

COMBINED DISSERTATION DOCUMENT

WRITER, EDITOR & ILLUSTRATOR

LOUISA KELLY

CONTENTS

- 5-36 Chapter One Proposition
- **37-98** Chapter Two Feasibility
- **99-145** Chapter Three Research paper

Hearing aids should be "a statement rather than a camo."

- FandD studio²⁹

Chapter One: Proposition



CONTENTS

- **7** Introduction
- 8 Nature of business
- **10** Nature of subject
- 12 What each facility delivers

CDAs

14 Amplify
15 Bejing art gallery
16 XYTS
17 Zhuyeqing flagship
18 Cave restaurant

Site analysis

- **19** Site overview
- 20 Site analysis
- 22 Building analysis
- **27** Conclusion
- **28** References
- **31** Bibliography
- **33** Image references

Introduction

Around 2 million people in the UK use hearing aids and a further 6 million 'could benefit from using one'¹. One of the reasons they don't, is the stigma attached to them. Society generally sees hearing aids as a sign of disability, or something that is associated with the elderly, or worn by people with severe hearing loss. The reality is, in fact, that '1 in 5 teens today have some form of hearing loss'² and so now, more than ever, young people need to wear hearing aids. Despite this, hearing aid designs have not really evolved - they are designed to be hidden or to blend in with the skin and the retail experience for teens who need hearing aids is stale and uninspiring.

In stark contrast, the experience for eye wear users couldn't be more different. Eye wear has never been more popular; it has become as much of a fashion statement as it is an aid to a disability, to the point where some people wear them solely for the aesthetic. We have some incredibly designed eyewear stores around the world. People will walk into them like any other fashion store, and even some popular high street stores sell glasses.

So, why can't the same thing happen with hearing aids? Why not have a hearing aid that is designed to stand out and be as much of an accessory as it is an aid? The aim is to achieve the same sort of ideals and retail experience with hearing aids where, instead of going to a hospital or other sterile environment to be prescribed and choose hearing aids, people can just walk into a vibrant, inspiring hearing aid store and choose from endless style options or maybe even design their own.

This proposal will discuss what the design space will be, the site context and more detail into the subject nature. Whilst there are shops that sell hearing aids or provide hearing tests in store, there are no dedicated retail spaces that sell hearing aids specifically. This proposal aims to address that need by providing a retail space that's not only just for hearing aids, but also a space where young people with hearing loss can feel at ease and be inspired in an environment in which choosing their hearing aids can be an exciting and unforgettable experience, undertaken in a bold and immersive environment rather than a dull audiology room. It will show my design philosophy of standing out, being proud and being bold.

Located in the centre of Leeds, surrounded by high-end stores and vibrant cafes, this will be a great place to have my commercial space as it will be in the heart of the shopping / café hub where teens and young adults regularly visit. As Leeds is a popular city destination, having something so different and innovative could create a buzz around the new commercial space, triggering more awareness about the design.

Nature of business

This project will be a retail space for people with hearing loss, selling hearing aids and hearing aid accessories. As well as the main retail element, this will also be a space where young people can socialise together in a hearing-aid friendly environment with some interesting acoustics to define this. The space will be mainly aimed at young deaf people, with the aim of building their confidence with hearing aids and make them feel more excited and proud about wearing them.

The Users

The target audience is a priority in the design and one of the most essential drivers of a business. The space must appeal to that specific audience, otherwise it will not function effectively. The target audience in this project is people with hearing loss, more specifically – young people with hearing loss because they are often forgotten about or their challenges not understood, so they need more recognition and representation, especially when journeying through adolescence with this disability. This is not to say that the space will not appeal to a wider target audience in the deaf community, as everything will be designed for the benefit of all people with hearing loss.

The Brand

As previously stated, the project aims to make hearing people more aware of the young deaf community and to help young people with hearing loss become more confident about their disability and in wearing their hearing aids. The brand will become something that young deaf people will want to be a part of and it will reset the image that hearing aids are meant stand out not blend in. There is currently no interior space offering similar experiences for young people, this brand could be one of the turning points to change this. The brand will be an immersive experience throughout, focusing on the acoustics, the colour, tactile materials and flow of space, all appealing to the senses of the target market.



[1]



Nature of subject

As hearing loss is usually associated with the elderly, people may not be aware that hearing loss also significantly affects young people, not just the disability itself but also how it affects their lives and adolescence. There are currently over '41,000 children and young people with hearing loss under the age of 19',³ a number which will only grow in time. Young people with hearing loss can struggle with socialising with peers - this can be for a number of reasons including losing track of group conversations if relying on lip-reading. Another main struggle is that young people tend to 'socialise in noisy environments and it can be hard to distinguish speech over background noise'.⁴ Also, because hearing aids are designed to amplify noise, this can trigger barriers to 'incidental learning'⁵-this is when information is gained from overhearing and then this can have impact on 'development on social skills and learning norms of behaviour'⁶.

Some cases of hearing loss are more severe than others. But even with mild hearing loss, young people can struggle with confidence in different ways. Yes, socialising is still difficult, mainly due to background noise, but the design of hearing aids also has a big impact on confidence as well. The unimaginative and old fashioned design of hearing aids can have a negative impact on body image and can affect young people's confidence because people with hearing aids can be stereotyped as 'different' and the hearing aid design doesn't help.

Hearing aids are designed to blend in with the skin and be hidden, implying that people should hide their disability and almost be ashamed of it. Having the hearing aids hidden also doesn't help other people identify whether someone has a hearing impairment, so when hearing impaired people struggle with hearing in conversation, people may not realise unless they are told that they wear hearing aids.

Studies have shown that young people feel confident only because people don't realise that they are wearing them, as said in a research study 'most people don't know so it's never a problem'⁷however, this is the point that the brand aims to change. As someone who wears hearing aids, I am familiar with the challenges mentioned above. I struggled through high school with confidence and was reluctant to speak up in my classes and in group conversations. This transitioned into me becoming a very quiet person throughout high school. In terms of the hearing aid itself, due to the design being associated with the elderly in the first place it took me a while to gain the confidence to wear one at all. If at the time there were beautiful hearing aid designs, I would have jumped at the chance to wear one and would have felt more confident. A lot of the time when people see someone wearing hearing aids they think it's severe and sometimes this can be quite offensive as said in a study 'I don't fit in sometimes and people think I'm someone else, like deaf and can't speak, but, like, I'm not⁸.

The brand image will hopefully change this current outlook that young deaf people have and have people start to think about the deaf community a bit differently and trigger more of a change in hearing aids to what there already is.





What each facility delivers

Retail Element

The retail area will be the centre point of the brand, with the products being new, and bold hearing aid designs. There will be a 'design your own' area where the customer can design their own hearing aid, making that personal hearing aid which is right for them. Also, it will be staffed by target users, as it can be more challenging for people with hearing loss to find work in most retail environments, or it may be tougher for them to work in those environments. Although hearing aids are small products, the retail space will display the product in a way that stands out, emphasising my philosophy of being bold and proud to wear a hearing aid.



Cafe and Social area

The café with be the social hub of the space; somewhere people can go and socialise with other people in the same target audience or hearing people. It can be a place where people in the deaf community can relax and feel at ease in an environment that works well with hearing aids. The café will help people with hearing loss to be aware of the surroundings and should encourage friends and families to go to this café with a hearing - aid user instead of going to noisy, crowded high street cafes. It can help raise better awareness of hearing aid users and the café can become a social hub for the deaf community.

Audiology

Many young people feel intimidated by going to the hospital audiologist or quite frankly, just don't like it, so having an audiologist in the space could massively change the way young people respond to having hearing tests. By putting one in a store, the change of environment could make hearing tests feel more normal, like eye tests now have been normalised for young people. The audiology room would be in a private space, with appropriate sound proofing, which is of utmost importance during a test to get accurate results and to enable the audiologist to programme the hearing aid accurately.



Sound experience

Throughout the whole space acoustics will play a key part in the user experience. In the basement there will be a sound experience that will be designed for hearing aid users specifically, the basement being the ideal sound environment for people to have conversation. Not only will it be an experience that the hearing aid user is unlikely to have had before, but also elements of it can show non-hearing aid users what a normal conversation can be like for someone who does wear one. As the acoustics will be throughout the space, this 'sound experience' will be a vital part to the scheme.

CDA's

Amplify

My space has been influenced by the hearing aid shown below, designed by Alice Turner, a University student at Central Saint Martins' studying product design. Her design, Amplify, was 'designed to be seen'⁹, the concept being in contrast to the norm that all hearing aids are usually hidden. From this, she has created a very sleek, fluid design that takes hearing aid design to new level making it look like a stunning earpiece.

In a similar way, I want my space to reflect the fluidity and curves of the hearing aid shape and the ear itself. I want it to feel continuous and fluid, and creating curves throughout the space will help achieve this. This design concept has helped influence my CDA choices and my design scheme as a whole.



Bejing art gallery

This CDA is an art gallery in Beijing, designed by Penda and its main feature is 'topsy-turvy archways'¹⁰ which is my main appeal of the design. The arches will be incorporated throughout my design, making use of the load bearing walls and doorways in a creative and innovative way. These archways create such fluidity throughout the space, looking like a 'continuous ribbon'.¹¹ They appear to connect the rooms together as one, whilst their main purpose being to separate the rooms.

As the design is in Beijing, inspiration for the arch forms was taken from mountains and valleys portrayed in 'typical Chinese landscape paintings, tying in with the artworks that comprise the gallery's main exhibition'.¹²The entire interior is white, which helps define the clean curves of the arches but also lets the artwork standout. The striking sharpness of the curves helps to draw people into the space and 'guides them naturally further into the gallery¹³The arches create continuous and sculptural curves which become an interpretation of the landscape paintings.

As for my design, the arches would represent the fluidity of curves on a hearing aid and ear, the arches will be constant throughout my space, to help replicate that hearing aid and ear curve.





XYTS

This is South Korean designer, WGNB's take on a retail design for XYTS, a new multi-brand shop in Seoul selling products from hundreds of contemporary fashion retailers. This design was the Frame 2020 People's Choice winner for Designer of the Year. Its bright, fluorescent orange installations are a massive feature in this design, alongside the cocoon-like, perforated metal structures which rise and coil around. WGNB wanted to imagine the whole store as a 'moulding cocoon'.⁴ These structures build 'form pavilions⁴⁵ to show the range of collections. They also help the store highlight their collaborations, with one of the collaboration areas being dedicated to showcasing a line from the Danish brand Ganni.

The feature that really stood out to me was the bold, fluorescent orange colour that makes the space look so striking. As my concept is about encouraging young people to be proud of their hearing aids and to create new and exciting designs for hearing aids, colour will be a vital part of the scheme to help instil this pride and excitement. By having such bright and daring colours it will attract people's attention when walking by and lure them in. Additionally, if this is to be the first dedicated retail store for hearing aids, it needs to be one that people won't forget and colour will be a big part in achieving this.



Zhuyeqing flagship

The design firm X+Living were commissioned by the green tea brand Zhuyeqing to design a green tea flagship store in Chengdu, China. Their brief was to create a spatial experience in the 'brand's native city¹⁶ For the basis of the designer's concept, they used the notion 'that the environment influences a person's mood, and a pleasant mood makes the tea tastier¹⁷ and the overall experience more alluring. Inside the store is an incredible installation of soft wooden cocoons that vary as many different elements to the store. The cocoons represent 'clouds and mountains commonly found in Chinese paintings'.¹⁸ Some of the installations are habitable with sofas for relaxing, some serve as product displays and others produce calming lighting effects. The heights of the cocoons range from ceiling height to almost touching the ground. The curved shapes create a very calming and organic aesthetic and the positioning give consumers 'a variety of viewing perspectives'.¹⁹ The cocoons have been purposefully laid out to make sure the circulation of the space works best for the consumer to make them feel like they are 'walking through the clouds'.²⁰

My main reason for choosing this design as one of my CDAs is because of the materials, especially the soft wood. More specifically, the way they have curved the wooden poles around to create the cocoon like shape, creates a tactile and interesting texture.



