological System, *Axiomathes*, pp. 1-17.

Ratanjee-Vanmali, H., Swanepoel, D. W. and Laplante-Lévesque, A. (2020) Patient uptake, experience, and satisfaction using web-based and face-to-face hearing health services: process evaluation study, *Journal of medical Internet research*, 22(3), pp. e15875.

Rawool, V. W. and Colligon-Wayne, L. A. (2008) Auditory lifestyles and beliefs related to hearing loss among college students in the USA, *Noise and health*, 10(38), pp. 1.

- Rawool, V., 2018. Denial by patients of hearing loss and their rejection of hearing health care: a review. *Journal of Hearing Science*, 8(3) pp. 9-23.
- Razieh, C., Zaccardi, F., Miksza, J., Davies, M. J., Hansell, A. L., Khunti, K. and Yates, T. (2022) Differences in the risk of cardiovascular disease across ethnic groups: UK Biobank observational study, *Nutrition, Metabolism and Cardiovascular Diseases*, 32(11), pp. 2594-2602.
- Rehman, A. A. and Alharthi, K. (2016) An introduction to research paradigms, *International Journal of Educational Investigations*, 3(8), pp. 51-59.
- Reijneveld, S. A. (1998) Reported health, lifestyles, and use of health care of first generation immigrants in The Netherlands: do socioeconomic factors explain their adverse position?, *Journal of Epidemiology & Community Health*, 52(5), pp. 298-304.
- Reiners, G. M. (2012) Understanding the differences between Husserl's (descriptive) and Heidegger's (interpretive) phenomenological research, *Journal of Nursing Care*, 1(5), pp. 1-3.
- Rennefeld, C., Wiech, K., Schoell, E. D., Lorenz, J. and Bingel, U. (2010) Habituation to pain: further support for a central component, *PAIN®*, 148(3), pp. 503-508.
- Richardson, A. E. , Morton, R. P. and Broadbent, E. (2015) Caregivers' illness perceptions contribute to quality of life in head and neck cancer patients at diagnosis, *Journal of Psychosocial Oncology*, 33(4), pp. 414-432.
- Ridgway, J., Lind, C. and Hickson, L. (2020) What motivates people to seek help for their hearing? Applying self-determination theory to hearing healthcare, In *Self-Determination Theory and Healthy Aging: Comparative Contexts on Physical and Mental Well-Being*, pp. 147-169.
- Rigters, S. C., van der Schroeff, M. P., Papageorgiou, G., de Jong, R. J. B. and Goedegebure, A. (2018) Progression of hearing loss in the aging population: repeated auditory measurements in the
- Rivis, A. and Sheeran, P. (2003) Descriptive norms as an additional predictor in the theory of planned behaviour: A meta-analysis, *Current Psychology*, 22(3), pp. 218-233.
- RNID (2018) *Fact and Figures*. Available at: <https://rnid.org.uk/about-us/research-and-policy/facts-and-figures/> [Accessed 29 January 2019].
- Robertson, R., Wenzel, L., Thompson, J. and Charles, A. (2017) Understanding NHS financial pressures, *How are they affecting patient care*.
- Rockquemore, K. A. and Brunnsma, D. L. (2007) *Beyond black: Biracial identity in America*. Rowman & Littlefield Publishers.
- Rodda, M. and Eleweke, C. J. (2002) Providing accessible services to minority ethnic deaf people: Insights from a study in Alberta, Canada, *American annals of the Deaf*, pp. 45-55.
- Rolfe, G., Freshwater, D. and Jasper, M. (2001) *Critical Reflection for Nursing and the Helping Professions a User's Guide*.
- Rosenbaum, P. (2011) Family-centered research: What does it mean and can we do it? *Developmental Medicine and Child Neurology*, 53(2), pp. 99-100.

Rosnow, R. L. and Rosenthal, R. (1976) The volunteer subject revisited, *Australian Journal of Psychology*, 28(2), pp. 97-108.

Royal College of General, P. GP consultations post-COVID should be a combination of remote and face to face, depending on patient need, says College. 2021.

Rüdel, K., Bhui, K. and Priebe, S. (2009) Concept, development and application of a new mixed method assessment of cultural variations in illness perceptions: Barts Explanatory Model Inventory, *Journal of health psychology*, 14(2), pp. 336-347.

Sabaté, E. ed. (2003) *Adherence to long-term therapies: evidence for action*. World health organization.

Saha, S., Beach, M. C. and Cooper, L. A. (2008) Patient centeredness, cultural competence and healthcare quality, *Journal of the National Medical Association*, 100(11), pp. 1275-1285.

Sakellariou, D. and Rotarou, E. S. (2017) The effects of neoliberal policies on access to healthcare for people with disabilities, *International journal for equity in health*, 16(1), pp. 1-8.

Sandelowski, M. (1993) Rigor or rigor mortis: the problem of rigor in qualitative research, *Advances in nursing science*, 16(2), pp. 1-8.

Sarabandi, A., Vatankhah, S., Kamali, M. and Aryankhesal, A. (2021) Essential components of rehabilitation services provided to visually impaired people. *Clinical and Experimental Optometry*, 104(2), pp. 215–221.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H. and Jinks, C. (2018) Saturation in qualitative research: exploring its conceptualization and operationalization, *Quality & quantity*, 52(4), pp. 1893-1907.

Saunders, G. (2015) Hearing aid outcomes and the influence of non-auditory factors, *Hearing Review*, 22(9), pp. 19.

Saunders, G. H., Vercammen, C., Timmer, B. H. B., Singh, G., Pelosi, A., Meis, M., Launer, S., Kramer, S. E., Gagné, J.-P. and Bott, A. (2021) Changing the narrative for hearing health in the broader context of healthy living: a call to action, *International Journal of Audiology*, 60(sup2), pp. 86-91.

Saunders, M. N. K., Lewis, P. and Thornhill, A. (2012) Research methods for business students (6th ended.) Harlow, England: Pearson Education.

Savage, J. (2000) Ethnography and health care, *Bmj*, 321(7273), pp. 1400-1402.

Savin-Baden, M. and Major, C. (2023) *Qualitative research: The essential guide to theory and practice*. Routledge.

Sawyer, C. S., Armitage, C. J., Munro, K. J., Singh, G. and Dawes, P. D. (2019) Correlates of hearing aid use in UK adults: Self-reported hearing difficulties, social participation, living situation, health, and demographics, *Ear and Hearing*, 40(5), pp. 1061-1068.

- Scalenghe, S. (2004) The deaf in Ottoman Syria, 16th-18th centuries, *The Arab Studies Journal*, 12(2/1), pp. 10-25.
- Scarinci, N., Worrall, L. and Hickson, L. (2008) The effect of hearing impairment in older people on the spouse, *International journal of audiology*, 47(3), pp. 141-151.
- Schein, J. (1968) *The Deaf Community: Studies in the Social Psychology of Deafness*. Washington: Gallandet College Press.
- Schneider, J. M., Gopinath, B., McMahon, C. M., Britt, H. C., Harrison, C. M., Usherwood, T., Leeder, S. R. and Mitchell, P. (2010) Role of general practitioners in managing age-related hearing loss, *Medical Journal of Australia*, 192(1), pp. 20-23.
- Schouten, B. C., Meeuwesen, L., Tromp, F. and Harmsen, H. A. M. (2007) Cultural diversity in patient participation: the influence of patients' characteristics and doctors' communicative behaviour, *Patient education and counseling*, 67(1-2), pp. 214-223.
- Schulz, R. and Sherwood, P.R. (2008) Physical and mental health effects of family caregiving. *Journal of Social Work Education*, 44, pp. 105-113.
- Schulz, R., Eden, J. and National Academies of Sciences, E. a. M. (2016) Family caregiving roles and impacts, *Families caring for an aging America*: National Academies Press (US).
- Schutz, A. (1967) *The phenomenology of the social world*. Northwestern University Press.
- Schwandt, T. A. (1994) Constructivist, interpretivist approaches to human inquiry, *Handbook of qualitative research*, 1, pp. 118-137.
- Scotland, J. (2012) Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms, *English language teaching*, 5(9), pp. 9-16.
- Scott, A.W., Bressler, N.M., Ffolkes, S., Wittenborn, J.S. and Jorkasky, J. (2016) Public attitudes about eye and vision health, *JAMA ophthalmology*, 134(10), pp. 1111-1118.
- Sedikides, C. and Brewer, M. B. (2015) *Individual self, relational self, collective self*. Psychology Press.
- Shah, A. and Kanaya, A. M. (2014) Diabetes and associated complications in the South Asian population, *Current cardiology reports*, 16(5), pp. 476-476.
- Shakespeare, T. (2006) The social model of disability, *The disability studies reader*, 2, pp. 197-204.
- Shan, A., Ting, J.S., Price, C., Goman, A.M., Willink, A., Reed, N.S. and Nieman, C.L. (2020) Hearing loss and employment: a systematic review of the association between hearing loss and employment among adults. *The Journal of Laryngology & Otology*, 134(5), pp. 387-397.
- Shariff, A. (2009) Ethnic identity and parenting stress in South Asian families: Implications for culturally sensitive counselling, *International Journal for the Advancement of Counselling*, 31(1), pp. 71-88.

Sharby, N. 2005. Health and Behavior, the Interplay of Biological, Behavioral and Societal Influences. LWW.

Sharkey, P. and Faber, J. W. (2014) Where, when, why, and for whom do residential contexts matter? Moving away from the dichotomous understanding of neighborhood effects, *Annual review of sociology*, 40, pp. 559-579.

