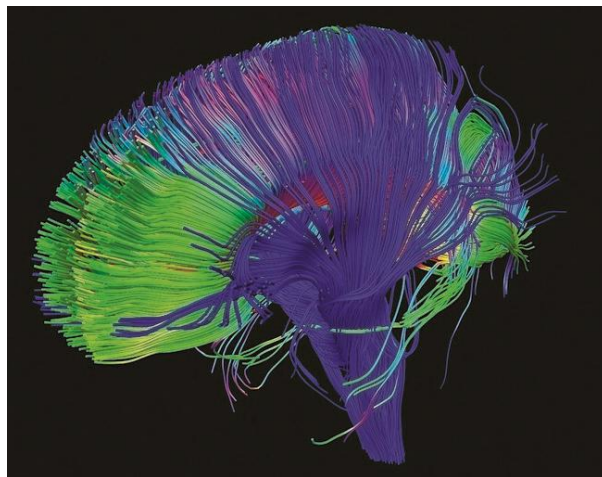




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ECGE5001Q



Assignment 1: E-Portfolio Evidence of Learning

Create a portfolio outlining a potential solution for an issue affecting a specific community or group. Your portfolio should include the following;

- a) A rationale which outlines the reasons for choosing the topic. This should be supported by evidence from appropriate sources.
- b) A short proposal aimed at a 'gatekeeper' outlines your chosen solution and the arguments for choosing it. This should be supported by evidence from appropriate sources.
- c) A poster promoting your chosen solution to the community/group you have chosen. This should be supported by evidence from appropriate

How the hearing aids impact deaf people's life?