Cave restaurant

Cave restaurant is a restaurant in Sydney, Australia designed by Koichi Takada Architects. Koichi Takada have aimed to change the way people eat and chat in restaurants by introducing some interesting acoustic design. They believe acoustics are a vital part of the eating and dining experience and this is perfectly encapsulated in their design.

When entering the restaurant, you are greeted with what looks like a cave, or even a rib cage, and below tables are positioned in the centre of the room which gives a beautiful sense of symmetry in the space, accompanied with a range of chairs and booth seating.

The main feature of this restaurant design is the acoustic wood panels that create the cave effect. Koichi Takada experimented many different ways to achieve the best acoustics for the environment. They 'experimented with noise levels in relationship to the comfort of dining and the ambience of a cave like environment'_{a1}By doing this they managed to create the perfect acoustic for the dining environment and create an experience that you don't usually experience in that scene. The acoustic is created by the timber which generates a 'sound studio atmosphere, and a pleasant noise of dining conversation'₂₂as well as this, the wood creates a visually stunning surrounding.

As the proposed project is about hearing aids and aimed at hearing impaired people, acoustics will play a massive part in the design scheme of the space, giving the ability to experiment with different acoustics and establish what works best not just in a 'nor-mal' retail environment, but also what is suitable and interesting for people with hearing loss.



Site overview



The project will be located in the centre of Leeds, specifically - Queens Arcade. Being in the central hub of Leeds, the site is surrounded by high street stores and cafes, ranging from high end brands to independent businesses. Built in '1888-89²³, Queens arcade has been a listed building since '1987²⁴, originally named in 'honour of Queen Victoria's Golden Jubilee²⁵. Today it is currently Simpatico – an Italian pizza shop run across three of the four floors.

Site analysis

Queens arcade was designed by architect 'Edward Clark of London',²⁶ originally the entrance was narrower with the main entrance on Lands Lane, until expanded in '1895 onto Briggate',²⁷ It originally opened for shops, however, the second floors were used as 'accommodation for the shopkeepers',²⁸

Now, Queens Arcade is used as a shopping centre for independent retailers and cafés, a small shopping hub but leading onto Briggate, one of the busiest retail high streets in Leeds centre. This makes it a perfect location for the project as the 'niche' nature of the product fits with the other independent retailers in the Arcade plus it has the benefit outside of being able to draw in a wider audience from the young people experiencing the vibrancy of Leeds.

For those close to the city centre who are more likely to travel by bus, there are many bus stops within short walking distances to the main retail hub, there is also a bus station at the east side of Leeds, which is just a short walk away. There are many different bus services and routes servicing different areas of Leeds, that all run through the city centre giving easy access. Students or young people can get bus cards for cheaper bus fares.

As for parking, there are multiple car parking areas throughout Leeds ranging from street parking, open site car parks and multi storey car parks, all within short walking distance to the site.

For those further afield, Leeds train station provides services locally and has trains connecting all over the country. The site is a short 10 - minute walk from the train station, through the centre of Leeds. Again, for cheaper train transport, young people can get access to 16-24 railcards which is valid on any trainline and route in the UK.



Map of train station to site.



Map of surrounding bus stops.

Building analysis

The current site 'Simpatico' is over 4 floors – Basement, ground floor, first floor and second floor. The Queens Arcade has two entrances, one on Briggate and one on Lands Lane, both busy high streets.

The exteriors at both east and west ends of the arcade are brick, painted blue and white in line with the rest of the colours inside the arcade. The site currently has a wooden exterior with large glass windows in the display front alongside the glass window door. The sites also have access to a small area of outdoor space at the shop fronts, whether used for tables and chairs, or for some kind of installation. Also, all shop exteriors in the arcade have white iron balconies connecting each shop to the next. Adjacent from these are large open windows, again allowing that natural light the flow in through the space.





[16]















Coming into the interior of the site, it currently has a very rustic industrial aesthetic, as the load bearing walls and partitions are concrete, plastered and painted white, contrasted with this is wooden flooring panels covered throughout the space. On the first floor it has an open kitchen with an exposed extraction fan, with most electrical units placed in this area. Also on this floor are three exits leading out onto the balcony, with opposite views to the neighbouring stores.

As for the staircases, the main staircase connection to ground and first floor currently has a metal handrail and balustrade with wooden treads, the first flight is more exposed to the area whereas coming to the second floor it is hidden by a short wall partition. The second floor has two sets of stairs both currently leading up to the second floor only used for staff and fire exits.





As the site is inside an arcade, the interior may rely on a lot of artificial lighting. However, through the centre of the arcade is a triangular skylight allowing natural light into the space, entering through the ground, first floor, the light also comes in the through the back of the site as well. The second floor is above the arcade roof so is right in the sun path, absorbing a lot of natural light. It will be the basement that relies mostly on artificial lighting, as no natural light can be absorbed. Natural lighting could integrate with the scheme well as it impacts the mood of the space considerably.

Conclusion

The proposition has provided a brief insight into the issues around hearing aid design, the stigma attached to hearing aids and the effects hearing aids have on young people's lives. This hearing aid retail and social space will help change that perception people have about hearing aids so that they are seen as 'normal' as eyewear. It will change the nature of hearing aids from an 'aid' to a fashion statement, and the fitting of them an experience rather than 'appointment', therefore helping to make young people feel more comfortable wearing their hearing aids, and to not hide their disability. It will be a brand that will change the stereotype of hearing aids and draw in not just people with hearing loss, but everyone into the space.

References

1 British Academy Of Audiology. 2021. [online] Available at: <https://www.baaudiology.org/about/media-centre/facts-about-hearing-loss-and-deafness/> [Accessed 11 January 2021].

2 Signia Hearing Aids. 2021. Why Are More Young People Losing Their Hearing?. [online] Available at: https://www.signiausa.com/blog/young-people-losing-hear-ing/> [Accessed 10 January 2021].

3 England.nhs.uk. 2021. [online] Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/09/hearing-loss-what-works-guide-transition-to-adulthood.pdf> [Accessed 10 January 2021].

4 England.nhs.uk. 2021. [online] Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/09/hearing-loss-what-works-guide-transition-to-adulthood.pdf> [Accessed 10 January 2021].

5 England.nhs.uk. 2021. [online] Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/09/hearing-loss-what-works-guide-transition-to-adulthood.pdf> [Accessed 10 January 2021].

6 England.nhs.uk. 2021. [online] Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/09/hearing-loss-what-works-guide-transition-to-adulthood.pdf> [Accessed 10 January 2021].

7 Kent, B., 2006. They Only See It When the Sun Shines in My Ears: Exploring Perceptions of Adolescent Hearing Aid Users. Journal of Deaf Studies and Deaf Education, 11(4), pp.461-476.

8 Kent, B., 2006. They Only See It When the Sun Shines in My Ears: Exploring Perceptions of Adolescent Hearing Aid Users. Journal of Deaf Studies and Deaf Education, 11(4), pp.461-476.

9 Hear Soundly. 2021. Alice Turner's Bold Vision For Hearing Aid Design — Hear Soundly. [online] Available at: https://www.hearsoundly.com/guides/alice-turn-er-hearing-aid-design [Accessed 10 January 2021].

10 Davis, A., 2021. Beijing Art Gallery By Penda Featuring Topsy-Turvy Archways. [online] Dezeen. Available at: https://www.dezeen.com/2014/01/16/beijing-art-gal-lery-penda-topsy-turvy-archways/ [Accessed 10 January 2021].

11 Davis, A., 2021. Beijing Art Gallery By Penda Featuring Topsy-Turvy Archways. [online] Dezeen. Available at: https://www.dezeen.com/2014/01/16/beijing-art-gal-lery-penda-topsy-turvy-archways/ [Accessed 10 January 2021]. 12 Davis, A., 2021. Beijing Art Gallery By Penda Featuring Topsy-Turvy Archways. [online] Dezeen. Available at: https://www.dezeen.com/2014/01/16/beijing-art-gal-lery-penda-topsy-turvy-archways/ [Accessed 10 January 2021].

13 Davis, A., 2021. Beijing Art Gallery By Penda Featuring Topsy-Turvy Archways. [online] Dezeen. Available at: https://www.dezeen.com/2014/01/16/beijing-art-gal-lery-penda-topsy-turvy-archways/ [Accessed 10 January 2021].

14 Frameweb.com. 2021. WGNB Highlights The Importance Of A Strong Material And Colour Palette With A Seoul Shop Interior. [online] Available at: https://www.frameweb.com/article/xyts-seoul-wgnb> [Accessed 10 January 2021].

15 Frameweb.com. 2021. WGNB Highlights The Importance Of A Strong Material And Colour Palette With A Seoul Shop Interior. [online] Available at: https://www.frameweb.com/article/xyts-seoul-wgnb> [Accessed 10 January 2021].

16 designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www.designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-chengdu-china-10-17-2019/> [Accessed 10 January 2021].

17 designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www.designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-chengdu-china-10-17-2019/> [Accessed 10 January 2021].

18 designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www.designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-chengdu-china-10-17-2019/> [Accessed 10 January 2021].

19 designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www.designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-chengdu-china-10-17-2019/> [Accessed 10 January 2021].

20 designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www.designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-chengdu-china-10-17-2019/> [Accessed 10 January 2021].

21 Koichi Takada Architects - Sydney. 2021. Cave Restaurant - Koichi Takada Architects - Sydney. [online] Available at: http://koichitakada.com/projects/cave-restau-rant/ [Accessed 10 January 2021].

22 Koichi Takada Architects - Sydney. 2021. Cave Restaurant - Koichi Takada Architects - Sydney. [online] Available at: http://koichitakada.com/projects/cave-restau-rant/ [Accessed 10 January 2021].

23 Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http:// www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=200342_125637234&subsubsecti on=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20 in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

24 Historicengland.org.uk. 2021. QUEENS ARCADE, Leeds - 1256158 | Historic England. [online] Available at: https://historicengland.org.uk/listing/the-list/list-en-try/1256158 [Accessed 10 January 2021].

25 Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http:// www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=200342_125637234&subsubsecti on=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20 in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

26 Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http:// www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=200342_125637234&subsubsecti on=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20 in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

27 Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http:// www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=200342_125637234&subsubsecti on=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20 in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

28 Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http:// www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=200342_125637234&subsubsecti on=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20 in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

29 Fandd.studio. 2021. hearring — FandD — Creative Duo. [online] Available at: https://fandd.studio/hearring [Accessed 17 April 2021].

Bibliography

Websites

Signia Hearing Aids. 2021. Why Are More Young People Losing Their Hearing?. [online] Available at: https://www.signiausa.com/blog/young-people-losing-hearing/ [Accessed 10 January 2021].

Hear Soundly. 2021. Alice Turner's Bold Vision For Hearing Aid Design — Hear Soundly. [online] Available at: https://www.hearsoundly.com/guides/alice-turn-er-hearing-aid-design [Accessed 10 January 2021].

Thukral, R., 2021. A Smart Hearing Aid Designed With Modern Aesthetics To Empower You! | Yanko Design. [online] Yankodesign.com. Available at: https://www.yankodesign.com/2020/07/06/a-smart-hearing-aid-designed-with-modern-aesthetics-to-empower-you/> [Accessed 10 January 2021].

Aouf, R., 2021. Facett Hearing Aid Takes Inspiration From Precious Gemstones. [online] Dezeen. Available at: https://www.dezeen.com/2018/10/10/facett-hear-ing-aid-precious-gemstones/> [Accessed 10 January 2021].

Davis, A., 2021. Beijing Art Gallery By Penda Featuring Topsy-Turvy Archways. [online] Dezeen. Available at: https://www.dezeen.com/2014/01/16/beijing-art-gallery-penda-topsy-turvy-archways/ [Accessed 10 January 2021].

Frameweb.com. 2021. WGNB Highlights The Importance Of A Strong Material And Colour Palette With A Seoul Shop Interior. [online] Available at: https://www.frameweb.com/article/xyts-seoul-wgnb> [Accessed 10 January 2021].

designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www. designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-cheng-du-china-10-17-2019/> [Accessed 10 January 2021].