Sharma, R. (2013) The family and family structure classification redefined for the current times, *Journal of family medicine and primary care*, 2(4), pp. 306.

Sharp, E. C., Pelletier, L. G. and Lévesque, C. (2006) The double-edged sword of rewards for participation in psychology experiments, *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 38(3), pp. 269.

Shawver, Z., Griffith, J. D., Adams, L. T., Evans, J. V., Benchoff, B. and Sargent, R. (2016) An examination of the WHOQOL-BREF using four popular data collection methods, *Computers in Human Behavior*, 55, pp. 446-454.

Sheeran, P., Gollwitzer, P.M. and Bargh, J.A. (2013) Nonconscious processes and health, *Health psychology*, 32(5), p.460.

Shickle, D. and Griffin, M. (2014) Why don't older adults in England go to have their eyes examined?, *Ophthalmic and Physiological Optics*, 34(1), pp. 38-45.

Shtein, R. M., Newman-Casey, P. A., Herndon, L., Coleman, A. L. and Lee, P. P. (2016) Assessing the role of the family/support system perspective in patients with glaucoma. *Journal of Glaucoma*, 25(7), pp. 676-680.

Shukla, A., Harper, M., Pedersen, E., Goman, A., Suen, J. J., Price, C., Applebaum, J., Hoyer, M., Lin, F. R. and Reed, N. S. (2020) Hearing loss, loneliness, and social isolation: A systematic review, *Otolaryngology–Head and Neck Surgery*, 162(5), pp. 622-633.

Silverman, D. (2016) *Qualitative research*. Sage.

Simkhada, B., Sah, R. K., Mercel-Sanca, A., Van Teijlingen, E., Bhurtyal, Y. M. and Regmi, P. (2020) Perceptions and experiences of health and social care utilisation of the UK-Nepali population, *Journal of immigrant and minority health*, pp. 1-10.

Simon, H. J. and Yund, E. W. (1993) Frequency discrimination in listeners with sensorineural hearing loss, *Ear Hear*, 14(3), pp. 190-201.

Simpson, A. N., Matthews, L. J., Cassarly, C. and Dubno, J. R. (2019) Time from hearing-aid candidacy to hearing-aid adoption: A longitudinal cohort study, *Ear and hearing*, 40(3), pp. 468.

Singh, P., Campbell, T., LeBlanc, P. and King-Shier, K. M. (2020) Development of a Culturally Tailored Motivational Interviewing-Based Intervention to Improve Medication Adherence in South Asian Patients, *Patient preference and adherence*, 14, pp. 757-765.

Singh–Carlson, S., Wong, F., Martin, L. and Nguyen, S. K. A. (2013) Breast cancer survivorship and South Asian women: understanding about the follow-up care plan and perspectives and preferences for information post treatment, *Current Oncology*, 20(2), pp. 63-79.

Skinner, M. and Mitchell, D. (2016) "What? So What? Now What?": Applying Borton and Rolfes Models of Reflexive Practice in Healthcare Contexts, *Health and Social Care Chaplaincy*, 4(1), pp. 10-19.

Sloan-Heggen, C. M. and Smith, R. J. H. (2016) Navigating genetic diagnostics in patients with hearing loss, *Current opinion in pediatrics*, 28(6), pp. 705.

Smedley, B. D. (2012) The lived experience of race and its health consequences, *American journal of public health*, 102(5), pp. 933-935.

Smeeth, L., Fletcher, A. E., Ng, E. S.-W., Stirling, S., Nunes, M., Breeze, E., Bulpitt, C. J., Jones, D. and Tulloch, A. (2002) Reduced hearing, ownership, and use of hearing aids in elderly people in the UK—the MRC Trial of the Assessment and Management of Older People in the Community: a cross-sectional survey, *The Lancet*, 359(9316), pp. 1466-1470.

Smits, C., Kramer, S. E. and Houtgast, T. (2006) Speech reception thresholds in noise and self-reported hearing disability in a general adult population, *Ear Hear*, 27(5), pp. 538-49.

Sooriyamoorthy, T. and De Jesus, O. (2020) Conductive hearing loss Available at: <https://pubmed.ncbi.nlm.nih.gov/33085414/> [Accessed 05 February 2024].

Stevens, G., Flaxman, S., Brunskill, E., Mascarenhas, M., Mathers, C. D. and Finucane, M. (2013) Global and regional hearing impairment prevalence: an analysis of 42 studies in 29 countries, *The European Journal of Public Health*, 23(1), pp. 146-152.

Stohler, N. A., Reinau, D., Jick, S. S., Bodmer, D. and Meier, C. R. (2019) A study on the epidemiology of tinnitus in the United Kingdom, *Clinical Epidemiology*, 11, pp. 855.

Strauss, A. and Corbin, J. (1990) *Basics of qualitative research*. Sage publications.

Strauss, A. and Corbin, J. (1998) *Basics of qualitative research techniques*. Sage publications Thousand Oaks, CA.

Stud, L. (2020) Understanding family influence in South Asian health behaviour: A cultural perspective, *Journal of Cross-Cultural Health Research*, 15(2), pp. 105–118.

Sukhramani, N. and Verma, S. (2013) Disability as diversity: the Indian perception, *Diversity and respect-problems of perception in the global agenda for social work*. Oldenburg: Paulo Freire Verlag, pp. 109-22.

Suurmond, J., Uiters, E., de Bruijne, M. C., Stronks, K. and Essink-Bot, M.-L. (2011) Negative health care experiences of immigrant patients: a qualitative study, *BMC health services research*, 11(1), pp. 1-8.

Sze, M., Butow, P., Bell, M., Vaccaro, L., Dong, S., Eisenbruch, M., Jefford, M., Girgis, A., King, M. and McGrane, J. (2015) Migrant health in cancer: outcome disparities and the determinant role of migrant-specific variables, *The oncologist*, 20(5), pp. 523-531.

Tahden, M. A. S., Gieseler, A., Meis, M., Wagener, K. C. and Colonius, H. (2018) What keeps older adults with hearing impairment from adopting hearing aids?, *Trends in hearing*, 22, pp. 2331216518809737.

Taylor, H., Dawes, P., Kapadia, D., Shryane, N. and Norman, P. (2021) Investigating ethnic inequalities in hearing aid use in England and Wales: a cross-sectional study. *International Journal of Audiology*, pp.1-11.

Teh, W.L., Samari, E., Cetty, L., Kumarasan, R., Devi, F., Shahwan, S., Chandwani, N. and Subramaniam, M. (2021) A reduced state of being: The role of culture in illness perceptions of young adults diagnosed with depressive disorders in Singapore, *PloS one*, 16(6), p.e0252913.

Terry, D. J., Hogg, M. A. and White, K. M. (1999) The theory of planned behaviour: Self-identity, social identity and group norms, *British Journal of Social Psychology*, 38(3), pp. 225–244.

Thomas, K., Nilsson, E., Festin, K., Henriksson, P., Lowén, M., Löf, M. and Kristenson, M. (2020) Associations of psychosocial factors with multiple health behaviors: A population-based study of middle-aged men and women. *International journal of environmental research and public health*, 17(4), pp. 1239.

Thomson, H., Petticrew, M. and Morrison, D. (2001) Health effects of housing improvement: systematic review of intervention studies, *Bmj*, 323(7306), pp. 187-190.

Thornicroft, G., Sunkel, C., Aliev, A. A., Baker, S., Brohan, E., El Chammay, R., Davies, K. , Demissie, M., Duncan, J., Fekadu, W. and Gronholm, P. C. (2022) The Lancet Commission on ending stigma and discrimination in mental health, *The Lancet*, 400(10361), pp. 1438-1480.

Timonen, V., Foley, G. and Conlon, C. (2018) Challenges when using grounded theory: A pragmatic introduction to doing GT research, *International Journal of Qualitative Methods*, 17(1), pp. 1609406918758086.

Tishkoff, S. A. and Kidd, K. K. (2004) Implications of biogeography of human populations for race and medicine, *Nature genetics*, 36(11), pp. S21-S27.

Toleikyte, L. and Salway, S. (2018) Local action on health inequalities: understanding and reducing ethnic inequalities in health, *Public Health England*.

Topal I.O., Duman, H., Goncu, O.E., Durmuscan, M., Gungor, S., Ulkumen, P.K. (2016) Knowledge, beliefs, and perceptions of Turkish vitiligo patients regarding their condition, *An Bras Dermatol*, 91(6), pp. 770-775.

Torre, L. A., Siegel, R. L., Ward, E. M. and Jemal, A. (2016) Global cancer incidence and mortality rates and trends—an update, *Cancer Epidemiology and Prevention Biomarkers*, 25(1), pp. 16-27.

Tran, K., Kaddatz, J. and Allard, P. (2005) South Asians in Canada: unity through diversity, *Canadian Social Trends*, 78(1), pp. 20-25.

Triandis, H. C. (1994) Culture and social behavior.

Triandis, H.C. (1995) *Individualism and collectivism*. Boulder, CO: Westview Press.

Tsiga, E., Panagopoulou, E., Sevdalis, N., Montgomery, A. and Benos, A. (2013) The influence of time pressure on adherence to guidelines in primary care: an experimental study, *BMJ open*, 3(4).

Tsimpida, D., Kontopantelis, E., Ashcroft, D. and Panagioti, M. (2019) Socioeconomic and lifestyle factors associated with hearing loss in older adults: A cross-sectional study of the English Longitudinal Study of Ageing (ELSA), *BMJ open*, 9(9), pp. e031030.

Tsimpida, D., Kontopantelis, E., Ashcroft, D. and Panagioti, M. (2020) Comparison of self-reported measures of hearing with an objective audiometric measure in adults in the English longitudinal study of ageing, *JAMA network open*, 3(8), pp. e2015009-e2015009.