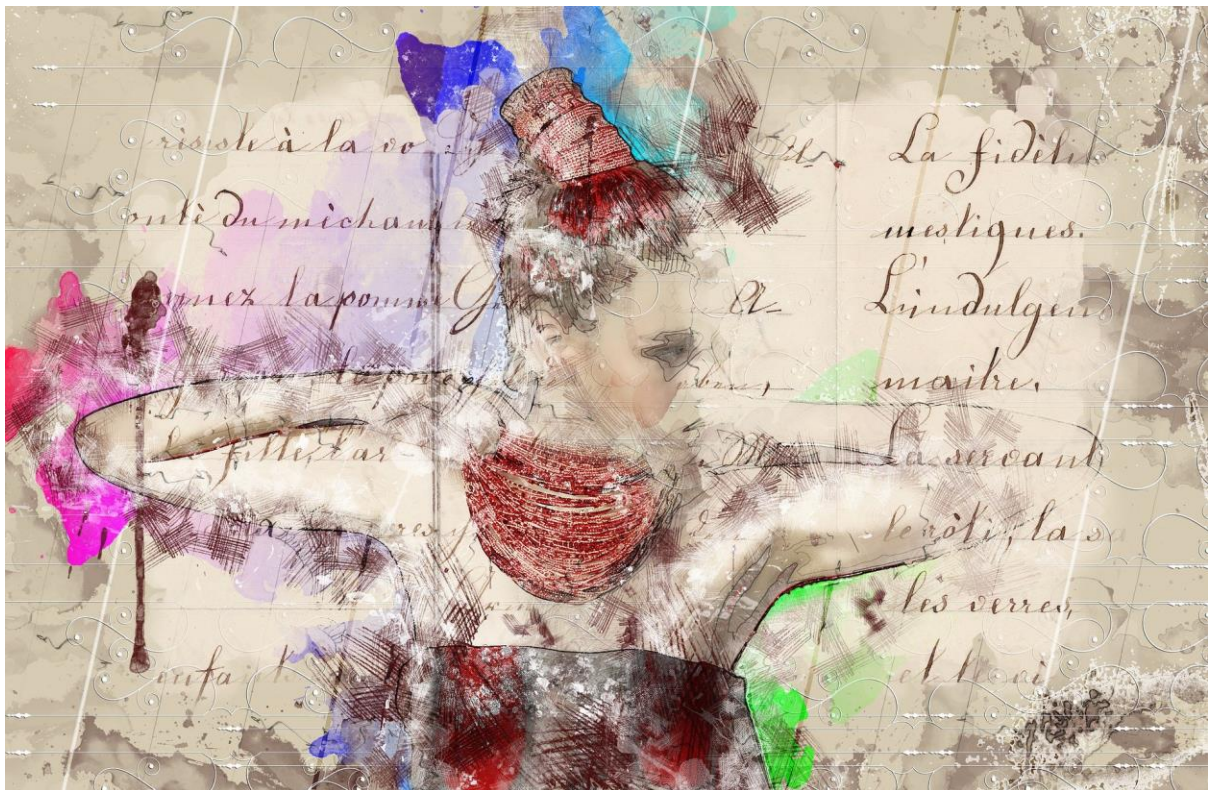
Introduction



As the World Health Organisation (2022) explains, a hearing approach of 20 dB or better in both ears is considered normal, and someone unable to attend and someone with normal hearing, is said to have hearing loss. One or two ears may be pretentious, and the severity can range from slight to profound. WHO (2021) declares that hearing loss affects people of all ages. They also said that concept that hearing loss is unavoidable is the second myth. According to estimates, 60% of hearing loss in children can be avoided. Attitudes toward hearing loss will start to alter when young people take ownership of their hearing and establish themselves as positive examples of safe listening. By 2050, there may be 2.5 billion people with hearing loss, up from the current 1.5 billion. Half a million, or close to one-third of them, today need hearing rehabilitation therapies. The third most common handicap in the world is still hearing loss, as they said. Gerber (1990) proclaims that congenital or early-onset hearing loss in children recurring infections of the middle ear, noise-induced hearing loss, age-related hearing loss (Bowl & Dawson, 2019), and ototoxic medicines that harm the inner ear are among the significant causes of hearing loss (Morata, 2007). Furthermore, hearing loss has wide-ranging and potentially serious effects. They include a lack of social skills and delayed language development in kids, which can result in social exclusion, loneliness, and

frustration, especially in older persons with hearing loss (Akram *et al.*, 2018). The widespread need for adequate hearing accommodations hampers academic performance and employment prospects. According to WHO (2022) estimates, untreated hearing loss costs the world economy US\$ 980 billion annually in lost productivity, educational expenditures, health sector costs, and social costs. Jambor and Elliott (2005) suggest that self-esteem is essential to the mental wellness of deaf people. However, Munoz - Baell (2000) applied the importance of empowering deaf individuals as vital to promoting equality and improving their quality of life. They claim this can be done through various means, including improving access to information and resources, fostering deaf culture and sign language, and providing education and job opportunities.

Proposal to Address Hearing Loss using Hearing Aids in the UK



Introduction:

Millions of people in the UK have hearing loss, which has a wide range of adverse effects on people's quality of life, including social isolation, despair, and a decline in overall health and well-being (UK Health Security Agency, 2019). This proposal explains why hearing aids should be the preferred option for those who have hearing loss. Hearing aids are an excellent treatment for hearing loss (Lee and Bance, 2019). For example, one of the most prominent composers of the time, Ludwig van Beethoven, significantly impacted his life and work due to his hearing loss. In his late 20s and early 30s, Beethoven started to lose his hearing, and by the end of his life, he was virtually wholly deaf. Despite this, he wrote some of his most well-known pieces, such as the Missa Solemnis and the

Ninth Symphony (Stevens, not date). However, according to the World Health Organisation (WHO, 2017), the adverse effects of untreated hearing loss and lack of access to necessary ear and hearing care services continue to affect millions of individuals globally. However, the impact of hearing loss on people and families is well known. There have been few attempts to estimate its economic costs globally and in low- and middle-income nations, as Graydon et al. (2014) declare. A non-profit organisation called Hearing Dogs for Deaf Individuals is one example of how to improve the lives of deaf people who, according to the Equality Act of 2010, are disabled people who, among others, are protected from discrimination by the Act. To ensure its clients' freedom, independence, and rights, the organisation is a founding member of Assistance Dogs (UK), a coalition of assistance dog organisations that foster communication among its members, raise public awareness of the issue, and advocate for societal and legal changes. Assistance Dogs (UK) has ties to Assistance Dogs Europe, which in turn has links to Assistance Dogs International.

Critical arguments of the proposal:

Solution: Hearing Aids Effectiveness - Hearing aids have significantly improved hearing ability and quality of life for individuals with hearing loss. Hearing aids are 'the most frequent treatment for hearing loss' and 'may help people hear more in both calm and noisy contexts,' according to the National Institute on Deafness and Other Communication Disorders (NIDCD, 2022). Numerous studies have demonstrated their efficacy in improving speech understanding and reducing listening effort (Maidment *et al.*, 2016).

Customizability - Hearing aids can be customised to fit individual hearing needs and preferences, allowing maximum benefit and comfort. Hearing aids 'help enhance speech intelligibility, lowering listening effort, and improving quality of life,' according to research published in the International Journal of Audiology (2017). Features such as noise reduction, directional microphones, and wireless connectivity options can enhance the user's experience (Lee and Bance, 2019).

Cost-effectiveness - While hearing aids can be a significant upfront cost, they offer a cost-effective solution in the long term compared to alternatives such as cochlear implants. Additionally, advances in technology have made hearing aids more affordable and accessible. A report by the World Health Organization (2021) highlights the cost-effectiveness of hearing aids compared to cochlear implants. It states that 'hearing aids are the most common and cost-effective intervention for adults with mild to moderate hearing loss'.