Frameweb.com. 2021. A Knitted Wall Attracts The Eye In A Seoul Optician'S Shop. [online] Available at: https://frameweb.com/article/a-knitted-wall-attracts-the-eye-in-a-seoul-opticians-shop [Accessed 10 January 2021].

Koichi Takada Architects - Sydney. 2021. Cave Restaurant - Koichi Takada Architects - Sydney. [online] Available at: http://koichitakada.com/projects/cave-restaurant/ [Accessed 10 January 2021].

Block, I., 2021. Burberry And Tencent Collaborate On Interactive Wechat Shop In Shenzhen. [online] Dezeen. Available at: https://www.dezeen.com/2020/08/02/burberry-tencent-wechat-shop-shenzhen/> [Accessed 10 January 2021].

England.nhs.uk. 2021. [online] Available at: <https://www.england.nhs.uk/wp-content/uploads/2017/09/hearing-loss-what-works-guide-transition-to-adulthood.pdf> [Accessed 10 January 2021].

RNID. 2021. Deaf Awareness - RNID. [online] Available at: <https://rnid.org.uk/information-and-support/deaf-awareness/> [Accessed 10 January 2021].

Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http:// www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=200342_125637234&subsubsecti on=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20 in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

Historicengland.org.uk. 2021. QUEENS ARCADE, Leeds - 1256158 | Historic England. [online] Available at: https://historicengland.org.uk/listing/the-list/list-entry/1256158> [Accessed 10 January 2021].

Articles

Kent, B., 2006. They Only See It When the Sun Shines in My Ears: Exploring Perceptions of Adolescent Hearing Aid Users. Journal of Deaf Studies and Deaf Education, 11(4), pp.461-476.

Easson, A. and Walter, S., 2017. Hearing-impaired young people – a physician's guide. Clinical Medicine, 17(6), pp.521-524.

Image refrences

Figure 1 Aouf, R., 2021. Facett Hearing Aid Takes Inspiration From Precious Gemstones. [online] Dezeen. Available at: https://www.dezeen.com/2018/10/10/facett-hearing-aid-precious-gemstones/> [Accessed 10 January 2021].

Figure 2 Hearingexpertwirral.co.uk. 2021. Hearing Expert. [online] Available at: https://hearingexpertwirral.co.uk/how-do-hearing-aids-work/ [Accessed 10 January 2021].

Figure 3 Kelly, L. (2020). own photo of hearing aids. [image].

Figure 4 Portfolios.pratt.edu. 2021. Hearing Aid Accessories On Pratt Portfolios. [online] Available at: http://portfolios.pratt.edu/gallery/37601299/Hearing-Aid-Accessories [Accessed 10 January 2021].

Figure 5 Signia Hearing Aids. 2021. Why Are More Young People Losing Their Hearing?. [online] Available at: https://www.signiausa.com/blog/young-people-losing-hearing/ [Accessed 10 January 2021].

Figure 6 Hearing Like Me. 2021. Living With Hearing Loss: How I Gained Confidence To Be Myself. [online] Available at: https://www.hearinglikeme.com/living-with-hearing-loss-how-my-parents-raised-me-made-all-the-difference/ [Accessed 10 January 2021].

Figure 7 Thukral, R., 2021. A Smart Hearing Aid Designed With Modern Aesthetics To Empower You! | Yanko Design. [online] Yankodesign.com. Available at: <https:// www.yankodesign.com/2020/07/06/a-smart-hearing-aid-designed-with-modernaesthetics-to-empower-you/> [Accessed 10 January 2021].

Figure 8 Davis, A., 2021. Beijing Art Gallery By Penda Featuring Topsy-Turvy Archways. [online] Dezeen. Available at: https://www.dezeen.com/2014/01/16/beijing-art-gallery-penda-topsy-turvy-archways/ [Accessed 10 January 2021].

Figure 9 Frameweb.com. 2021. WGNB Highlights The Importance Of A Strong Material And Colour Palette With A Seoul Shop Interior. [online] Available at: https://www.frameweb.com/article/xyts-seoul-wgnb> [Accessed 10 January 2021].

Figure 10 designboom | architecture & design magazine. 2021. X+Living Fills Tea Store With Smooth Wooden Clouds And Mountains In China. [online] Available at: <https://www.designboom.com/architecture/xliving-green-tea-store-interiors-zhuyeqing-chengdu-china-10-17-2019/> [Accessed 10 January 2021].

Figure 11 Koichi Takada Architects - Sydney. 2021. Cave Restaurant - Koichi Takada Architects - Sydney. [online] Available at: http://koichitakada.com/projects/cave-restaurant/ [Accessed 10 January 2021].

Figure 12 Kelly, L. (2020). Diagram of site location. [image]

Figure 13 Kelly, L. (2020). Diagram of train station to the site. [image]

Figure 14 Kelly, L. (2020). Diagram of bus stops around the site. [image]

Figure 15 Kelly, L. (2020). Diagram of surrounding streets. [image]

Figure 16 Kelly, L. (2020). Photo of Briggate street. [image]

Figure 17 Kelly, L. (2020). Diagram of the Queens Arcade strip. [image]

Figure 18 Kelly, L. (2020). Photo of East entrance. [image]

Figure 19 Kelly, L. (2020). Photo of the arcade strip. [image]

Figure 20 Kelly, L. (2020). Photo of the arcade strip. [image]

Figure 21 Kelly, L. (2020). Photo of site exterior. [image]

Figure 22 Kelly, L. (2020). Photo of ground floor interior. [image]

Figure 23 Kelly, L. (2020). Photo of first floor interior. [image]

Figure 24 Kelly, L. (2020). Photo of first floor interior. [image]

Figure 25 Kelly, L. (2020). Photo of GF and FF staircase. [image]

Figure 26 Kelly, L. (2020). Sun path at 2:00pm. [image]

Figure 27 Kelly, L. (2020) Photo of the balcony on the first floor. [image]

Figure 28 Kelly, L. (2020) Photo of the large windows and doors on the first floor. [image]

Figure 29 Ft.com. 2021. Can a hearing aid be high fashion?. [online] Available at: https://www.ft.com/content/00c62024-4d27-11e8-8a8e-22951a2d8493 [Accessed 17 April 2021].




Chapter Two: Feasibility



"DISABILITY TO DESIRABILITY"

- LEAH HEISS



CONTENTS

- 42 Introduction
- 44 The site
- 54 Block plans
- 60 Brief
- 70 Surveys and Authorities
- 72 Consultants
- 76 Timescales
- 80 Cost estimate
- 81 Fees
- 82 Procurement
- 86 Handover and Completion
- 88 Conclusion
- **90** References
- **91** Bibliography
- 92 Image references



INTRODUCTION

Echo is a brand with the goal to dispel the perception that hearing aids are for the elderly, are something to be hidden and therefore hiding the disability. Even though they are small, there is an opportunity to make them a feature, make them stand out and have the user feel more confident and not ashamed. Therefore, creating a space that has the ideals of 'standing out' and being seen will help raise the visibility hearing aids and the disability in general.

Hearing aids have always been associated with the elderly or severe hearing loss. There are practically no independent hearing aid stores, and most hearing aids are purchased or prescribed through hospital audiologists, which can be quite a dull and daunting experience. There are becoming increasingly more young hearing aid users, but the hearing aid industry hasn't evolved to reflect this, with mainly just the same uninspiring designs available, and only a small minority of designers trying to change this image. Echo will be a brand that can be related to by young people, by giving them body confidence and to help them feel comfortable with their disability. A brand that can push the idea of hearing aids being something that should be seen not hidden.

As well as the shop selling hearing aids, it will be a place where young people can go to just 'hang out' and it will be a place that will help educate people on what a hearing disability can entail, other than just 'not being able to hear'. It is a place that will bring a sense of belonging and community, as well as just being a retail store. The store will allow people to create their own idea of what a hearing aid should look like and what feels comfortable for them, by designing their own. The store will provide a different take on hearing aids and will help change the image of hearing aids and their users, by creating an exciting, bold and different hearing aid experience.











The site is located in the centre of Leeds inside the Queens Arcade, positioned right in the middle of the social hub of Leeds, a thriving city which is continuing to grow. Echo would fit perfectly into this environment, as the target audience is the young deaf community, who are likely to frequent Leeds city centre for retail and social activities. Queens Arcade has a mix of high-end brands, such as Ollie Quinn, established brands, such as Levi's and guirky independent stores and cafes. Because of this, echo will fit in well with the hierarchy of the surrounding brands. Queens Arcade is very accessible via public transport, with bus, local and national train services all within a short walking distance to the site.

The chosen building inside the arcade is 16 Queens Arcade which is currently Simpatico Pizza restaurant, which occupies 3 floors, ground, first and second. As the building is listed it has its elements that cannot be changed, this includes the exterior, which is a white and blue colour scheme, with the small balcony that runs down the arcade. From first being built, the arcade has always been used for shops, originally only over two stories, with the second storey being used as 'the living accommodation for the shopkeepers'.² The is now used as part of the restaurant, with a third storey used for storage.

The site had a basement floor but, in 2013, the existing basement stair was removed, and it was floor slab infilled when refurbished. In 2017, when the Simpatico plans were drawn up, the basement was not included for the use of the store. However, the basement will be used in this project, alongside the other 3 floors which gives a total of 500m² to use.







Current layout plans



Ground Floor



1st Floor



Stripped out plans



Basement Floor



Ground Floor



1st Floor







BLOCK PLANS

Front of House



Middle of House

Back of House



Basemnet Floor





First Floor











Brief

For a long time now the hearing disability has been largely overlooked and misunderstood, which has led to stereotypical views about what the hearing aid should look like and who wears them. All that is seen when looking at a hearing aid is just an aid to the disability, rather than something that is desirable or a feature. In contrast, the eyewear phenomenon has progressed from an aid to a fashion item, to the that point people without poor eyesight wear them as accessories.

Echo's mission is to start ending the stereotypes of the hearing aid and its users by creating the first independent hearing aid brand store and creating an environment that shows just how far the design and impact of the hearing aid can progress. The store will offer a range of hearing aid products along with an audiologist consultant on-site, providing professional expertise, along with multiple areas in store for customers to design their own hearing aid. The 'community' element of the space will be at the forefront of the store, with a café/social area and intriguing experiences throughout the store.

Retail Experience

Located on the Ground floor will be an array of hearing aids on display with a carefully considered design to help these small products stand out and be visible throughout the store. As well as having the product display, it will also be an interactive and educational experience. Interactivity will be integrated by having bespoke digital screens to design your own hearing aid, alongside a beautifully designed collection of hearing aids from a range of designers. There will also be opportunities for hearing people to experience sound through a different perspective.

The retail environment will involve educational aspects by showcasing hearing aids in detail. These will be displayed around the edges of the room along with the product display. There will be various types of hearing aids in the product range, separated into different categories throughout the space as there are many different types such as, 'IIC, half shell, mini bite'³ and more. Accompanying products will be sold also, such as, hearing aid boxes, accessories and ear plugs

The design of the store will be portrayed to mimic the shapes of the ear and hearing aid, thus the space will be focused on arches and curves. With the brand ideals and product line in mind, the colour scheme will vary between bright and bold to light and pastel throughout the space.

Experienced and well-trained staff will be in place throughout all floors, as well assisting the customers they will also help give them more knowledge and advice in line with their expertise. Check-out areas will be situated in the centre of the space, making it that focal point of interaction with staff and maybe even fellow customers.









Café and social area

This will be a buzzing community area for people to socialise, and in which the young deaf community can feel comfortable going to with friends, into an environment that is a welcoming and an enjoyable experience for the hearing impaired. This can be an 'Instagramable' moment, with interesting furniture design and an intriguing design style, following the curves and shapes idea. The café bar will serve healthy food and beverages along-side an innovative ordering system that is friendly and helpful to the deaf community.