Tucci, D. L., Merson, M. H. and Wilson, B. S. (2010) A summary of the literature on global hearing impairment: current status and priorities for action, *Otology & Neurotology*, 31(1), pp. 31-41.

Törngren, S. O., Irastorza, N. and Rodríguez-García, D. 2021. Understanding multiethnic and multiracial experiences globally: Towards a conceptual framework of mixedness. Taylor & Francis.

Urcia, I. A. (2021) Comparisons of adaptations in grounded theory and phenomenology: Selecting the specific qualitative research methodology, *International journal of qualitative methods*, 20, 16094069211045474.

Uchida, Y., Sugiura, S., Nishita, Y., Saji, N., Sone, M. and Ueda, H. (2019) Age-related hearing loss and cognitive decline—The potential mechanisms linking the two, *Auris Nasus Larynx*, 46(1), pp. 1-9.

UK, G. 2019. Patient experience of primary care: GP services.

Vafaei, P., Liu, C. M., Davis, H., Patel, P., Vadlakonda, U. and Pursnani, S. (2023). Heart health for South Asians: improved cardiovascular risk factors with a culturally tailored health education program, *BMC Public Health*, 23(1), pp. 711.

van Leeuwen, L. M., Goderie, T. P. M., van Wier, M. F., Lissenberg-Witte, B. I., Lemke, U. and Kramer, S. E. (2021) Uptake of Hearing Aids and Hearing Assistive Technology in a Working Population: Longitudinal Analyses of The Netherlands Longitudinal Study on Hearing, *Ear and Hearing*, 42(4), pp. 793.

Van Manen, M. (2016) *Researching lived experience: Human science for an action sensitive pedagogy*. Routledge.

van Rosse, F., Suurmond, J., Wagner, C., de Bruijne, M. and Essink-Bot, M.-L. (2016) Role of relatives of ethnic minority patients in patient safety in hospital care: a qualitative study, *BMJ open*, 6(4), pp. e009052.

Van Der Sanden, R. L. , Bos, A. E. , Stutterheim, S. E. , Pryor, J. B. and Kok, G. (2015) Stigma by association among family members of people with a mental illness: A qualitative analysis. *Journal of Community and Applied Social Psychology*, 25(5), pp. 400-417.

Vas, V., Akeroyd, M. A. and Hall, D. A. (2017) A data-driven synthesis of research evidence for domains of hearing loss, as reported by adults with hearing loss and their communication partners, *Trends in hearing*, 21, pp. 2331216517734088.

Vathi, Z. (2015) Identities of the first and second generation: the role of ethnicity, *Migrating and Settling in a Mobile World*: Springer, pp. 37-72.

Verhagen, I., Steunenbergh, B., de Wit, N. J. and Ros, W. J. G. (2014) Community health worker interventions to improve access to health care services for older adults from ethnic minorities: a systematic review, *BMC health services research*, 14(1), pp. 1-8.

Verkuyten, M. (2004) *The social psychology of ethnic identity*. Psychology Press.

Verkuyten, M. (2018) *The social psychology of ethnic identity*. Routledge.

Vermeire, K., Knoop, A., Boel, C., Auwers, S., Schenus, L., Talaveron-Rodriguez, M., De Boom, C. and De Sloovere, M. (2016) Speech recognition in noise by younger and older adults: effects of age, hearing loss, and temporal resolution, *Annals of Otolaryngology, Rhinology & Laryngology*, 125(4), pp. 297-302.

Vernon, M. (2005) Fifty years of research on the intelligence of deaf and hard-of-hearing children: A review of literature and discussion of implications, *Journal of deaf studies and deaf education*, 10(3), pp. 225-231.

Victor, C. R., Martin, W. and Zubair, M. (2012) Families and caring amongst older people in South Asian communities in the UK: a pilot study, *European Journal of Social Work*, 15(1), pp. 81-96.

von Gablenz, P., Hoffmann, E. and Holube, I. (2020) Gender-specific hearing loss in German adults aged 18 to 84 years compared to US-American and current European studies, *PloS one*, 15(4), pp. e0231632.

Vrinten, C., Gallagher, A., Waller, J. and Marlow, L. A. V. (2019) Cancer stigma and cancer screening attendance: a population based survey in England, *BMC Cancer*, 19(1), pp. 566.

Wahyuni, D. (2012) The research design maze: Understanding paradigms, cases, methods and methodologies.

Wallhagen, M. I. (2010) The stigma of hearing loss, *The Gerontologist*, 50(1), pp. 66-75.

Wallhagen, M. I. and Pettengill, E. (2008) Hearing impairment: significant but underassessed in primary care settings, *Journal of gerontological nursing*, 34(2), pp. 36-42.

Wallhagen, M. I., Strawbridge, W. J., Shema, S. J. and Kaplan, G. A. (2004) Impact of self-assessed hearing loss on a spouse: A longitudinal analysis of couples, *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 59(3), pp. S190-S196.

Walls, P., Parahoo, K. and Fleming, P. (2010) The role and place of knowledge and literature in grounded theory, *Nurse researcher*, 17(4).

Wang, T., Tan, J. Y. B. , Liu, X. L. and Zhao, I. (2023) Barriers and enablers to implementing clinical practice guidelines in primary care: an overview of systematic reviews. *BMJ open*, 13(1), p. e062158.

Wang, Y. , Van Der Boog, P. , Hemmelder, M. H. , Dekker, F. W. , De Vries, A. and Meuleman, Y. (2023) Understanding health-related quality of life in kidney transplant recipients: the role of symptom experience and illness perceptions, *Transplant International*, 36, pp. 10837.

- Wang, Q., Wang, X., Yang, L., Han, K., Huang, Z. and Wu, H. (2021) Sex differences in noise-induced hearing loss: a cross-sectional study in China, *Biology of sex differences*, 12(1), pp. 24-24.
- Warringa, L. T. L., Henke, C. E., Pronk, M., Kramer, S. E. and Stam, M. (2020) Relationships Between Coping Behaviors and Social Loneliness in Adults With Self-reported Hearing Problems, *Ear and hearing*, 41(4), pp. 1040-1050.
- Wasserman, D. (2010) The justifiability of racial classification and generalizations in contemporary clinical and research practice, *Law, Probability and Risk*, 9(3-4), pp. 215-226.
- Watkinson, R. E., Sutton, M. and Turner, A. J. (2021) Ethnic inequalities in health-related quality of life among older adults in England: secondary analysis of a national cross-sectional survey, *The Lancet Public Health*, 6(3), pp. e145-e154.
- Watson, H., Harrop, D., Walton, E., Young, A. and Soltani, H. (2019) A systematic review of ethnic minority women's experiences of perinatal mental health conditions and services in Europe, *PloS one*, 14(1), pp. e0210587.
- Watson, S., Padala, S. A. and Bush, J. S. (2020) Alport syndrome, *StatPearls [Internet]*.
- Weerasinghe, S. and Maddalena, V. (2016) Negotiation, mediation and communication between cultures: end-of-life care for South Asian immigrants in Canada from the perspective of family caregivers, *Social work in public health*, 31(7), pp. 665-677.
- Welsh, E. Dealing with data: Using NVivo in the qualitative data analysis process. 2002.
- WHO (2012) *World Health Organisation Mortality and Burden of Diseases and Prevention of Blindness and Deafness*. Available at: https://www.who.int/pbd/deafness/WHO_GE_HL.pdf [Accessed 27 June 2017].
- WHO (2014) *World Health Organisation, The global burden of disabling hearing impairment: a call to action*. Available at: <https://www.who.int/bulletin/volumes/92/5/13-128728/en/> [Accessed 27 June 2017].
- WHO (2018) *Deafness and Hearing Loss*. Available at: <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss> [Accessed 29 June 2017].
- Wieczorkowska, M. (2024) Biomedical model, reductionism and their consequences for body perception, *Acta Universitatis Lodzensis. Folia Sociologica*, (90), pp. 19-35.
- Wiley, T. L., Cruickshanks, K. J., Nondahl, D. M. and Tweed, T. S. (2000) Self-reported hearing handicap and audiometric measures in older adults, *Journal of the American Academy of Audiology*, 11(2), pp. 67-75.
- Williams, E., Buck, D., Babalola, G. and Maguire, D. (2022) *What are health inequalities?* Available at: <https://www.kingsfund.org.uk/publications/what-are-health-inequalities> [Accessed 03 June 2022].

Williamson, J. and Hill, S. (2017) *Pushing the Boundaries*. Available at: <https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2017/11/Audiology-Pushing-the-Boundaries.pdf>. [Accessed 10 September 2023].

Wilson, C., Alam, R., Latif, S., Knighting, K., Williamson, S. and Beaver, K. (2012) Patient access to healthcare services and optimisation of self-management for ethnic minority populations living with diabetes: a systematic review, *Health & social care in the community*, 20(1), pp. 1-19.

Winterbottom, A., Cross, P. and Redding, D. (2010) The quality of patient engagement and involvement in primary care, *The King's Fund*.

Wonders, L., Honey, A. and Hancock, N. (2019) Family inclusion in mental health service planning and delivery: consumers' perspectives, *Community mental health journal*, 55(2), pp. 318-330.

Wong, A., Peiris-John, R., Sobrun-Maharaj, A. and Ameratunga, S. (2015) Priorities and approaches to investigating Asian youth health: Perspectives of young Asian New Zealanders, *Journal of primary health care*, 7(4), pp. 282-290.