Methods:

The study will involve a sample of individuals with hearing loss who use hearing aids and are over 18. Participants will be recruited through advertisements in local hearing aid clinics, Facebook, and support groups. Exclusion criteria will be individuals with cognitive or neurological impairments that would impact their ability to participate in the study.

Methods: The study will be conducted using a combined-methods approach and collaborative qualitative and quantitative data collection methods (Casebeer and Verhoef, 1997).

Quantitative data collection:

1. **Surveys:** A self-administered online survey will be conducted among a representative sample of people with hearing loss in the UK using a validated quality of life questionnaire. The survey will ask questions about demographic information, hearing loss, and hearing aid use. As Fink (1995) states surveys result in observations that can be expressed as stories or numbers. They are provided in the survey respondent's words, which are then tallied, compared, and evaluated, frequently utilising techniques from anthropology and communications theory.
1. **Clinical data:** Clinical data will be obtained from audiology clinics, for example, Specsavers in the UK, to supplement the survey data. It will include information on the type and severity of hearing loss and the type and configuration of hearing aids used (NHS, 2021).

Qualitative data collection:

1. **Interviews:** In-depth interviews will be conducted with a subset of survey participants to provide a more nuanced understanding of the impact of hearing loss and hearing aids on quality of life.
1. **Focus groups:** Focus groups will be conducted with individuals with hearing loss and their families to gain further insight into the experiences and perspectives of people affected by hearing loss in the UK.

Data analysis: Descriptive and inferential statistical tests will be used to analyse quantitative data. A theoretical framework will be used to analyse qualitative data (Flick, 2017).

The study will use a longitudinal design, with participants being assessed at baseline and six months after the start of the study. Participants will also be asked to complete daily diaries to provide additional insights into the impact of hearing aids on their daily lives.

Methodology:

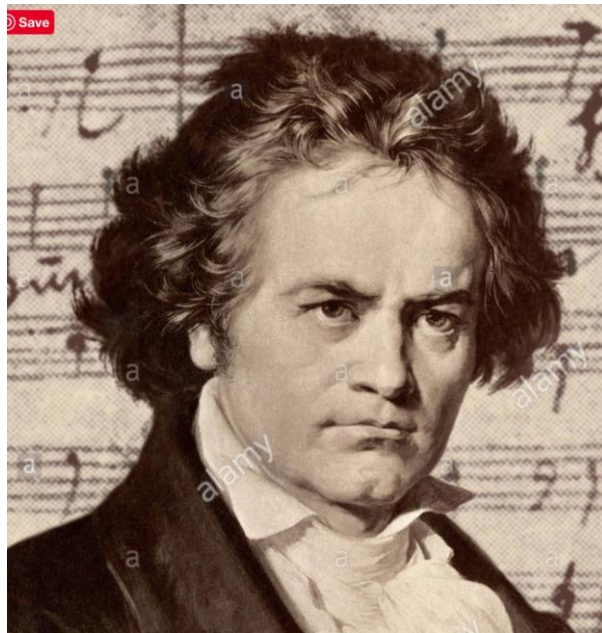
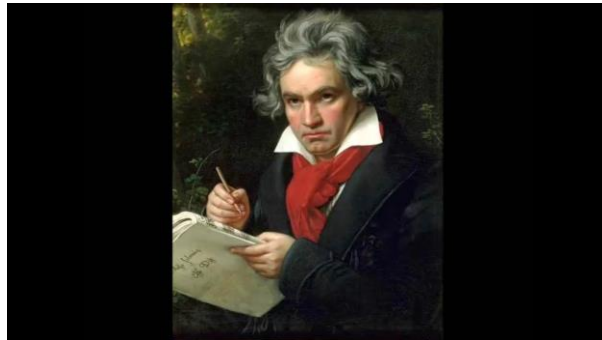
The UWTSD framework and the Supervisor will guide the study, recognising the role of personal, environmental, and societal factors in determining an individual's functioning and disability (McGarrigle et al., 2014).

The research design will be a longitudinal observational study that will allow readers to assess the impact of hearing aids on quality of life over time (Ciorba et al., 2012). Using a combination of self-reported and objective measures will provide a comprehensive and robust assessment of the impact of hearing aids. The daily diaries will provide additional information about the practical effects of hearing aids on daily activities.

Regarding ethical considerations, the study will be approved by the UWTSD review board, and all participants will provide written informed consent. By signing the permission form, participants indicate their willingness to participate in the research and attest that they know the trial's purpose, risks, and potential benefits (Jefford and Moore, 2008). Also, the researcher will follow all the Research Ethics Guidelines like BERA (Brooks, Riele & Maguire, 2014). Confidentiality (Journal of Empirical Research on Human Research Ethics, 2015) will be maintained throughout the study, with all data being stored securely with a double password and only accessible to authorised personnel (Wu, 2010).