Audiology

Located in the basement, away from all the distraction noise and with reduced light to place greater emphasis on sound, the audiology room will have a trend-aware style but will also take into consideration the technical elements of what an audiology room needs, such as sound proofing. The audiologist will offer hearing tests and hearing aid programming all in one appointment, all appointments are to be booked online by customers or can be booked in store for their next visit. Customers will be directed to a waiting area in the sound experience room, here they will be greeted by members of staff for their appointment to keep that interaction with the staff and the customer. Once the customers chosen hearing aid is programmed, they can start using them straight away, so they get an immediate 'before and after' experience.



Sound experience

This will be located in the basement, cut off from the noise of the retail and café experience, creating a completely surreal atmosphere. It will be an experience to remember, by creating the sound surroundings experienced by people with loss and how that can be applied to this experience. Alongside this, the space will also have innovative furniture and material design to help enhance the other senses like touch and sight, the senses that deaf people rely on more.





Back Of House

The back of house will be situated across the entire second floor and a part of the first floor, this is where all stock range and storage will be for products and food and beverages. There will also be break-out areas for staff, with a carefully considered design to fit the rest of the design scheme.

Public and staff toilets will be installed across the first and second

floor, the public on the first floor and staff and the second. Both will have innovative designs that keep the continuity of the design identity of the space.

Circulation and accessibility

The space given to work with is fairly small, particularly on the ground floor, therefore careful consideration will need to be given when thinking about the accessibility throughout the space. A solution is to use a spiral staircase, but also to include a lift for full accessibility, which is a key aspect of the scheme.

A second staircase will be at the back of the premises, connecting the first and second floors to be used only as access for staff circulation. The main staircase will be the main point for circulation throughout the four floors and the secondary staircase will act as a fire escape from the second floor.







Survey's

Building survey

Before any construction can take place on site, a structural engineer must do an in-depth inspection to determine whether there are any major problems that may affect the construction of the project and that it is safe to be used by the public. This will provide a 'detailed evaluation of the property's condition'⁴ which will help to avoid any costly inconveniences further into the construction.

Utilities survey

This survey will locate any existing services such as, gas, electrics, plumbing etc. This will ensure that there are no damages to these services and that they won't be interrupted during any building construction.

Architecture survey

An 'architectural survey focuses on the building features'.⁵ As the site is listed, it will need a survey carried out to see what original features need to be retained in the space and if the existing structure is safe for public use.

Acoustic survey

An acoustic consultant will help control, design and assess sound and vibrations in the building environment, assessing the noise mitigation and 'carrying out acoustic analysis using specialist modelling software'.⁶ They consult with the designers on what would work best in the space given.

Statuary authorities

Planning application

Before any work commences on the site, a planning application must be submitted to the local authorities to be approved, in this case it would be submitted to the Leeds City Council.

Building Regulations

Building regulations are a required aspect of the construction and design process. They are approved before this process begins as they help ensure the new alterations to the site follow health and safety for the users.

Listed Building consent

As my site is a listed building, this will require a building consent application to be submitted. This consent is required as it will determine which architectural elements can be removed and which have to remain.

Advertising consent

An advertising consent form should be submitted to local authorities to allow display of branding or signage this includes: 'flags, canopy signs, pole signs and placards etc'⁷.

Consultants

Interior Designer

The interior designer will conceptualise the client's vision and work with a brief to turn it into a three-dimensional, functional reality. The designer will take into account how the human experience and interaction will occur within the space and work on site making sure everything is installed to the specified design. Throughout the process, the interior designer will show research inspiration, drawings and visualisations to the clients up to the point when everything is finalised and approved, this then leads to the production of a contractual drawing pack. For this project the interior designer will need to have experience in retail/commercial design, branding environments and if possible, working with hearing products, audiology clinics or something similar.

Architect

The architect works closely with the structural element of the site, they will provide more knowledge of the building structure. As it is a listed building the architect will pay attention to the components that cannot be moved and how they can be integrated into the design without damage to the historic structure.

Project manager

Project managers are responsible for the business side of the project as they manage the planning, organizing and directing of the project. They liaise with contractors, clients or any specialists that may be required on the site and make sure the project is delivered to the budget and time schedule and ensuring that it is completed successfully and to the desired quality.

Electrical consultant

Electrical engineers use designs and drawings to 'power up buildings', making sure that all electrical systems are installed correctly and that the buildings electrics are safe and functional. These engineering services include – 'Lighting, power system studies, energy efficiency and life safety systems'.

Structural engineer

The structural engineer provides detailed insight to the structure of the building, working closely with the architect they help determine what modifications will be safe and structurally sound for public use.

Quantity surveyor

The quantity surveyor will manage the costs and budget of the project from the outset to completion, mainly looking at material costing. They ensure that the costs do not exceed the budget and that the project can be completed to the design within the required budget.

Planning consultant

The planning consultant help guide decisions throughout the planning stages giving a range of advice on different matters like social and environmental issues that may interfere with the project.
Building services consultant

The building services engineer guides the design, installation and maintains the building services such as lighting, water, heating, lifts etc. They ensure that this all works efficiently and effectively on site.

Ventilation consultant

This consultant is responsible for controlling the indoor air quality of the space by designing ventilation systems. They also control temperature, humidity and air motion, all ensuring the safety of the users.

Fire consultant

They have the crucial job of ensuring the fire safety of the site. They use their expertise to conduct a fire risk assessment on the site and writing a building safety report. The also advise on fire equipment to be used by staff or customers in the unlikely event of a fire in the premises.

Specialists

Sound Engineer

The sound engineer will be focused on the proposed sound experience room and audiology room, along with sound through the entire site. They will design and control the sound within the space, and will be responsible for assembling, operating and maintaining the equipment used.

Audiologist

The audiologist will be on site of the completed project providing hearing tests, but will also help during the build by using their expertise in audiology for the development of the sound throughout the space and also within the design, making sure it is a comfortable experience for the target audience.





Timescale of stages

STAGES	FE	BRL	JRA	Y	١	MAF	RCH			APR	IL		Ν	/IAY			JU	NE			JUL	٢
BRIEFINGS AND INITIAL MEETINGS	0	0	0																			
FEASIBILTY REPORT				0	0	0																
SCHEME DESIGN					0	0	0	0	0													
CLIENT APPROVAL										0	C											
DETAIL DESIGN DRAWINGS											(D	00	C	C							
STATUTORY APPROVAL AND APPLICANTS											(D	00	oc	C	0	0	0				
WORKING DRAWINGS													C	C	C	0	0	0				
CONSULTANT DRAWINGS														C	C	0	0					
SPECIFICATIONS																	0	0	0			
QUANTITIES BILL																		0	0	0	0	
TENDERING PERIOD																			0	0	0	
TENDERS RECEPIT																					00	20

-1

Timescale of works

TIME SCALE OF WORKS	AUC	GUST	SEPT	FEM	BER	0	СТС	BEF	R	NOV	EMB	ER	DEC	EMB	ER	JAN	JARY	FE	BF	RUA	RY	M	ARCI	н
PRE CONTRACT LEAD IN	00	000																						
WORKS ON SITE			00	oc	00	0	0	0	0	00	0	0	0	00	0	oc	00	00	0	0	0	0	00	oc
MEETINGS			C	C	0		0	0		C	0		(00		O	0		0	0	0		00	DC
HANDOVER																								C
LIABILITY PERIOD	6 mo	nth period	after	work	s are	e cor	nple	ted																





Cost estimate

SPACE	AREA	COST/m ²	COST ESTIMATE	
F.O.H	341m ²			
Retail Space	54m ²	£3,000	£162,000	
Sound Experience	147m ²	£4,500	£661,500	
Cafe/Social area	95m ²	£3,000	£285,000	
Audiologist	45m ²	£4,500	£202,500	
В.О.Н	94m²			
Retail Storage	49m ²	£1,000	£49,000	
Staff break areas	45m ²	£1,100	£49,000	
М.О.Н	47m ²			
Toilets	47m ²	£1,100	£51,700	
			£1,460,700	

Fees

CONSULTANTS	% OF TOTAL	TOTAL FEE
INTERIOR DESIGNER	10%	£146,070
ARCHITECT	10%	£146,070
PROJECT MANAGER	2%	£29,214
ELECTRICAL CONSULTANT	0.5%	£7,303
STRUCTURAL ENGINEER	0.5%	£7,303
QUANTITY SURVEYOR	3%	£43,821
PLANNING CONSULTANT	1%	£14,607
BUILDING SERVICES CONSULTANT	2%	£29,214
VENTILATION CONSULTANT	0.5%	£7,303
FIRE CONSULTANT	0.5%	£7,303
SOUND ENGINEER	2%	£29,214
AUDIOLOGIST	2%	£29,214
	TOTAL FEES	£496,636
	TOTAL COST EST.	£1,957,336
	TOTAL PROJECT COST	£1,460,700

Procurement

Procurement is the act of acquiring goods or services at the best price for the client. There are a range of different ways of procuring a project, depending on what is most suitable for the client's requests and business plans.

Design & build

This procurement route is when a contractor is hired to design and construct a project from the outset to completion.

Competitive tendering

This is where multiple contractors will present their tender documents to the client and the most suitable will be selected for the project.

Negotiated tendering

Negotiated tender is a single-stage tender between the client and chosen contractor who will then present their tender document.

Meetings

Meetings should occur throughout the whole project process between client and contractor to ensure the client's needs are being met as well as updates of the project progression.

Tender document pack

Included is the following:

- -Proposition document
- -Feasibility report
- -Research paper
- -Contractual drawing pack
- -Concept Models
- -Development pack
- -Material Board
- -Material experimentation
- -Presentation Boards/visuals





Handover and completion

Practical completion

This stage marks the point that all construction stated in the project contract at this point should be completed, 'except for minor defects that can be put right without disturbance of the project'9, this can occur during the defects liability period.

Handover

The handover period takes place once the construction is complete. This is the process between the contractor and client in which the site is handed over to the client. However, before full handover a full detailed assessment of the site must take place to ensure that it is safe for public use.

Defects Liability period

After a certain amount of time prior to the construction completion, the defects liability period comes into effect, which can last for '12 months'10. This is a set period of time where the client can inform the contractor of any defects, and if any defects are found the contractor can then rectify the issue, however this issue can affect the final sum.



Conclusion

This bold new brand is ready to tackle an issue that is not often spoken about openly within the young community. Echo will become a brand that allows young hearing aid users to be proud and have that confidence to 'show off' their disability, it will become a brand that young hearing aid users will want to be associated with. Echo will take the product from an aid to a 'fashion statement'.



References

1 Sheth, S., 2021. Designed To Look Like Jewelry, The Facett Hearing Aid Makes Wearables Precious | Yanko Design. [online] Yankodesign.com. Available at: https://www.yankodesign.com/2018/10/11/designed-to-look-like-jewelry-the-facett-hearing-aid-makes-wearables-precious/ [Accessed 10 January 2021].

2 Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http://www.leodis.net/ discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsectio n=200342_125637234&subsubsection=200343_348125637#:~:text=Queen's%20Arcade&text=lt%20was%20built%20in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

3 Hearing aid. 2021. [online] Available at: <https://www.hearingaid.org.uk/hearing-aids?gclid=Cj0KCQiAlsv_BRDtARIsAHMGVSaszmnaUCJPtDoWiqrMbUohf7SXPohWh5UQR9meBijNzjy6OKP-QiOYaAnLiEALw_wcB> [Accessed 10 January 2021].

4 reallymoving. 2021. What Is A Building Survey?. [online] Available at: https://www.reallymov-ing.com/surveyors/guides/what-is-a-building-survey [Accessed 10 January 2021].

5 Ltd, I., 2021. Measured Building Survey And Topographical Survey Specialist - Icelabz. [online] Icelabz. Available at: https://icelabz.co.uk [Accessed 10 January 2021].

6 Designingbuildings.co.uk. 2021. Acoustic Consultant. [online] Available at: <https://www.designingbuildings.co.uk/wiki/Acoustic_consultant> [Accessed 10 January 2021].