Woodward, J., Bagnall, A. and White, J. (2016) An evaluation of the Bradford Beating Diabetes Intensive Lifestyle Change Programme.

Woodward, E. and Saunders, G.H. (2023) Do UK audiologists feel able to address the hearing, social and emotional needs of their adult patients with hearing loss. *International Journal of Audiology*, pp.1-8.

World Health Organization (2021) *World report on hearing*. World Health Organization. Available at: <https://www.who.int/publications/i/item/9789240020481> [Accessed: 01 July 2025].

Wu, Y. (2022) Narrative review on psychosocial challenges and identity issues associated with severe mental illness in adolescents, *International Journal of Study in Psychology*, 2(1), pp. 21-32.

Yates, S. , and Gatsou, L. (2020). Undertaking Family-Focused Interventions, *When a Parent Has a Mental Illness - Possibilities and Challenges. Practice*, 33(2), pp. 103–118.

Yeung, J., Matsuyama, T., Bray, J., Reynolds, J. and Skrifvars, M.B. (2019) Does care at a cardiac arrest centre improve outcome after out-of-hospital cardiac arrest?—A systematic review. *Resuscitation*, 137, pp.102-115.

Yong, M., Willink, A., McMahon, C., McPherson, B., Nieman, C. L., Reed, N. S. and Lin, F. R. (2019) Access to adults' hearing aids: policies and technologies used in eight countries, *Bulletin of the World Health Organization*, 97(10), pp. 699.

Yueh, B., Shapiro, N., MacLean, C. H. and Shekelle, P. G. (2003) Screening and management of adult hearing loss in primary care: scientific review, *JAMA*, 289(15), pp. 1976-85.

Zhao, F., Manchaiah, V., St. Claire, L., Danermark, B., Jones, L., Brandreth, M., Krishna, R. and Goodwin, R., (2015) Exploring the influence of culture on hearing help-seeking and hearing-aid uptake *International journal of audiology*, 54(7), pp.435-443.

Zaidi, A. U., Couture-Carron, A. and Maticka-Tyndale, E. (2016) 'Should I or Should I Not?': an exploration of South Asian youth's resistance to cultural deviancy, *International Journal of Adolescence and Youth*, 21(2), pp. 232-251.

Zaman, S., Whitelaw, A., Richards, N., Inbadas, H. and Clark, D. (2018) A moment for compassion: emerging rhetorics in end-of-life care, *Medical Humanities*, 44(2), pp. 140-143.

Zhang, H. , Chen, D. , Zou, P. , Zhang, Y. , Liang, X. and Peng, X. (2023) The integrated common-sense model of illness self-regulation: predicting healthy eating, exercise behaviors, and health among individuals at risk of metabolic syndrome, *BMC Public Health*, 23(1), pp. 1486.

Appendices

Appendix 1 – Database search strategies

MEDLINE

Total results 551

Due to the high number of articles identified the filters shown in the three right columns were applied. These filters correspond with all possible filters in CINHALL, ScienceDirect and ASSIA.

#	Query	Results	Academic journals	English	Age – Adults only	Full text
S6	S1 AND S2 AND S3	338	338	328	218	118
S5	S2 AND S3	485	485	456	284	143
S4	S1 AND S2	1,157	1154	1106	639	290
S3	(MH "Correction of Hearing Impairment") OR (MH "Hearing Tests") OR (MH "Hearing Aids") OR "hearing services" OR (MH "Audiology")	25,868				
S2	(MH "Perception") OR (MH "Social Perception") OR "experiences or perceptions or attitudes or views or feelings or qualitative or perspective" OR (MH "Attitude to Health") OR (MH "Qualitative Research") OR (MH "Health Knowledge, Attitudes, Practice")	345,630				
S1	(MH "Hearing Loss") OR (MH "Hearing Loss, Sensorineural") OR (MH "Hearing Loss, Bilateral") OR (MH "Hearing Loss, Unilateral") OR (MH "Hearing Loss, Central") OR (MH "Hearing Loss, Sudden") OR (MH "Hearing Loss, Functional") OR (MH "Hearing Loss, Hidden") OR (MH "Hearing Loss, Conductive") OR (MH "Hearing Loss, High-Frequency") OR (MH "Hearing Loss, Noise-Induced") OR (MH "Hearing Disorders") OR (MH "Hearing Loss, Mixed Conductive-Sensorineural") OR (MH "Persons With Hearing Impairments") OR "hearing loss or deafness or hearing impairment or deaf or hard of hearing" OR (MH	92,111				

	"Deafness") OR (MH "Correction of Hearing Impairment")					

CINAHL

Total results 361

#	Query	Results	Academic journals	English	Age – Adults only	Full text
S6	S1 AND S2 AND S3	354	224	223	113	59
S5	S2 AND S3	534	347	346	156	87
S4	S1 AND S3	1,804	1285	1276	375	215
S3	(MH "Perception") OR (MH "Social Perception") OR (MH "Attitude Measures") OR (MH "Attitude to Illness") OR (MH "Attitude to Disability") OR (MH "Attitude to Life") OR (MH "Attitude to Health") OR (MH "Attitude to Aging") OR "experiences or perceptions or attitudes or views or feelings" OR (MH "Life Experiences") OR (MH "Self Concept") OR (MH "Emotions")	230,248				
S2	"hearing services" OR (MH "Audiology") OR (MH "Hearing aids")	15,842				
S1	(MH "Hearing Tests") OR "hearing loss or deafness or hearing impairment or deaf or hard of hearing" OR (MH "Hearing Screening") OR (MH "Hearing Disorders") OR (MH "Deafness") OR (MH "Hearing Loss, High-Frequency") OR (MH "Hearing Loss, Noise-Induced") OR (MH "Hearing Loss, Hidden") OR (MH "Hearing Loss, Central") OR (MH "Hearing Loss, Sensorineural") OR (MH "Hearing Loss, Conductive") OR (MH "Hearing Loss, Functional") OR (MH "Hearing Loss, Partial") OR (MH "Rehabilitation of Persons with Hearing Loss") OR (MH "Presbycusis")	42,537				

Science Direct

Total number of articles identified - 281

Science direct processed the OR operator first, looking for all documents containing the two words. Then it looks for articles that contain the AND words.

Terms searched in 'Advanced search' under 'Title, abstract or author-specified keywords'.

Keywords	Number of Articles	Research articles only	English only	Open access only
"hearing loss" AND "experiences"	678	506	487	92
"hearing loss" AND "perceptions"	676	508	632	187
"hearing services" AND "experiences"	1	1	1	1
"hearing services" AND "perceptions"	1	1	1	1

ASSIA search strategy non ethnic

Total number of articles identified = 1419

Subject headings were used to refine and focus the search. These headings were used along with my keywords (as shown in the table below). The subject headings were chosen by adding my chosen keywords in the thesaurus section. Under the thesaurus, social science thesaurus was chosen as it was deemed the most appropriate for my topic as discerned by the librarian (Helen Ryba). The search terms were limited to 'abstract and summary text'. The key word 'hearing loss' appeared with just one subject heading which was 'sudden hearing loss' therefore the key word hearing impairment was used.

Set	Search	Databases	Results	English only and full text
S20	[S12] AND [S13] AND [S14]	23 databases	22	21

S19	[S13] AND [S14]	23 databases	98	94
S18	[S12] AND [S14]	23 databases	2,106	692
S17	[S11] AND [S12] AND [S13]	23 databases	21	13
S16	[S11] AND [S13]	23 databases	69	52
S15	[S11] AND [S12]	23 databases	2,060	547
S14	(MAINSUBJECT.EXACT("Hearing impairment") OR MAINSUBJECT.EXACT("Sensorineural hearing impairment")) OR MAINSUBJECT.EXACT("Deafness") OR (MAINSUBJECT.EXACT("Hearing impaired people") OR MAINSUBJECT.EXACT("Hearing impairment") OR MAINSUBJECT.EXACT("Hearing impaired young adults") OR MAINSUBJECT.EXACT("Hearing impaired young people") OR MAINSUBJECT.EXACT("Hearing impaired elderly people") OR MAINSUBJECT.EXACT("Sensorineural hearing impairment")) OR summary(hearing AND loss)	23 databases	40,329	
S13	summary(Attitudes) AND (MAINSUBJECT.EXACT("Attitudes") OR MAINSUBJECT.EXACT("Social attitudes") OR MAINSUBJECT.EXACT("Cultural attitudes") OR MAINSUBJECT.EXACT("Negative attitudes"))	23 databases	84,566	
S12	summary(Experiences) OR (MAINSUBJECT.EXACT("Subjective experiences") OR MAINSUBJECT.EXACT("Early life experiences") OR MAINSUBJECT.EXACT("Crosscultural experiences") OR MAINSUBJECT.EXACT("Life experiences") OR MAINSUBJECT.EXACT("Memorable experiences") OR MAINSUBJECT.EXACT("Past experiences") OR MAINSUBJECT.EXACT("Personal experiences") OR MAINSUBJECT.EXACT("Social experiences") OR MAINSUBJECT.EXACT("Experiences") OR MAINSUBJECT.EXACT("Negative experiences"))	23 databases	2,418,725	
S11	(MAINSUBJECT.EXACT("Hearing impaired people") OR MAINSUBJECT.EXACT("Hearing impairment") OR MAINSUBJECT.EXACT("Hearing impaired young adults") OR MAINSUBJECT.EXACT("Hearing tests") OR MAINSUBJECT.EXACT("Hearing therapy") OR MAINSUBJECT.EXACT("Hearing aids") OR	23 databases	56,345	

	MAINSUBJECT.EXACT("Hearing impaired young people")) OR summary(hearing AND services)			

Do you struggle to hear?