Conclusion

As Rashbrook and Parkins (2019) sum up, deafness implies diversity, and diversity concerning hearing loss needs to be acknowledged, understood, and, most importantly, respected. Furthermore, as they declare there are various potential areas for action to stop hearing acts, on a personal level, there is a need to address public understanding that age-related hearing loss is unavoidable and that you must put up with it. The stigma attached to hearing loss and using hearing aids must be addressed, especially in the workplace. There is also a need to spread the word that hearing aids are available on the NHS because only about 40% of those who require them are using them. Furthermore, as they inform, the workforce should have easy modifications that improve communication for those suffering from hearing loss, like rotating the camera when using video conferencing.



Poster



Hearing Aids in the UK: Understanding the Pros and Cons

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The best hearing aid for someone will typically depend on the hearing loss.
There are different styles and sizes of Hearing aids.
The person can find the ideal style of hearing aid with the assistance of their audiologist or a hearing healthcare practitioner. They'll think about the following:
lowered hearing
how big is the individual ear canal is
way of the person's life
While some hearing aids can be purchased privately, some are only available through the NHS
(WHO, 2019)

Introduction:

Aims:

- To provide a comprehensive overview of hearing aids in the UK.
- To educate people about the benefits and drawbacks of hearing aids.

Objectives:

- To highlight the advantages and disadvantages of hearing aids.
- To draw attention to the individuals to help them to make informed decisions about their hearing health.

Advantages of Hearing Aids:

- Improved communication and social interaction
- Enhanced quality of life
- Increased safety in everyday situations

Disadvantages of Hearing Aids:

- Initial cost
- Maintenance costs
- Need for frequent battery replacements

Benefits:

- Improved hearing and speech comprehension
- Ability to hear sounds that were previously difficult or impossible to hear
- Increased confidence and self-esteem

Pros and Cons:

- Pros: improved hearing, increased confidence, improved communication
- Cons: initial and ongoing costs need for maintenance (Middleton, *et al.* 2010)

(WHO, 2018)



Category of hearing aids

In the UK, a variety of hearing aid models are offered, such as behind-the-ear, in-the-ear, in the canal, and completely-in-the-canal.

The most popular kind of hearing aids is those worn behind the ear (BTE). They consist of a tiny plastic gadget that goes behind the ear. They are connected by a tube to an ear mould made of plastic or a soft tip that fits into the hole of the ear (an open fitting). ITE hearing aids are among the smoothest to use and are suitable for most deaf individuals. They come in a variety of colours. Hearing aids with a receiver in the ear (RITE) resemble ITE hearing aids. The key distinction is that RITE hearing aids have a smaller behind-the-ear portion connected by a thin wire to a speaker positioned inside the ear canal. RITE hearing aids are less noticeable than BTE hearing aids and are suited for most hearing-impaired persons, although they can be trickier. Hearing aids are placed in the ear (ITE), the space directly outside the ear's opening. Unlike ITE or RITE hearing aids, they may be seen from the side but not from the back. ITE hearing aids are more complex to use than above, but they can be suitable for most people with hearing loss. Hearing aids worn in the canal (ITC) are like ITE aids but smaller and enclose the ear canal entirely. Although they can be challenging to use and typically have lower efficacy for those with severe hearing loss, they are less noticeable than many other hearing aids. If a person loses their hearing in one ear, CROS and BICROS hearing aids may be able to help. They arrive in pairs. The hearing aid in the hearing-impaired ear detects sound and transmits it to the hearing aid in your healthy ear. You can do this wirelessly or with a wire wrapped around your neck. Body-worn hearing aids consist of an earphone-connected tiny box. The box can be placed inside the person's pocket or fastened to their clothing. If a person with severe hearing loss requires a powerful hearing aid or finds the settings on smaller hearing aids challenging, this type of hearing aid can be the best option
(NHS, 2021)



It is important to empowerment of people with hearing loss. Several laws in the UK talking about it, including:

According to the Equality Act of 2010 - discrimination against people with disabilities—including hearing loss—is prohibited in work, education, and access to products and services.

The Care Act 2014 - outlines the duty help that people with impairments, including hearing loss, should receive.

The Children and Families Act of 2014 - This law requires local authorities to recognise, evaluate, and cater to the needs of children and young adults with disabilities, including those who have hearing loss.

The Human Rights Act of 1998 - transposes the European Convention on Human Rights, which includes the right to respect for private and family situations and the prohibition of discrimination, into UK law.

(Supporting people who are deaf, have hearing loss or tinnitus, (RNID), no date)

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