7 Portal, P., 2021. Advertisement Consent | Consent Types | Planning Portal. [online] Planningportal.co.uk. Available at: [Accessed 10 January 2021].

8 Inc., 2021. What We Do | Electrical Engineering Consultants | ICS Engineering Inc.. [online] Icsenggroup.com. Available at: http://www.icsenggroup.com/what-we-do.shtml [Accessed 10 January 2021].

9 Uk.practicallaw.thomsonreuters.com. 2021. [online] Available at: ">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?transitionType=true>">https://uk.practicallaw.thom-sonreuters.com/6-107-7024?tran

10 Pinsentmasons.com. 2021. [online] Available at: https://www.pinsentmasons.com/out-law/guides/defects-liability-periods [Accessed 10 January 2021].

Bibliography

Websites

Frameweb.com. 2021. Nadine Jewellery. [online] Available at: https://www.frameweb.com/pro-ject/nadine-jewellery [Accessed 10 January 2021].

Thukral, R., 2021. A Smart Hearing Aid Designed With Modern Aesthetics To Empower You! | Yanko Design. [online] Yankodesign.com. Available at: <https://www.yankodesign. com/2020/07/06/a-smart-hearing-aid-designed-with-modern-aesthetics-to-empower-you/> [Accessed 10 January 2021].

Sheth, S., 2021. Designed To Look Like Jewelry, The Facett Hearing Aid Makes Wearables Precious | Yanko Design. [online] Yankodesign.com. Available at: https://www.yankodesign.com. Com/2018/10/11/designed-to-look-like-jewelry-the-facett-hearing-aid-makes-wearables-precious/> [Accessed 10 January 2021].

Leodis.net. 2021. Discovering Leeds - Briggate. [online] Available at: <http://www.leodis.net/discovery/discovery.asp?page=2003218_676159084&topic=2003218_372249783&subsection=20 0342_125637234&subsubsection=200343_348125637#:~:text=Queen's%20Arcade&text=It%20was%20built%20in%201888,of%20Queen%20Victoria's%20Golden%20Jubilee.> [Accessed 10 January 2021].

Hearing aid. 2021. [online] Available at: <https://www.hearingaid.org.uk/hearing-aids?gclid=Cj0KCQiAlsv_BRDtARIsAHMGVSaszmnaUCJPtDoWiqrMbUohf7SXPohWh5UQR9meBijNzjy6OKP-QiOYaAnLiEALw_wcB> [Accessed 10 January 2021].

reallymoving. 2021. What Is A Building Survey?. [online] Available at: https://www.reallymoving.com/surveyors/guides/what-is-a-building-survey [Accessed 10 January 2021].

Ltd, I., 2021. Measured Building Survey And Topographical Survey Specialist - Icelabz. [online] Icelabz. Available at: https://icelabz.co.uk [Accessed 10 January 2021].

Designingbuildings.co.uk. 2021. Acoustic Consultant. [online] Available at: https://www.designingbuildings.co.uk/wiki/Acoustic_consultant> [Accessed 10 January 2021].

Portal, P., 2021. Advertisement Consent | Consent Types | Planning Portal. [online] Planningportal.co.uk. Available at: https://www.planningportal.co.uk/info/200126/applications/60/consent_types/8 [Accessed 10 January 2021].

Inc., 2021. What We Do | Electrical Engineering Consultants | ICS Engineering Inc.. [online] Icsenggroup.com. Available at: http://www.icsenggroup.com/what-we-do.shtml [Accessed 10 January 2021].

Uk.practicallaw.thomsonreuters.com. 2021. [online] Available at: <https://uk.practicallaw.thomsonreuters.com/6-107-7024?transitionType=Default&contextData=(sc.Default)&firstPage=true> [Accessed 10 January 2021].

Pinsentmasons.com. 2021. [online] Available at: https://www.pinsentmasons.com/out-law/guides/defects-liability-periods [Accessed 10 January 2021].

Image referances

Figure 1 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewel-lery-261120184/> [Accessed 10 January 2021].

Figure 2 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: <https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewellery-261120184/> [Accessed 10 January 2021].

Figure 3 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: <https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewellery-261120184/> [Accessed 10 January 2021].

Figure 4 Hargreaves, J. (2013) Proposed elevations, (edited). [image]

Figure 5 Kelly, L. (2020). Diagram of zoomed out site location. [image]

Figure 6 Kelly, L. (2020). Photo of site exterior. [image]

Figure 7 Kelly, L. (2020). Photo of arcade shop fronts. [image]

Figure 8 Kelly, L. (2020). Diagram of site location. [image]

Figure 9 James, R. (2017) Proposed layout – all floors. [image]

Figure 10 Kelly, L. (2020) Stripped out plan layout. [image]

Figure 11 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewel-lery-261120184/> [Accessed 10 January 2021].

Figure 12 Kelly, L. (2020) Block plans. [image]

Figure 13 Kelly, L. (2020) Block plans. [image]

Figure 14 Behance.net. 2021. Behance. [online] Available at: <https://www.behance.net/vale-ro-architecture> [Accessed 10 January 2021].

Figure 15 Frameweb.com. 2021. A New Mosque In Australia Shows Islamic Architecture Going Beautifully Brutalist. [online] Available at: https://www.frameweb.com/article/a-new-mosque-in-australia-shows-islamic-architecture-going-beautifully-brutalist [Accessed 10 January 2021].

Figure 16 Frameweb.com. 2021. JINS Namba Parks. [online] Available at: https://www.frameweb.com/project/jins-namba-parks [Accessed 10 January 2021].

Figure 17 Petertarka.com. 2021. [online] Available at: https://www.petertarka.com [Accessed 10 January 2021].

Figure 18 Frameweb.com. 2021. Why An 18Th-Century Fortress Played Into The Design Of This Futuristic Papyrus Shop By Atelier Archi@Mosphere. [online] Available at: https://frameweb.com/article/why-an-18th-century-fortress-played-into-the-design-of-this-futuristic-papyrus-shop-by-atelier-archi-at-mosphere [Accessed 10 January 2021].

Figure 19 Frameweb.com. 2021. Say Architects Plays A Game Of Contrasts For A Hangzhou Jewellery Store Within A Bookshop. [online] Available at: https://www.frameweb.com/article/say-architects-plays-a-game-of-contrasts-for-a-hangzhou-jewellery-store-within-a-bookshop [Accessed 10 January 2021].

Figure 20 Frameweb.com. 2021. This Factory-Turned-Photography-Studio In Beijing Is A New Kind Of Social Space. [online] Available at: https://www.frameweb.com/article/this-factory-turned-photography-studio-in-beijing-is-a-new-kind-of-social-space [Accessed 10 January 2021].

Figure 21 Frameweb.com. 2021. This Bakery Is Designed To Withstand Bogotá'S Perennially Chilly Spring. [online] Available at: https://www.frameweb.com/article/this-bakery-is-designed-to-withstand-bogotas-perennially-chilly-spring [Accessed 10 January 2021].

Figure 22 Puma-acoustic-booths.com. 2021. Puma Acoustics - Sound Booths Bespoke Soundproofing Projects. [online] Available at: https://www.puma-acoustic-booths.com/# [Accessed 10 January 2021].

Figure 23 Bluebird-electric.net. 2021. SOUND PROOFING YOUR ROBOT FOR SILENT RUNNING DESIGNS. [online] Available at: https://www.bluebird-electric.net/artificial_intelligence_autono-mous_robotics/Robots_Hexapods_Insects_Animatronics/Sound_Proofing_Silent_Robots_By_De-sign.htm> [Accessed 10 January 2021].

Figure 24 Spigogroup. 2021. Curved Wood Ceilings | Spigogroup | Curved Wood Walls. [online] Available at: <https://www.spigogroup.com/en/curved-wood-ceilings/> [Accessed 10 January 2021].

Figure 25 Sofa, P., 2021. Pratone Sofa - Milia Shop. [online] Milia Shop. Available at: https://www.miliashop.com/en/sofas/1244-pratone-sofa-gufram-.html [Accessed 10 January 2021].

Figure 26 Ravenscroft, T., 2021. Rattan Yoga Pods Create "Space Of Captivating Calmness" In Bangkok. [online] Dezeen. Available at: https://www.dezeen.com/2020/09/27/rattan-yoga-stu-dio-bangkok-vikasa-enter-projects-asia/ [Accessed 10 January 2021].

Figure 27 staff, D., 2021. Velux Skylights Illuminate Copper Double Spiral Staircase In CEBRA's Experimentarium. [online] Dezeen. Available at: https://www.dezeen.com/2018/11/14/velux-skylights-cebras-experimentarium-denmark/ [Accessed 10 January 2021].

Figure 28 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewellery-261120184/> [Accessed 10 January 2021].

Figure 29 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewellery-261120184/> [Accessed 10 January 2021].

Figure 30 Palaisbulles.com. 2021. The Palais Bulles Of Pierre Cardin |Le Palais Bulles. [online] Available at: https://www.palaisbulles.com/dream.php [Accessed 10 January 2021].

Figure 31 Frameweb.com. 2021. Meehotel. [online] Available at: https://www.frameweb.com/project/meehotel-panorama-design-group [Accessed 10 January 2021].

Figure 32 Morris, A., 2021. Granite Boulders Feature In Jewellery Showroom By Richard Stampton Architects. [online] Dezeen. Available at: https://www.dezeen.com/2018/12/31/cushla-whit-ing-richard-stampton-architects/> [Accessed 10 January 2021].

Figure 33 Klein, K., 2021. Studio Shamshiri Designs Pink-Hued Jewellery Shop In LA For Sonia Boyajian. [online] Dezeen. Available at: https://www.dezeen.com/2019/12/15/studio-shamshiri-jewellery-shop-sonia-boyajian/ [Accessed 10 January 2021].

Figure 34 CUFF, E., 2021. EADIE EAR CUFF. [online] ANNE MANNS Jewelry. Available at: https://annemanns.com/collections/the-pea-01/products/eadie-ear-cuff-pre-order [Accessed 10 January 2021].

Figure 35 PIECE, E., 2021. EILA's SISTER EAR PIECE. [online] ANNE MANNS Jewelry. Available at: https://annemanns.com/collections/the-pea-01/products/eilas-sister-ear-piece [Accessed 10 January 2021].

Figure 36 3Dnatives. 2021. H (Earring); The 3D Printed Hearing Aid Jewellery - 3Dnatives. [online] Available at: https://www.3dnatives.com/en/h-earring-3d-printed-hearing-aid-jewel-lery-261120184/> [Accessed 10 January 2021].









Chapter Three: Research paper



CONTENTS

- 101 Preface
- Introduction
- Aims
- Timeline of hearing aid store design
- CDA WHATEVER Eyewear retail
- What are the opportunities for the future of hearing aid store deisgn?
- Primary research
- Analysis
- 123 Conclusion
- References
- Bibliography
- Figure & Image references
- 132 Appendix

Preface

This research paper will investigate how hearings aids can become a more desirable functional accessory by the way they are displayed in shops. Through a range of different research methods and analysis of interior retail environments, this paper will investigate how different stores make small products desirable and how that can be translated into a hearing aid store, including what people deem a desirable hearing aid to be. This paper will correspond will my Final Major Project (FMP) and inform design decisions.

Introduction

In today's society the hearing aid is generally seen as something that should be hidden. It signifies a disability, which is usually associated with old people, and is not seen as an accessory that could be desirable. But the hearing aid could be become the next glasses trend, with new ways to make this small delicate item stand out.

The demographic of the primary research candidates is aged between 16-30, an age group that is generally overlooked and doesn't receive enough focus within the hearing- impaired community. Currently in the UK 'there are 12 million adults with hearing loss greater than 25 dBHL'¹ and '1 in 5 American teens experience some degree of hearing loss'.²

These statistics are rising, yet the perception of hearing aids and the consumer options for them is not changing fast enough with the stats. Currently there are very few hearing-aid stores around the UK. Those that do exist, are dull, functional and do not offer an enticing consumer experience. If the stores and product promotions were designed in a more desirable way, then the whole stereotype around hearing aids could change. That's why in this paper, I will be exploring how much a display can change the perception of hearing aids and make them more desirable as glasses have.