Seeking Participants for a research study

I am a qualified audiologist with over 10 years experience of testing people's hearing and I would like to know about your hearing.

What is the study?

- ❖ A single interview lasting up to 1 hour at Birmingham City University or your local health centre.
- ❖ You will be offered a Free hearing test

Eligibility criteria

- ❖ You belong to an ethnic minority and you are over 18



**To learn about our study and complete a short phone screening ,please call:
07514170847 or email at simra.mahroof@mail.bcu.ac.uk**



Appendix 3 – Invitation letter with response slip



University

Simra Mahroof
c/o Andy Powell
Seacole 488
Birmingham City

Westbourne Road
Birmingham, B15 3TN

Project Title: Accessing Hearing Services in Ethnic Minorities.

Dear Participant,

I would like to invite you to take part in my research study, where I would like to explore your views about the hearing services and hearing aid uptake. I am an experienced audiologist doing a PhD at Birmingham City University. I am employed by Heartlands Hospital in Bordesley Green East area. I have a particular interest in people's views from ethnic minority groups about the hearing services being offered. Whether you have accessed the hearing services or not, your views regarding your hearing difficulties and experiences would be very valuable for this project. This research could lead to improvement in the provision of hearing services and the health professional's clinical practice.

There is detailed information about the project in the Patient Information Sheet attached. Please take time to carefully read through the information. If you are interested in taking part in the study please complete and return the response slip below in the stamped addressed envelope.

Alternatively please text or email your response to me.

Tel: 07514170847

email: simra.mahroof@mail.bcu.ac.uk

I do / do not wish to be a part of
this research project.

Telephone:

Email:

Signed.....

Date.....



Participant Information Sheet

Research title: **Accessing Hearing Services in people from Ethnic Minorities**

Introduction

I would like to invite you to participate in this research project which explores the views of people from ethnic minorities relating to their hearing difficulties and hearing services. Please read all the information on this leaflet carefully before deciding whether to participate.

What is the purpose of the research?

The purpose of the research is to understand your views about hearing difficulties and any contact or involvement you may have had with NHS hearing services. It is anticipated that the outcome of the study will be useful in improving the hearing services currently offered. It may help to design better healthcare for ethnic minority groups based on their needs.

Who is carrying out the research?

I am a qualified audiologist with nine years clinical experience with patients reporting hearing issues. I am currently doing research as a PhD student at Birmingham City University. I have two research supervisors to support my research, Dr Chris Inman and Dr Andy Powell. Ethics committees have approved my research to allow me to approach you.

Do you have to take part in this research?

I am inviting you to participate because you are interested in my research and have contacted me for more information. However you can change your mind about being involved at any time. You may want to discuss this invitation with family and friends before deciding. If you decide not to participate you do not need to take any action.

What should you do if you are interested and want to know more?

If you decide you are interested and would like to ask questions & discuss the research with me please contact me by phone or email. Alternatively complete your details on the response slip at the bottom of the invitation letter with your telephone number or email address and post it to me in the enclosed stamped addressed envelope so I can contact you.

- 1 I will then contact you to discuss the research and answer any queries you may have. If you then decide that you would like to participate in the research we can arrange to meet for an interview at a local centre and time that is convenient for you.

- 2 Before the interview takes place I will ask you to sign a consent form for the interview.
- 3 During the interview I will ask you to discuss some issues regarding your hearing and experiences relating to the hearing services. This interview will last no longer than an hour and is a one off event.
- 4 If you agree to the interview it will be audio recorded so I can refer back to your words.
- 5 I may write down a few notes during interview so information is not missed.
- 6 You will be offered a hearing test at the end of the interview which only takes 15 minutes. It involves wearing headphones and responding via a button to the sounds (beeps and tones) you hear. It is your choice, you do not have to take part in the hearing test if you prefer not to and can participate in the interview alone.

What if you change your mind about participating in the interview?

You have the right to change your mind about taking part in the interview at any point of time even after you have signed the consent form. You do not need to state a reason for changing your mind and this will not affect any of your future treatment and care. If you change your mind you can withdraw your interview information from the research at any. This also applies to the hearing test.

Will anyone be able to recognise you?

All your personal information will be kept confidential and will not be revealed to any other person. Your name will be anonymised so you cannot be recognised and you will be assigned a participant number. Your real name will not be used following the interview so you cannot be identified. The information you provide during the interview will only be used for the purpose of this research. All consent forms with your name and personal details will be stored in a locked filing cabinet in a secure office at the University.

Confidentiality would only be breached in the unlikely event of information being disclosed suggesting that any person is at risk of harm which would indicate a safeguarding issue. Depending on the information that emerges my professional code of conduct as an audiologist may require me to pass information on to other professionals.

What are the benefits of taking part in this research?

You may find this project interesting and enjoy answering the interview questions. I would like to know about your views on hearing services and with your input this may influence the way healthcare professionals provide these services. You may also benefit from having your hearing tested and knowing the results straight after.

What are the possible disadvantages of taking part?

You may find speaking about your hearing loss and any difficulties you face due to it could make you feel worried. However, the interviewer has nine years' experience working as an audiologist and will try to ensure your comfort at all times.

How will the information you provide be kept safe?

All personal details with names, locations and any other identifiable information that you provide in the interview will be kept safe and locked in a metal cabinet in a secure office.

Who should you contact for further information?

Please contact the chief investigator if you have any queries or concerns about the research:

Simra Mahroof
simra.mahroof@mail.bcu.ac.uk

Tel: 07514170847

Email:

If you prefer you can contact my research supervisors:

Dr Chris Inman
Tel: 0121 331 6105
Email: chris.inman@bcu.ac.uk

Dr Andy Powell
Tel: 0121 331 7113
Email: andy.powell@bcu.ac.uk

Or you can contact the representative of the University sponsoring the research:

Julie Quick Tel: 0121 331 7080 Email: Julie.Quick@bcu.ac.uk

Thank you for taking the time to read this information. I hope that you are able to participate in my research.



BIRMINGHAM CITY
University

**Title of the study: Accessing Hearing Services in people from
Ethnic Minorities**

Consent form

Name of researcher: Simra Mahroof

Participant identification code:

Please

tick box

- 1 I confirm that I have read and understand the information sheet dated.....for the above research. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
- 2 I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. ☐
- 3 I understand that relevant sections of my anonymised data collected during the research, may be looked at by individuals from Birmingham City University, or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data. ☐
- 4 I agree to being audio-recorded in this interview. ☐
- 5 I agree to my anonymised data and some direct quotes of words from my interview being published as part of the researchers' PhD dissertation and potentially presented at conferences or published in a journal in the future. ☐
- 6 I understand all information will be confidential unless anything is disclosed indicating any risk or harm to any individual as required by the researcher's professional organisation (HCPC, 2017). ☐

7 I agree to take part in the above study.

☐

Name of participant: _____ Date: _____ Signature: _____

Name of person taking consent: _____ Date: _____ Signature: _____

Appendix 6 – Versions of interview questions

Interview Questions Version Pre pilot interview

Questions

How do you feel about your hearing loss?

Tell me about your hearing in different situations?

What do your family and friend feel about your hearing?

What does hearing loss mean to you?

How do you cope with your hearing in your daily life?

How do you feel about your hearing when speaking to someone in one to one situation?

What are your views about hearing services?

What do hearing services mean to you?

Have you ever had any contact with the hearing services?

What do you know about the hearing services?

How do you manage other health issues?

How do you feel about approaching your GP?

How do you feel about being referred to a hospital?

Now I am going to ask a few questions about yourself, you do not have to answer them if you wish not to:

How many years have you lived in the UK?

What is your highest qualification?

What is your occupation?

What is your age?

Thank you for your time

Do you have any questions you would like to ask me?

Initial Questions after Participant 1

These questions were devised with the help of my supervisors and post reflection from practice interview with Andy.

These questions are designed around the aims of the study to understand views of ethnic minority people about accessing hearing services.

	Question	Prompt
1.	Tell me about your hearing - What caused your hearing loss? - How long have you had a hearing loss? - Which ear is your better ear? - Do you get any noises in your ears?	When did you first notice you were struggling to hear...
2.	Have you accessed hearing services?	
3.	Can you tell me how you feel about your hearing?	You said ... can you tell me a bit more about that?
4.	What is your hearing like on a daily basis each day when you are doing normal things at home – in your normal routine?	Well maybe when the TV or radio is on.
5.	How do you feel about your hearing when talking to someone in one to one situation?	You said ... can you tell me a bit more about that?
6.	So can you tell me a bit about how your hearing seems when you are out and about?	Well I was thinking in the shops/ or crossing the road/ or driving.
7.	What about when you are with a few people what is it like then?	Or at family event when there are lots of people.
8.	What are the views of your family and friends about your hearing loss?	Do you enjoy being there?
9.	Have your family and friend said anything to you about your hearing?	Do you know how they feel about your hearing?
10.	What does it mean to you if you know someone has a hearing problem?	How do you make sure they have understood you?
11.	Have you heard of the NHS hearing services? - What are your views on being seen by an audiologist? - What are your views on having hearing aids if needed?	What do you know about them? Have you ever had any contact with people working in the hearing services?
12.	How do you normally go about managing any health related issues if you have them?	Can you give me an example how you manage if you feel ill/poorly.
13.	How do you feel about approaching your GP if you feel you could be given some support for a problem you have?	Is it easy getting to see your GP if you want to?
14.	<u>Now I am going to ask a few questions about yourself, you do not have to answer them if you wish not to:</u>	
	How long have you lived in the UK for?	Number of years

	Have you had a chance to study since you left school?	Your highest qualification?
	Do you have a full or part time job?	What is your occupation?
	Which age bracket do you fall in?	20-29;30-39;40-49; 50-59; 60-69;70-79; 80-89;90-99

Do you have any questions you would like to ask me?