Aims

The aims of this paper are to fully investigate how hearing aids could be displayed in store to make them more desirable and so break the stereotypes that come with hearing aids. An eye-catching display is one of the first things that attracts people to a product and persuades them to buy it, so this paper explores how to make that happen and how this translates into the design of the FMP. This paper also aims to tackle how the experience of a hearing aid store can affect the desirability of the product e.g appeal, comfort, quality, service, and how the space can make people feel versus how they might want to feel when in a hearing aid store. The paper will explore what makes a desirable product display and how that can help tackle the stereotype of the hearing aid, ie. that they should be hidden instead of standing out.





The timeline of hearing aid store design

Hearing aids have always been something that have been associated with disability. Hearing aid wearers might be considered 'different' and many are 'made fun of for wearing hearing aids³ especially children and adolescents, and young adults. The way hearing aid stores are designed does not help the current situation and there needs to be some drastic changes to make the hearing aid become more desirable, in the same way as glasses have over recent years.

As 'many individuals wear glasses even if they do not have vision loss',⁴ this should be the same aspiration for hearing aids. And the way they are portrayed in store is a big part of it.

Many hearing aid wearers collect their devices from hospitals and private clinics. These tend to be dull, clinical and lifeless spaces (see figure 1). As functional spaces, they prioritise the more technical and acoustic side of the space over visual design. To illustrate this, IAC Acoustics are 'the world's leading supplier of audiometric testing and medical research facilities⁵. They have designed over '40,000 rooms since 1949'⁶ and the design approach they take is stuck in the 20th century. As this is the design most associated with hearing aids, it's no surprise that hearing aids are viewed the way they are. Retailers look at these designs and assume that this is what the hearing-impaired community like and are comfortable with. There have been attempts to move designs more into the 21st century, with hearing aid store designs like this (see figure 2). Whilst this design has moved away from muted toned colours and built on the brand colours of red, it still feels clinical, due to the materials used and not having any hearing aids actually out on display. Amplifon do acknowledge that getting a hearing aid can be an uncomfortable experience and they aim to make 'the whole experience runs smoothly because customers are often uncomfortable about hearing loss'. Whilst it is good that they consider this, it doesn't address the reason why people feel uncomfortable in the first place, and how this can be tackled through better use of space and more appealing display design of hearing aids.





Figure 2

Figure 1

106

Now hearings aids are stating to move into 'the digital age'⁸, the age where hearing aid users shouldn't have to 'endure any indignity or discomfort as a result of their condition'⁹. Hearing aid designs are starting to catch up with the digital era and more designers are becoming aware of how to tackle the hearing aid stereotype.

The hearing aid is such a delicate device that it could be compared to jewellery, and that is the approach that some designers are starting to take. Hearing aid jewellery is rising. Designers 'Siying Qu and Haoran Li¹⁰met with 'model, actor and activist Chella Man'¹¹to collaborate with 'New York label Private policy'¹²to design a range of hearing aid jewellery. Whilst these small movements to change the look of hearing aids is a very positive step, it is not being done in conjunction with changing the retail experience for hearing aids.

Another step forward is that there are hearing centres/clinics that are starting to take on more clever design decision within the spaces (see figure 3). This 'hearing centre/store in Thessaloniki, Greece'¹³ designed by 'T&T Architects'¹⁴, has taken a more conceptual approach to the spatial design, following the concept of 'the intricate anatomy of the ear as well as the physics of the sound'¹⁵. Whilst this is a clinic rather than a store, this approach shows how the future of hearing aid stores could be redefined. It shows how a space for hearing aids could be this interesting and intriguing. However, it still doesn't tackle the retail experience for purchasing hearing aid products or how comfortable the experience of the instore space can be for hearing aid users. Moving from a clinic environment to a store would help make the hearing aid more desirable as an accessory, and the way the experience is handled will be the turning point for how hearing aids are perceived.



Figure 3




WHATEVER Eyewear retail CDA

How product display can redefine a perception

From the outset any 'cool' branded, retail store should scream 'design' and that's what the WHATEVER Eyewear store did. They have taken this aid to disability (glasses) and turned them into a hip, fashion feature just by the way they have been portrayed in the display design. This is what needs to occur in hearing aid stores for the stereotype to change and make them become a desirable accessory.

Designed by 'RooMoo design studio'¹⁶at only '45.00m2'¹⁷the designers were inspired by 'specific details of the logo and the signature sunglasses from WHAT-ERVER'¹⁸ and the 'sound wave phenomenon'¹⁹. The inspiration resulted in the studio creating this incredible futuristic industrial style retail store, taking eyewear display to new heights. The store has two central installation displays made from aluminium. Each aluminium plate of the installation 'is laser cut to a customized pattern also designed for the brand'²⁰. The aluminium display shape is 'divided into upper and lower parts by a central handle, which echoes the WHATEVER brand's logo pattern'²¹. This installation has taken a new approach to display design and intrigues the customers to explore and purchase the product. As well as having a unique display, RooMoo studio have also managed to keep branding consistent throughout the entire space, this is something I have taken into consideration when designing Echo.

This CDA brings a lot of factors in to show how display design can drastically change the perception of a product. This is what the future of hearing aid store design could potentially look like, within the aspirations and comfort zones of the demographic. If hearing aid stores were to go down this innovative route, hearing aids would be more likely to be seen as a desirable accessory, just as glasses have and WHATEVER Eyewear store has proven how this can realised. The display should allow the delicacy of the hearing aid to stand out and be portrayed more as jewellery rather than an aid to disability that is camouflaged not only behind the ear but also in society.







What are the opportunities for the future of hearing aid store design.

The future for hearing aid store design covers quite a broad spectrum of features that need to be considered. The future should focus on how to make the space an enjoyable experience for each individual, the person should feel good in the space and the perception should be a positive experience. Hearing aid designs 'are getting smaller'²² and more advanced in technology. Whilst the advance in technology is changing them for the better, making hearing aids smaller should not be the only design solution route for the future. Smaller designs continue the perception that hearing aids should be hidden, which could perpetuate a negative impact to the confidence in young people's body image. Bolder designs will help change this and will also offer an alternative retail experience, as they can be displayed in more innovative ways than small hearing aids, which are just designed to be hidden.

There have been many different variables proven that affect the way consumers act in retail store experiences. For instance, shopping experiences can 'evoke value either through successfully accomplishing it's intended goal or by providing enjoyment and/or fun'²³ to evoke a successful retail experience for a hearing aid consumer, the store could have many innovative design features to help stimulate that goal of having fun. Consumers are also known to shop just for 'a means of so-cializing with their friends'²⁴. This can be tackled in store design by having multiple areas with opportunity to socialize, such as cafe's, seating areas etc. They shop for 'entertaining or recreational purposes. These consumers have often been referred to as recreational shoppers'²⁵. With the demographic that Echo has in mind, the store would attract many of these types of shoppers. This is why it's crucial that the hearing aid display plays such a big part in the store; as the product is small it needs to stand out to grab the attention of these young shoppers.

As every shopping experience is personal, the store needs to find a balance of making everyone feel good. But a hearing aid store has more challenges to overcome, to accommodate the hearing-impaired people within the demographic, taking into account their specific needs. When stores are designed, the hearing-impaired community is often forgotten about. Consumers with hearing loss often 'struggle with hearing conversations in noisy environments, cluttered by many people and background noise'²⁶ This then leads them to 'mishear or misunderstand their communication with service providers'²⁷. This can be very frustrating as I know from experience, and it can make people feel uncomfortable in the environment and can cause anxiety. This can be tackled by having soundproof materials to minimise the noise, zoned areas, and not have staff talking over the intercom, as this can be hard to understand. People with complete hearing loss are at a major disadvantage in retail environments if they don't 'have an interpreter present to whom they can ask questions about products and services²⁸. Many consumers 'leave retail settings feeling frustrated and dissatisfied'²⁹ and many people with 'hearing loss or total deafness report that employees often avoid talking to them out of discomfort with interacting with consumers with hearing limitations³⁰

All this has to change for the future of hearing aid stores to be enjoyable and successful. Having sign language interpreters working in the store, and ensuring all staff are well versed in the understanding of hearing impairments, will make customers feel more comfortable and reassured and add to their positive experience. This would also help educate other customers about hearing loss. Display design within the store can also help increase the levels of comfort and enjoyment, because if hearing aids are displayed more like jewellery, it could help boost the body confidence of the demographic and also change the perception of the hearing aid stereotype.

[9]

Primary research

My research consists of conducting three interviews with people within the demographic of 16-30 and they had to be a hearing aid wearer. They were asked carefully considered questions all under their consent and knowing no personal information would be shared in the research. The questions outlined five main aspects of the paper which I wanted to explore. These were:

- Experience
- Product display
- Service
- Hearing aid design
- Future

These aspects were covered through 11 questions (see figure 4)

ຊາ - Are you con	nfortable with me asking your age? If yes, how old are you?
22 - How long h	ave you been wearing a hearing aid?
	scribe how your first experience was when getting a hearing aid? ie. The environment, how the service was.
24 - How has yo	ur experience in obtaining a hearing aid changed or improved over time?
	u think of hearing aid product display in shops, if you have been in one? If so, what do be improved in terms of the perception of the product?
	ways purchased/recieved your hearing aid in the same place and where? If yes, why? Is it ze, location, accessibility?
27 - How would	you describe the check-up service in terms of the comfort and quality?
28 - How satisfie	d are you with the design choices for hearing aids at the moment?
completely? If ye	ike the opportunity to be able to customise your hearing aid or even design it s how would you like to do this in a store? It could be a digital interactive experience ouch screens or a more hands on experience, like drawing it and picking out physical
	d you make a hearing aid store space more desirable in the future? Thinking about the and the overall experience of the space.
211 - What woul	d it take to make hearings aids a more desirable accessory in the future (eg. like glasses).



The responses were very varied across the three participants and really helped inform and push the research. There were interesting results, and some responses were quite surprising. Every participant had worn a hearing for as long as they can remember, confirming that hearing losses can start from a young age, it's not just a disability that comes with old age.

Analysis

Experience

Most participants didn't remember their first hearing aid fitting experience; however, most were first fitted at the hospital. One participant described what they could remember as 'quite intimidating'³¹as everyone else in the hospital was 'like 60 or 70'³². This demonstrates how getting a hearing aid at a young age can be quite scary and I think the design of the space could have changed this impact if done correctly and taking into consideration the surrounding environment. One participant received their first hearing aid at school as they went to a 'deaf school'.³³ When the participant left school, they had to use hospital audiology facilities and they were 'shocked by how different it was'³⁴and they 'didn't like it because there was so many old people in the waiting room and then there's me, 16,17,18 year old'³⁵. Again, showing that not enough attention is being given to the younger demographic.

Over time, the experiences when dealing with hearing aids has changed, as there have become more available options and now, at audiology appointments they ask 'what would you like? You can have this option, this option³⁶. This is showing a move more towards what the customer wants, and this is vital if a store is to be successful, as it's all about the consumers wants and needs.

Product Display

The responses to question five are vital in terms of how consumers would want to see the hearing aids displayed and how they find current hearing aid store design. Some of the participants have actually not been in a store or used the audiology facilities, only that they have seen glimpses of them or looked in out of curiosity.

One view sees it as more of a demographical problem as 'they should be normal izing it for people who need hearing aids at a much younger age³⁷ and 'broadening the scope of what the normal person is to get a hearing aid.³⁸ This point of view shows just how much the younger hearing aid community are forgotten about, which pushes the philosophy of hearing aids standing out and how a store can make people more aware of the young hearing loss community.