Would you like a short report sending when the research has

Interview questions after fourth interview (For participants 5-9th)

The first four interviewees spoke about their families and their involvement in their daily matters and health.

An interesting point was raised by the third interviewee after the recording was switched off. She mentioned about the difference in perception of self-care and seeking healthcare between women and men.

Quote from her transcript:

“It just seems like women just get on with life and their health is the last thing on their priority list. I think in our culture people just expect women to carry on where as when men get ill, its quite a significant issue. Our women just keep going with whatever they have to do.”

Ensuring that the participants words are used to create and adapt the interview questions, the changes below (in red) were made to the initial questions after analysis of four interviews.

	Question	Prompt
1.	Tell me about your hearing - What caused your hearing loss? - How long have you had a hearing loss? - Which ear is your better ear? - Do you get any noises in your ears?	When did you first notice you were struggling to hear...
2.	Have you accessed hearing services?	
3.	Can you tell me how you feel about your hearing?	You said ... can you tell me a bit more about that?
4.	What is your hearing like on a daily basis each day when you are doing normal things at home – in your normal routine?	Well maybe when the TV or radio is on. Well I was thinking in the shops/ or crossing the road/ or driving.
5.	How do you feel about your hearing when talking to someone in one to one situation?	You said ... can you tell me a bit more about that?
6.	So can you tell me a bit about how your hearing seems when you are out and about?	Removed as it is integrated within question 4.

7	What about when you are with a few people what is it like then?	Or at family event when there are lots of people.
8.	What are the views of your family and friends about your hearing loss?	This question is emphasised and allowed more time.
9.	Have your family and friend said anything to you about your hearing?	Do you know how they feel about your hearing?
10.	What does it mean to you if you know someone has a hearing problem?	How do you make sure they have understood you?
11.	Have you heard of the NHS hearing services? - What are your views on being seen by an audiologist? - What are your views on having hearing aids if needed?	What do you know about them? Have you ever had any contact with people working in the hearing services?
12.	How do you normally go about managing any health related issues if you have them?	Can you give me and example how you manage if you feel ill/poorly.
13.	How do you feel about approaching your GP if you feel you could be given some support for a problem you have?	Is it easy getting to see your GP if you want to?
14.	What are your views on the way men and women look after themselves.	Added after the comments from 3rd participant.
15.	<u>Now I am going to ask a few questions about yourself, you do not have to answer them if you wish not to:</u>	
	How long have you lived in the UK for?	Number of years
	Have you had a chance to study since you left school?	Your highest qualification?
	Do you have a full or part time job?	What is your occupation?
	Which age bracket do you fall in?	20-29;30-39;40-49; 50-59; 60-69;70-79; 80-89;90-99

Interview questions adapted after ninth interview (For participants 10-15)

The general reflection on the previous four interviews also revealed deviation from hearing healthcare to discussions about general health. Effort has not been made to restrict the interviews to just hearing issues to prevent any rich data from being overlooked or constricted within the aims of the research.

Constant comparison is an essential part of the analytic process in Grounded Theory (Glaser, 1967; Glaser 1978) which was applied searching for recurrent similar events in participant's lives. One of the main areas emerging issue from this set of four interviews (4th – 9th) was accessing GP and dissatisfaction with their GPs. The participants spoke explicitly about their GP and their ethnic backgrounds.

Therefore the following questions were adapted and added (shown in red):

	Question	Prompt
1.	Tell me about your hearing - What caused your hearing loss? - How long have you had a hearing loss? - Which ear is your better ear? - Do you get any noises in your ears?	When did you first notice you were struggling to hear...
2.	Have you accessed hearing services?	
3.	Can you tell me how you feel about your hearing?	You said ... can you tell me a bit more about that?
4.	What is your hearing like on a daily basis each day when you are doing normal things at home – in your normal routine?	Well maybe when the TV or radio is on. Well I was thinking in the shops/ or crossing the road/ or driving.
5.	How do you feel about your hearing when talking to someone in one to one situation?	You said ... can you tell me a bit more about that?
6.	So can you tell me a bit about how your hearing seems when you are out and about?	Removed as it is integrated within question 4.
7	What about when you are with a few people what is it like then?	Or at family event when there are lots of people.
8.	What are the views of your family and friends about your hearing loss?	This question is emphasised and allowed more time.

9.	Have your family and friend said anything to you about your hearing?	Do you know how they feel about your hearing?
10.	What does it mean to you if you know someone has a hearing problem?	How do you make sure they have understood you?
11.	Have you heard of the NHS hearing services? - What are your views on being seen by an audiologist? - What are your views on having hearing aids if needed?	What do you know about them? Have you ever had any contact with people working in the hearing services?
12.	How do you normally go about managing any health related issues if you have them?	Can you give me and example how you manage if you feel ill/poorly.
13.	How do you feel about approaching your GP if you feel you could be given some support for a problem you have?	Is it easy getting to see your GP if you want to?
14.	How easy is it for you to be able to see your GP?	This question was inserted to gather more data about access to primary care (appointments etc).
15.	What is your GP like? - Are you satisfied with the service provided? - Do you get referred further where needed? - What ethnicity is your GP? - When is the last time you visited your GP?	These questions were asked to understand the patient GP relationship.
16.	What are your views on the way men and women look after themselves.	Added after the comments from 3 rd participant.
17.	<u>Now I am going to ask a few questions about yourself, you do not have to answer them if you wish not to:</u>	
	How long have you lived in the UK for?	Number of years
	Have you had a chance to study since you left school?	Your highest qualification?
	Do you have a full or part time job?	What is your occupation?
	Which age bracket do you fall in?	20-29;30-39;40-49; 50-59; 60-69;70-79; 80-89;90-99

Interview questions adapted after ninth interview (For participants 16-20)

Other than the previous questions, I directed most of questions towards the emerging categories and the sub categories.

	Question	Prompt
1.	Tell me about your hearing	When did you first notice you were struggling to hear...
2.	What does your family think of your hearing issues	
3.	How does hearing loss impact your life?	
4.	What do you do cope with any difficulties experienced due to your hearing problems.	
5.	What do you think of hearing aids?	
6.	What would your family think of hearing aids if you needed them?	
7	Why do you think people are reluctant to wear hearing aids?	
8.	When would you have gone to have your hearing checked?	
9.	What are you like when other health issues are in question?	
10.	How would you prefer to see an audiologist? Location?	

Appendix 7- Ethics committee approval letter



Faculty of Health, Education and Life Sciences Research Office

Faculty of Health, Education and Life Sciences
Birmingham City University
Westbourne Road
Birmingham
B15 3TN

HELS_Ethics@bcu.ac.uk

09/11/2017

Mrs. Simra Mahroof

261 Bromford Road
Hodge Hill
Birmingham
West Midlands
B36 8EU
United Kingdom

Dear Simra ,

Re: Mahroof /Nov /2017 /RC /0755 - Accessing Hearing Services in Ethnic Minorities

Thank you for your resubmission of your application and documentation regarding the above study. I am pleased to confirm that the Faculty of Health, Education and Life Sciences of Birmingham City University has agreed to take on the role of Sponsor however can you make sure before you issue the patient information leaflets that it is clear that participants can contact the Trust's PILS if they have any concern over the Trust's hearing services.

I can confirm that the legal liability for death or injury to any person participating in the project is covered under the University's insurance arrangements.

A copy of BCU's insurance details is available at:

<https://icity.bcu.ac.uk/Finance/Procurement-and-Insurance/Insurance>

If you wish to make any changes to your proposed study (by request or otherwise), then you must submit an Amendment application to us. Examples of changes include (but are not limited to) adding a new study site, a new method of participant recruitment, adding a new method of data collection and/or change of Project Lead.

Please also note that the Committee should be notified of any serious adverse effects arising as a result of this activity.

Keep a copy of this letter along with the corresponding application for your records as evidence of approval.

If you have any queries, please contact HELS_Ethics@bcu.ac.uk

May I take this opportunity to wish you every success with your study.

Yours Sincerely,

Ms Julie Quick

On behalf of the Faculty Academic Ethics Committee
Health, Education and Life Sciences

Appendix 8 – Additional GDPR sheet



Project title: Accessing Hearing Services in People from Ethnic Minorities

Birmingham City University ('BCU') is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally-identifiable information possible.

BCU will use your name, and contact details to contact you about the research study, and make sure that relevant information about the study is recorded to oversee the quality of the study. Individuals from BCU may look at your research records to check the accuracy of the research study. The only people in BCU who will have access to information that identifies you will be people who need to contact you to arrange interviews for data collection, people who audit the data collection process and people who manage data storage and archiving.

BCU will retain evidence of your participation in this study through the signed consent form for up to three years after the research project has been completed. This is in accordance with the University's legal obligations and the time you have available in which you may wish to raise any issues or concerns with us about your participation in this study.

1. Up to three years after the project has been completed. Therefore we anticipate retaining some of your personal data up until Sept 2023

After this period, BCU will securely destroy information held about you.

You can find out more about how we use your information by contacting Simra Mahroof, Email: , Tel: 07902608408

For more information about how the University can process your personal data for research, please see the University Privacy Statement, available here:

If you have any concerns about how we use or handle your personal data please contact the University's Data Protection Officer using the following contact details:

By Email to: informationmanagement@bcu.ac.uk

By Telephone on: +44 (0)121 331 5288

By Post to: Data Protection Officer
Information Management Team
Birmingham City University
University House
15 Bartholomew Row
Birmingham
B5 5JU

If you are not content with the how we handle your information we would ask you to contact our Data Protection Officer to help you who will investigate the matter. However, you do also have the right to complain directly to the Information Commissioner at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF. Information about the Information Commissioner is available at: .