Another provided a more literal point of view with having been inside a hearing aid store 'because of this interview'³⁹. The store was described as it has been shown in figure 2, 'bland and just had four posters but was just not very appealing at all'," proving just how much the design of the store can affect the atmosphere of the room and how customers respond to the space. Most importantly, 'there were no hearing aids on display'⁴, which completely detracts from the point of a store; the point being that people should be able to look at the product before purchasing and that the display should make the product more desirable. The hearing aid should be a desirable, jewellery like product and have consumers wanting 'to have that opportunity to go yeah I might pay a bit more to have that.⁴²If hearing aids were displayed more in a way like 'WHATEVER Eyewear retail'43 they would be instantly more desirable and would appeal to everyone. The innovative design shown in the glasses store needs to be considered when thinking about the way hearing aids are displayed. How can they be displayed like jewellery, 'kind of like a Pandora shop'⁴⁴ A display which transforms this stereotypical aid to disability to a beautiful desirable accessory.

Service

When thinking about the audiologist experience, there is no room for error. As this is a core feature specifically for the hearing loss community, comfort and ease throughout the experience would be expected, however this is not always the case. A couple of participants described the audiology experience as 'uncomfortable'⁴⁵and 'awful'⁴⁶One experience was particularly unpleasant for a profoundly deaf person, as the audiologist was 'wearing a face mask and I asked for an interpreter but they never came'⁴⁷, linking in with the research that 'employees often avoid talking to them out of discomfort'⁴⁸ This all demonstrates that there is a problem in the way that people with hearing loss are treated so poorly, not only in stores but even in hospitals, and that more action needs to be taken by staff to help create a more comfortable environment. In hospitals it can be dependent on who you are assigned to as, at a different hospital the audiologist didn't make the participant 'feel like I was weird for being profoundly deaf'⁴⁹. This will be crucial when designing a hearing aid store as all consumers with hearing loss need to feel relaxed, comfortable and understood and it should be a place where they can feel like owning a hearing aid is normal.

Hearing aid design

The majority of the participants were not satisfied with the current design choices of hearing aids, they want to have more 'lavish'50 hearing aids that stand out and make them feel 'more confident'⁵¹ and be 'proud'⁵² to be wearing a hearing aid. I think if the hearing aid designs were to become more extravagant, not only would it boost body confidence in young hearing aid wearers, but it would also allow for interesting display design of the products. The displays show the beauty of these intricate products, and accentuate their fragility and style. It will give customers the opportunity to 'look around and be like, yeah, I like the look of that'⁵³ However, on the other hand some participants were not as positive about having 'to educate other people'⁵⁴ and felt it might be better just to keep the hearing aids as something 'to hide'⁵⁵ However, this participant also had contradictory views, as he also said he liked to be proud and 'out' about his hearing aid than hiding it, showing that people's feelings towards their hearing aids might change depending on situations and mood. The philosophy of echo is, 'to be seen not hidden', but this insight does also highlight the need to balance the different requirements and preferences of people in the display design.

All participants said they would love the idea of being able to design their own hearing aids. However, the majority preferred the idea it being a digital interactive process, as they are not creative enough to do it from scratch. They all have personal styles ranging from 'black⁵⁶ to 'flowers and peacocks⁵⁷, this idea would be a great opportunity to really allow people to make their own and build their confidence to wear it. As hearing aids re moving towards Bluetooth technology, the interactive design process could incorporate this, in line with the technology 'digital age⁵⁸ and this can also be featured on surrounding display units. Whilst the digital option would be best, one participant stated that they'd like 'to feel⁵⁹ the hearing aid materials to get an idea of comfort. They would want a 'prescriptive choice of options that I could choose from, but then actually use the hands-on to actually check my comfort level⁶⁰. The materials could be displayed in a way that allows people to feel and understand the comfort, but would also emphasise the desirability, as there could be really interesting and beautiful materials on display.

Future

All participants focused more on the idea of having the store 'deaf friendly' and having staff that were knowledgeable about hearing aids. The majority suggested ways in which the space can be deaf-aware by not having 'loudspeakers'⁶¹ within the store and having people 'that can sign'⁶². Looking back at the secondary research, having staff well versed in sign language would bring reassurance to the space, but this primary research backs up that people with hearing loss genuinely struggle with these problems in stores.

The store should be a place where people can 'trust'⁶³the staff and audiology facilities and, having a level of knowledge that would reassure the customers. But it also needs to be a place of ease and enjoyment, where the hearing aids are seen as desirable and 'not a disability in the same way that glasses are a disability'⁶⁴ it should feel more 'luxurious'⁶⁵. It seems clear that how hearing aids are displayed in the store will have an important impact on their desirability, with the use of screens with 'young people wearing the hearing aids'⁶⁶helping to make the product seem more attractive and appealing, in the same way that glasses have been deemed fashionable. This take is a further consideration for product display, but definitely steers away from the, dull, clinical Amplifon store design. The hearing aids can be displayed in a desirable way by advertising on screens with maybe 'Louis Vuitton or Dior wearing hearing AIDS on a runway'⁶⁷this would definitely help make hearing aids become more fashionable and desirable.

Hearing aids in the future can become more of a desirable accessory if displayed instore in a way that portrays them as such. All participants suggested ways in which they can become more appealing, such as having 'clip-ons with different designs'⁶⁸giving people the opportunity to choose their daily design and have more than one. This would be a great angle to take when displaying the product in store, as it gives people even greater style options. The future of hearing aids should aspire to the ideals that 'everyone is different'⁶⁹, that the hearing aid is just another accessory and can be something that is proudly worn by everyone. The design of the display plays a key part in demonstrating this, by positioning them in a way that makes them look great for anyone to wear, that it's an accessory or piece of jewellery, and not just an aid to disability that should be hidden and forgotten about.

Overview

The secondary and primary research combine together to demonstrate the flaws with current hearing aid store design, to show what is wrong with the experience of people with hearing loss in these environments, and also how the aesthetic aspect of display design for hearing aids is non-existent. They also both demonstrate how the future for hearing aid design could evolve, and how hearing aid store design and display design could evolve with it. It explores different points of view about the hearing aid industry (from purely functional and medical to jewellery/fashion accessory), but then it also looks first-hand at how hearing aid users see the industry as it is now, to what it could be in the future, with some enthusiastic opinions on how hearing aid store design can and needs to progress.



Conclusion

To conclude, this paper has fully investigated how hearing aids can be displayed in a way that makes them more appealing and attractive. I have found that in order to make the product desirable, it has to be displayed in a way that addresses individual tastes and personal styles. It has to be displayed to show what the future of the hearing aid can be and what this can look like. This could be done by displaying new upcoming designs and screen displays showing 'big brand' models wearing the hearing aids, almost as fashion accessories and by displaying them in such a way that they don't look like functional equipment, but eye-catching accessories/jewellery. This paper also aimed to determine how the experience of the store can enhance the appeal of the product. Ease, comfort, and quality of knowledge in the store is also crucial to the experience. As well as focusing on the design and innovative qualities of the store, it should also consider how customers are treated and proactively thought about in the store. For example, how deaf people would easily communicate with staff and also how to reduce or eliminate certain sounds that may be distracting or unpleasant for people with hearing loss.

Overall, this paper has helped shape and enhance my thinking on how the stereotype of hearing aids can be changed completely through better product design, more thoughtful and innovative display and through a more empathetic approach to consumers with hearing loss. All research will be used accordingly to further benefit the design of my FMP.





References

1 - RNID. 2021. Facts and figures - RNID. [online] Available at: <https://rnid.org. uk/about-us/research-and-policy/facts-and-figures/> [Accessed 9 April 2021]. 2 - Hearingloss.org. 2021. [online] Available at: <https://www.hearingloss.org/ wp-content/uploads/HLAA_HearingLoss_Facts_Statistics.pdf?pdf=FactStats> [Accessed 9 April 2021].

3 - Foundation, H. and Foundation, H., 2021. Breaking Stereotypes: Hearing Loss in the Media — Hearing Health Foundation. [online] Hearing Health Foundation. Available at: https://hearinghealthfoundation.org/blogs/breaking-the-seal-enter-tainment-industry [Accessed 9 April 2021].

4 - Foundation, H. and Foundation, H., 2021. Breaking Stereotypes: Hearing Loss in the Media — Hearing Health Foundation. [online] Hearing Health Foundation. Available at: https://hearinghealthfoundation.org/blogs/breaking-the-seal-enter-tainment-industry [Accessed 9 April 2021].

5 - Iacacoustics.global. 2021. [online] Available at: https://www.iacacoustics.global/audiology-test-rooms/ [Accessed 9 April 2021].

6 - Iacacoustics.global. 2021. [online] Available at: https://www.iacacoustics.global/audiology-test-rooms/ [Accessed 9 April 2021].

7 - Brookes-scs.com. 2021. Case Study - Amplifon. [online] Available at: <https:// www.brookes-scs.com/case-study-page-amplifon> [Accessed 9 April 2021].

8 - Bootshearingcare.com. 2021. The History of Hearing Aids | Boots Hearingcare. [online] Available at: https://www.bootshearingcare.com/hearing/lifestyle/the-his-tory-of-hearing-aids/> [Accessed 9 April 2021].

9 - Bootshearingcare.com. 2021. The History of Hearing Aids | Boots Hearingcare. [online] Available at: https://www.bootshearingcare.com/hearing/lifestyle/the-his-tory-of-hearing-aids/> [Accessed 9 April 2021].

10 - Allaire, C., 2021. A New Jewelry Collaboration Celebrates the Deaf and Hard of Hearing Communities. [online] Vogue. Available at: https://www.vogue.com/article/private-policy-chella-man-jewelry-collab-deaf-community [Accessed 9 April 2021].

11 - Allaire, C., 2021. A New Jewelry Collaboration Celebrates the Deaf and Hard of Hearing Communities. [online] Vogue. Available at: https://www.vogue.com/article/private-policy-chella-man-jewelry-collab-deaf-community [Accessed 9 April 2021].

12 - Allaire, C., 2021. A New Jewelry Collaboration Celebrates the Deaf and Hard of Hearing Communities. [online] Vogue. Available at: https://www.vogue.com/article/private-policy-chella-man-jewelry-collab-deaf-community [Accessed 9 April 2021].

13 - Architizer. 2021. HEARING CENTER -Hearing Aid Store by T&T ARCHI-TECTS. [online] Available at: https://architizer.com/projects/hearing-center-hearing-aid-store/ [Accessed 9 April 2021].

14 - Architizer. 2021. HEARING CENTER -Hearing Aid Store by T&T ARCHI-TECTS. [online] Available at: https://architizer.com/projects/hearing-center-hearing-aid-store/ [Accessed 9 April 2021].

15 - Architizer. 2021. HEARING CENTER -Hearing Aid Store by T&T ARCHI-TECTS. [online] Available at: https://architizer.com/projects/hearing-center-hearing-aid-store/ [Accessed 9 April 2021].

16 - Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 9 April 2021].

17 - Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 9 April 2021].

18 - Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 9 April 2021].

19 - urdesignmag. 2021. Whatever Eyewear Store, Shanghai, China / Roomoo — urdesignmag. [online] Available at: https://www.urdesignmag.com/life-style/2019/06/24/whatever-eyewear-store-shanghai-roomoo/ [Accessed 9 April 2021].

20 - Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 9 April 2021].

21 - urdesignmag. 2021. Whatever Eyewear Store, Shanghai, China / Roomoo — urdesignmag. [online] Available at: https://www.urdesignmag.com/life-style/2019/06/24/whatever-eyewear-store-shanghai-roomoo/ [Accessed 9 April 2021].

22 - Hearingplanet.com. 2021. Why Today's Hearing Aids Are Technological Wonders | Hear What Matters. [online] Available at: <https://www.hearingplanet. com/en/find-a-clinic/hear-what-matters/not-your-grandfathers-hearing-aids.html> [Accessed 9 April 2021].

23 - Backstrom, K. and Johansson, U., 2006. Creating and consuming experiences in retail store environments: Comparing retailer and consumer perspectives. Journal of Retailing and Consumer Services, [online] 13(6), pp.417-430. Available at: https://www.sciencedirect.com/science/article/pii/S0969698906000154 [Accessed 9 April 2021].