Appendix 9 – Standard BCU consent form

PARTICIPANT CONSENT FORM

Study Title: Accessing Hearing Services in People from Ethnic Minorities

Name of Researcher: Simra Mahroof

Project Code:

Participant identification number:

RC/0755				

Initial

1. I confirm that I have read the information sheet [10/12/18; version 7] for this study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my [medical care or] legal rights being affected.	
3. I understand that relevant sections of my data collected during the study may be looked at by individuals from Birmingham City University and from regulatory authorities where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.	
4. I understand that personal data about me will be collected for the purposes of the research study including [name, address, ethnicity, health status audio recordings, hearing test results], and that these will be processed in accordance with the information sheet [10/12/18; version 7].	
5. I agree to audio recording and the use of anonymised quotes in research reports and publications.	
6. I agree to take part in this study.	

Initial

Optional elements	Yes	No
7. I agree to the use of my anonymised data in research reports and publications.		

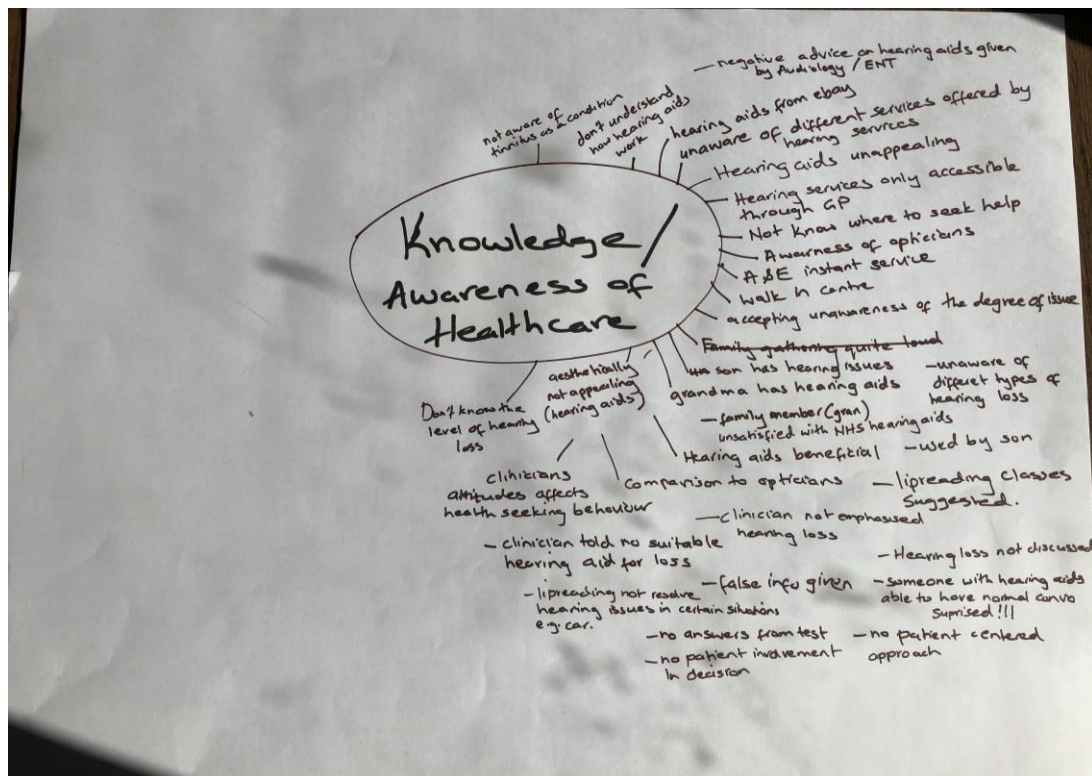
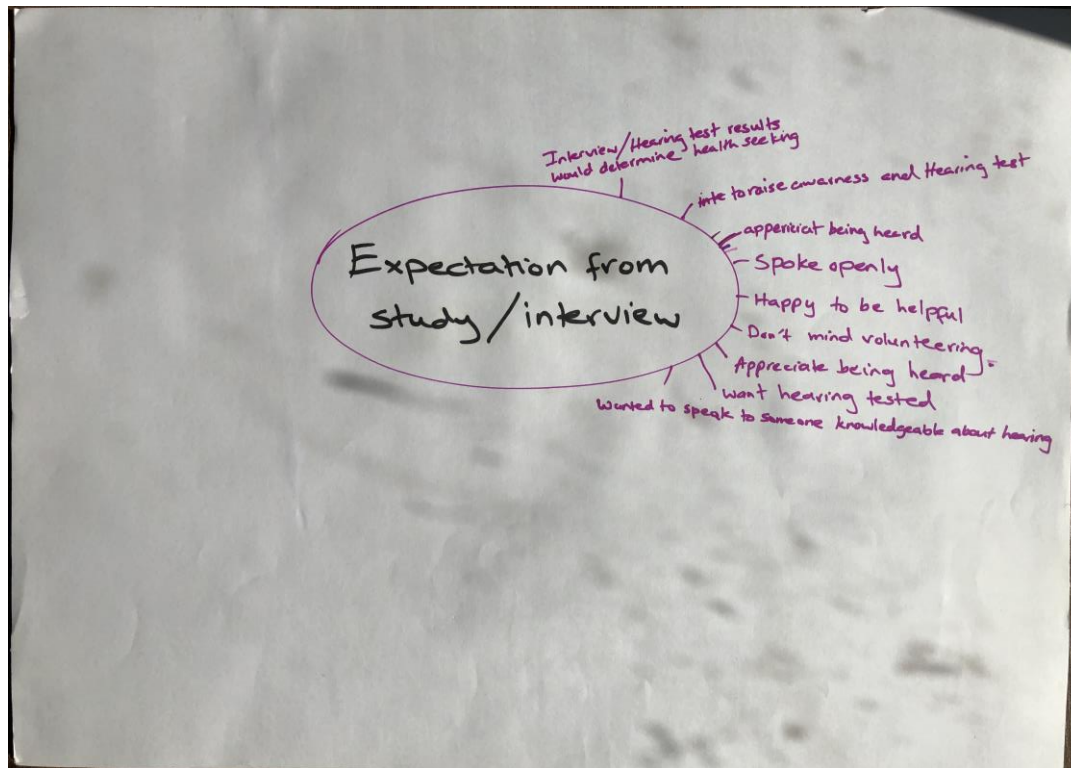
8. (if appropriate) I agree for my anonymised data to be used for teaching purposes.		

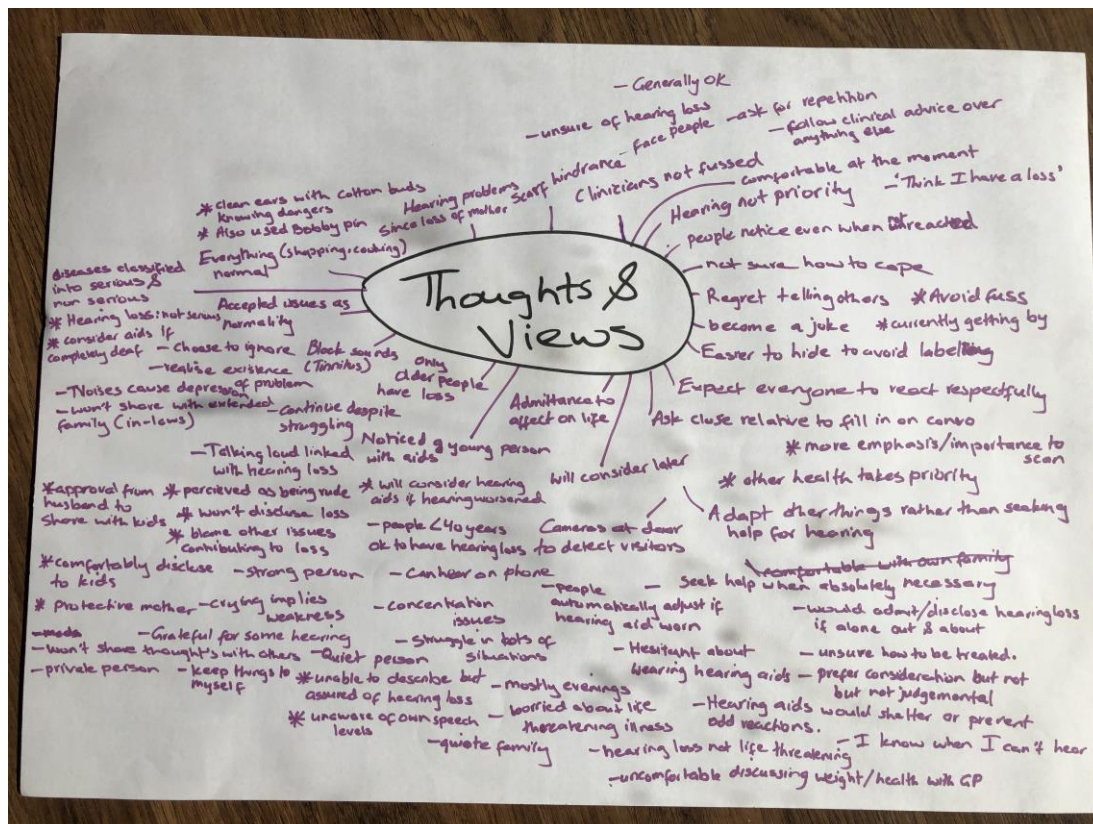
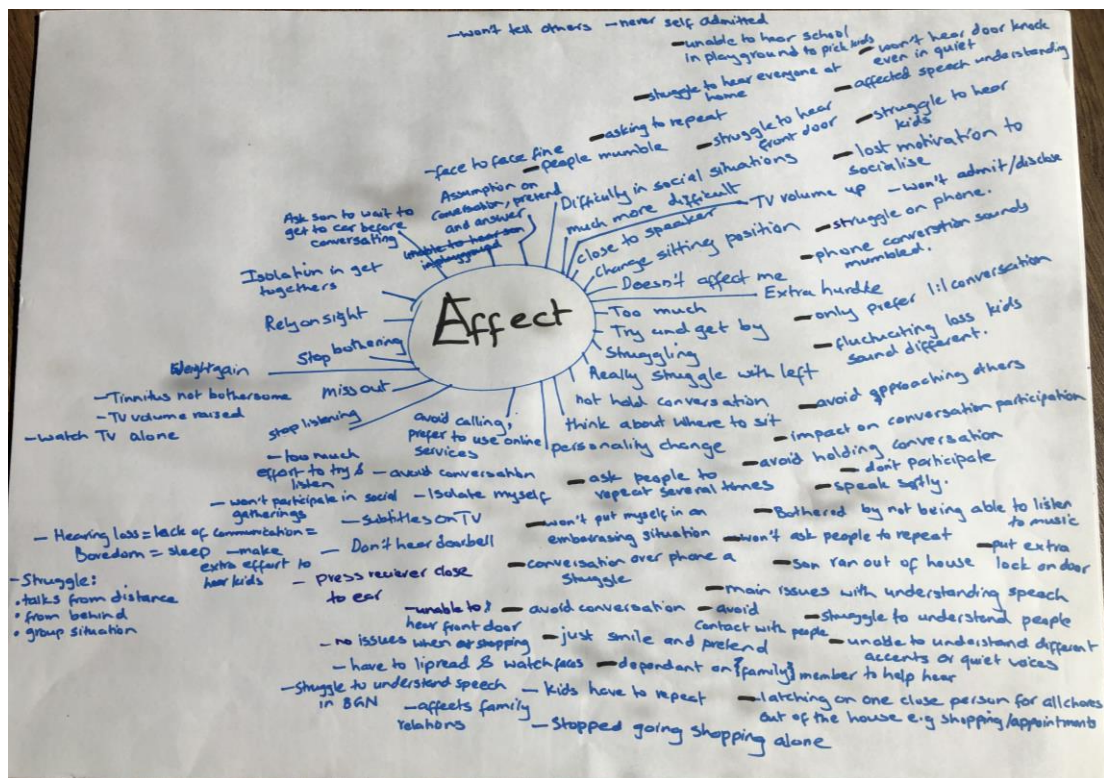
_____	_____	_____
<i>Name of Participant</i>	<i>Date</i>	<i>Signature</i>

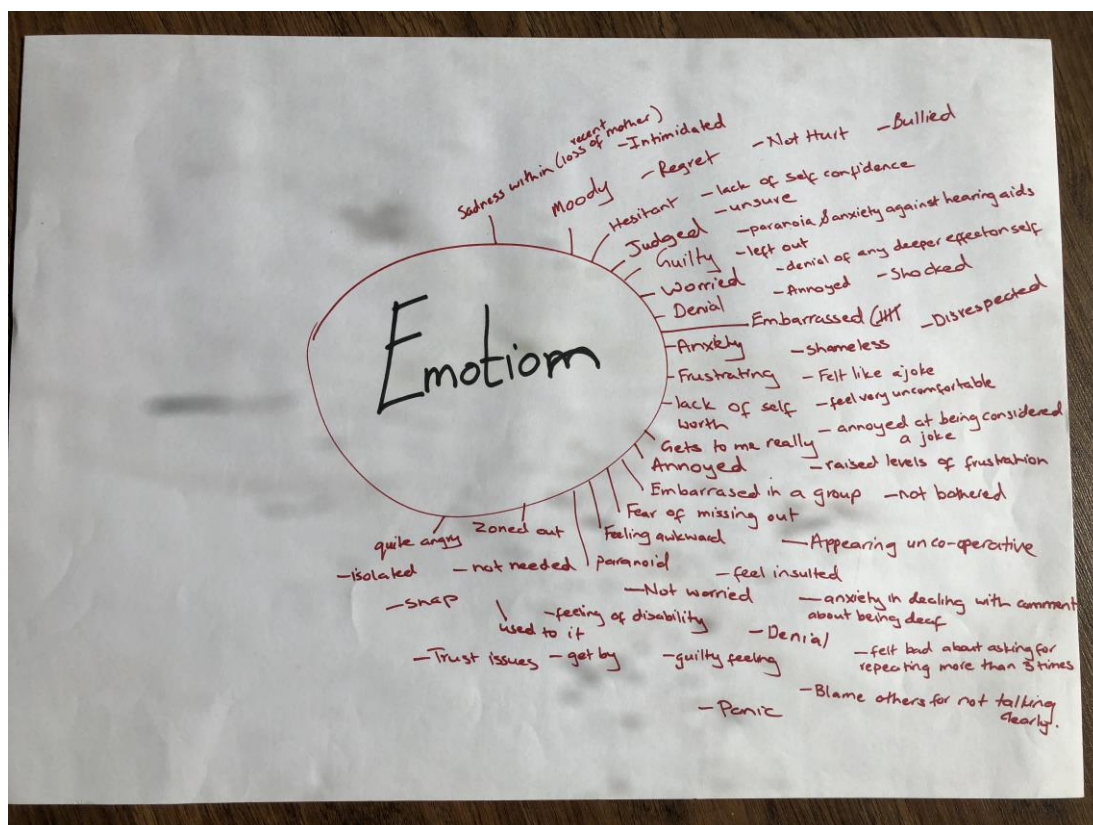
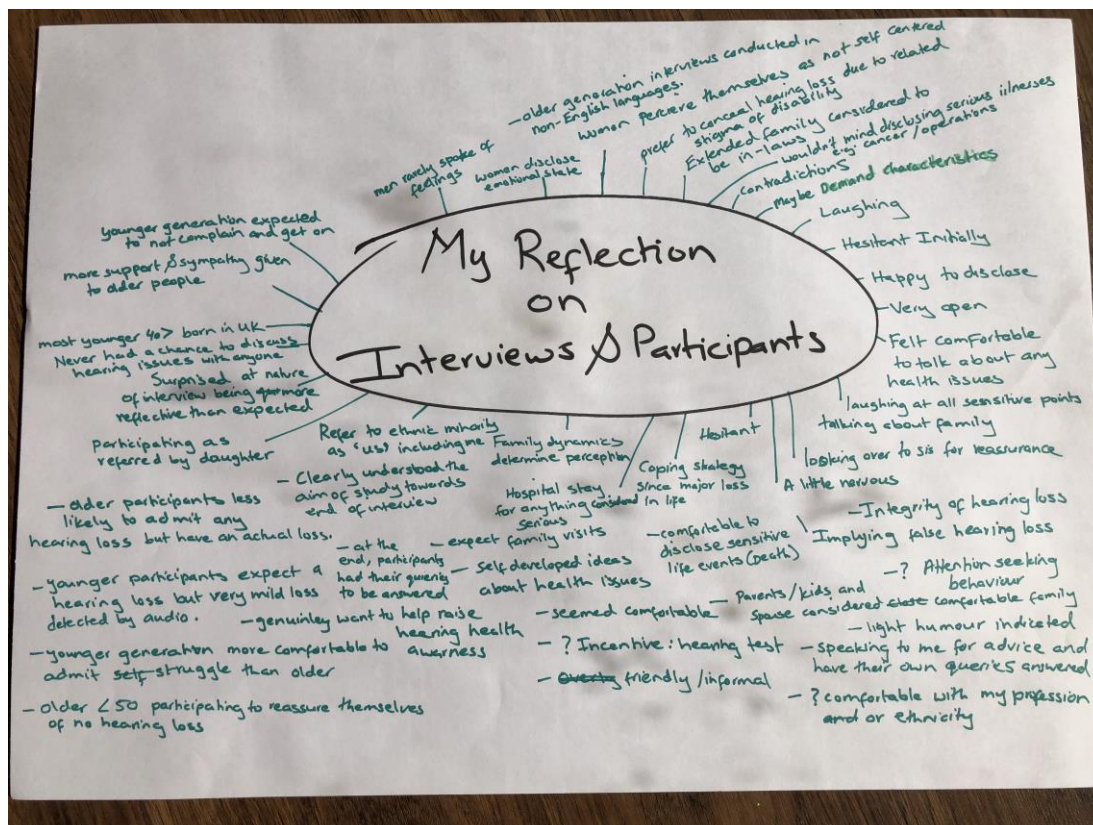
_____	_____	_____
<i>Name of Person taking Consent</i>	<i>Date</i>	<i>Signature</i>

**1 copy for participant; 1 copy for researcher site file;*

Appendix 10 – Spider diagrams







Pre Hearing Issues

- previously more social
- used to be able to hear normal in playground
~~initial thought was in ears~~
- 3-4 years
- could hear from both ears
- used to go out
- socialise
- lost motivation
- worse than before
- normal conversation
- wed be an independent person
- Made all official calls e.g. bank/appointments etc
- Help parents (struggle to speak English) made calls on their behalf
- Help others
 - Hear normally
 - Heavy conversations fine