24 - Backstrom, K. and Johansson, U., 2006. Creating and consuming experiences in retail store environments: Comparing retailer and consumer perspectives. Journal of Retailing and Consumer Services, [online] 13(6), pp.417-430. Available at: https://www.sciencedirect.com/science/article/pii/S0969698906000154 [Accessed 9 April 2021].

25 - Backstrom, K. and Johansson, U., 2006. Creating and consuming experiences in retail store environments: Comparing retailer and consumer perspectives. Journal of Retailing and Consumer Services, [online] 13(6), pp.417-430. Available at: https://www.sciencedirect.com/science/article/pii/S0969698906000154 [Accessed 9 April 2021].

26 - Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/article/pii/S0969698918302522> [Accessed 9 April 2021].

27 - Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/article/pii/S0969698918302522> [Accessed 9 April 2021].

28 - Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/article/pii/S0969698918302522> [Accessed 9 April 2021].

29 - Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/article/pii/S0969698918302522> [Accessed 9 April 2021].

30 – Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/article/pii/S0969698918302522> [Accessed 9 April 2021].

- 31 Kelly, L. (2021). Interview one.
- 32 Kelly, L. (2021). Interview one.
- 33 Kelly, L. (2021). Interview two.
- 34 Kelly, L. (2021). Interview two.
- 35 Kelly, L. (2021). Interview two.
- 36 Kelly, L. (2021). Interview one.
- 37 Kelly, L. (2021). Interview one.
- 38 Kelly, L. (2021). Interview one.
- 39 Kelly, L. (2021). Interview two.
- 40 Kelly, L. (2021). Interview two.
- 41- Kelly, L. (2021). Interview two.
- 42 Kelly, L. (2021). Interview two.

43 –Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 9 April 2021].

- 44 Kelly, L. (2021). Interview two.
- 45 Kelly, L. (2021). Interview one.
- 46 Kelly, L. (2021). Interview two.
- 47 Kelly, L. (2021). Interview two.

48 – Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/article/pii/S0969698918302522> [Accessed 9 April 2021].

- 49 Kelly, L. (2021). Interview two.
- 50 Kelly, L. (2021). Interview one.
- 51 Kelly, L. (2021). Interview two.
- 52 Kelly, L. (2021). Interview one.
- 53 Kelly, L. (2021). Interview two.
- 54 Kelly, L. (2021). Interview one.
- 55 Kelly, L. (2021). Interview one.
- 56 Kelly, L. (2021). Interview three.
- 57 Kelly, L. (2021). Interview two.

58 – Bootshearingcare.com. 2021. The History of Hearing Aids | Boots Hearingcare. [online] Available at: https://www.bootshearingcare.com/hearing/lifestyle/ the-history-of-hearing-aids/> [Accessed 9 April 2021].

- 59 Kelly, L. (2021). Interview one.
- 60 Kelly, L. (2021). Interview one.
- 61 Kelly, L. (2021). Interview three.
- 62 Kelly, L. (2021). Interview two.
- 63 Kelly, L. (2021). Interview one.
- 64 Kelly, L. (2021). Interview one.
- 65 Kelly, L. (2021). Interview two.
- 66 Kelly, L. (2021). Interview two.
- 67 Kelly, L. (2021). Interview one.
- 68 Kelly, L. (2021). Interview two.
- 69 Kelly, L. (2021). Interview one.

Bibliography

Websites:

• Hearingloss.org. 2021. [online] Available at: <https://www.hearingloss.org/ wp-content/uploads/HLAA_HearingLoss_Facts_Statistics.pdf> [Accessed 9 April 2021].

• Who.int. 2021. Deafness and hearing loss. [online] Available at: <https:// www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss> [Accessed 9 April 2021].

• It's a Noisy Planet. Protect Their Hearing. 2021. NIH-Supported Researchers Find Stable Numbers of U.S. Teens with Signs of Noise-Induced Hearing Loss. [online] Available at: https://www.noisyplanet.nidcd.nih.gov/have-you-heard/stable-numbers-teen-hearing-loss> [Accessed 9 April 2021].

• Hearing Review. 2021. More Teens Showing Potential Signs of Hearing Loss. [online] Available at: [Accessed 9 April 2021].

• RNID. 2021. Facts and figures - RNID. [online] Available at: <https://rnid. org.uk/about-us/research-and-policy/facts-and-figures/> [Accessed 9 April 2021].

• lacacoustics.global. 2021. [online] Available at: <https://www.iacacoustics.global/audiology-test-rooms/> [Accessed 9 April 2021].

• Bootshearingcare.com. 2021. The History of Hearing Aids | Boots Hearingcare. [online] Available at: <https://www.bootshearingcare.com/hearing/lifestyle/ the-history-of-hearing-aids/> [Accessed 9 April 2021].

• Architizer. 2021. HEARING CENTER -Hearing Aid Store by T&T ARCHI-TECTS. [online] Available at: https://architizer.com/projects/hearing-center-hearing-aid-store/ [Accessed 9 April 2021].

• Hearingplanet.com. 2021. Why Today's Hearing Aids Are Technological Wonders | Hear What Matters. [online] Available at: <https://www.hearingplanet. com/en/find-a-clinic/hear-what-matters/not-your-grandfathers-hearing-aids.html> [Accessed 9 April 2021].

• www.hearingaiddoctors.com. 2021. Smaller & Smarter: How Technology Has Improved Hearing Aids. [online] Available at: https://www.hearingaiddoctors.com/news/smaller-smarter-how-technology-has-improved-hearing-aids-1562348743874.html [Accessed 9 April 2021].

• TruHearing. 2021. The Pros and Cons of Invisible Hearing Aids - TruHearing. [online] Available at: https://www.truhearing.com/more-resources/the-prosand-cons-of-invisible-hearing-aids/> [Accessed 9 April 2021].

• Bluelettrico, S., 2021. Bespoke design of soundproofed audiometric rooms for audiology. [online] Pumasrl.it. Available at: https://www.pumasrl.it/6498/38682/design-your-soundproof-audiometric-room-custom-insulation-mate-rials.php> [Accessed 9 April 2021].

Articles:

• Entrepreneur. 2021. The Art and Science of Retail Displays. [online] Available at: https://www.entrepreneur.com/article/78992> [Accessed 9 April 2021].

• Foundation, H. and Foundation, H., 2021. Breaking Stereotypes: Hearing Loss in the Media — Hearing Health Foundation. [online] Hearing Health Foundation. Available at: https://hearinghealthfoundation.org/blogs/break-ing-the-seal-entertainment-industry> [Accessed 9 April 2021].

• Allaire, C., 2021. A New Jewelry Collaboration Celebrates the Deaf and Hard of Hearing Communities. [online] Vogue. Available at: https://www.vogue.com/article/private-policy-chella-man-jewelry-collab-deaf-community [Accessed 9 April 2021]. Journals:

• Edwards, K., Rosenbaum, M., Brosdahl, D. and Hughes, P., 2018. Designing retail spaces for inclusion. Journal of Retailing and Consumer Services, [online] 44, pp.182-190. Available at: https://www.sciencedirect.com/science/ article/pii/S0969698918302522> [Accessed 9 April 2021].

• Backstrom, K. and Johansson, U., 2006. Creating and consuming experiences in retail store environments: Comparing retailer and consumer perspectives. Journal of Retailing and Consumer Services, [online] 13(6), pp.417-430. Available at: https://www.sciencedirect.com/science/article/pii/S0969698906000154> [Accessed 9 April 2021].

Case studies:

• Brookes-scs.com. 2021. Case Study - Amplifon. [online] Available at: https://www.brookes-scs.com/case-study-page-amplifon [Accessed 9 April 2021].

Magazines:

• urdesignmag. 2021. Whatever Eyewear Store, Shanghai, China / Roomoo — urdesignmag. [online] Available at: <https://www.urdesignmag.com/lifestyle/2019/06/24/whatever-eyewear-store-shanghai-roomoo/> [Accessed 9 April 2021].

• Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 9 April 2021].

Books:

• Wang, S., 2011. Curated. Barcelona: Promopress.

Figure references

Figure 1 - lacacoustics.global. 2021. [online] Available at: https://www.iacacoustics.global/audiology-test-rooms/ [Accessed 9 April 2021].

Figure 2 - Brookes-scs.com. 2021. Case Study - Amplifon. [online] Available at: https://www.brookes-scs.com/case-study-page-amplifon [Accessed 9 April 2021].

Figure 3 - Architizer. 2021. HEARING CENTER -Hearing Aid Store by T&T ARCHI-TECTS. [online] Available at: https://architizer.com/projects/hearing-center-hearing-aid-store/ [Accessed 9 April 2021].

Figure 4 – Kelly, L. (2021). Interview questions table. [image]

Image references

Image 1 - Fandd.studio. 2021. hearring — FandD — Creative Duo. [online] Available at: https://fandd.studio/hearring [Accessed 17 April 2021].

Image 2 - Fandd.studio. 2021. hearring — FandD — Creative Duo. [online] Available at: https://fandd.studio/hearring [Accessed 17 April 2021].

Image 3 - Allaire, C., 2021. A New Jewelry Collaboration Celebrates the Deaf and Hard of Hearing Communities. [online] Vogue. Available at: https://www.vogue.com/article/private-policy-chella-man-jewelry-collab-deaf-community [Accessed 11 April 2021].

Image 4 - Allaire, C., 2021. A New Jewelry Collaboration Celebrates the Deaf and Hard of Hearing Communities. [online] Vogue. Available at: https://www.vogue.com/article/private-policy-chella-man-jewelry-collab-deaf-community [Accessed 11 April 2021].

Image 5 - Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 11 April 2021].

Image 6 - Frameweb.com. 2021. WHATEVER Eyewear Retail. [online] Available at: https://www.frameweb.com/project/whatever-eyewear-retail [Accessed 11 April 2021].

Image 7 - Frameweb.com. 2021. Radius 58. [online] Available at: <https://www. frameweb.com/project/radius-58> [Accessed 11 April 2021].

Image 8 - Frameweb.com. 2021. Radius 58. [online] Available at: https://www.frameweb.com/project/radius-58> [Accessed 11 April 2021].

Image 9 - Frameweb.com. 2021. Small retail spaces shouldn't limit creativity, shows this Beijing jewellery store. [online] Available at: https://www.frameweb.com/article/small-retail-spaces-shouldnt-limit-creativity-shows-this-beijing-jewel-lery-store> [Accessed 11 April 2021].

Image 10 - Frameweb.com. 2021. Pandora Shine. [online] Available at: <https:// www.frameweb.com/project/pandora-shine> [Accessed 11 April 2021]. Image 11 - Frameweb.com. 2021. Âme Jewelry. [online] Available at: <https://

www.frameweb.com/project/ame-jewelry> [Accessed 11 April 2021].

Image 12 - Frameweb.com. 2021. Âme Jewelry. [online] Available at: <https:// www.frameweb.com/project/ame-jewelry> [Accessed 11 April 2021].

Image 13 - Retaildesignblog.net. 2021. » Freudenhaus Eyewear Store by Aigner Architecture, Munich. [online] Available at: https://retaildesignblog. net/2011/08/15/freudenhaus-eyewear-store-by-aigner-architecture-munich/> [Accessed 11 April 2021].

Image 14 - Retaildesignblog.net. 2021. » Freudenhaus Eyewear Store by Aigner Architecture, Munich. [online] Available at: https://retaildesignblog. net/2011/08/15/freudenhaus-eyewear-store-by-aigner-architecture-munich/ [Accessed 11 April 2021].

Appendix

Interview one:

Interviewer (00:00): Okay. Are you okay with me asking your age?

Interviewee (00:04): Yes, I am 25.

Interviewer (00:07): Okay. how long have you been wearing A hearing aid?

Interviewee (00:13):

For as long as I can remember. So I I'd say 24 or 25 years.

Interviewer (00:19):

Yeah. So basically all your life. Yeah. Can you describe how your first experience was when getting a hearing aid? So like the environment, how you felt and how the service was.

Interviewee (00:36):

I can't remember my first time ever getting one, but then I definitely remember the hospital. It may be like year three and year four and having a check-up because I was growing as a kid anyway, so I had to get hearing aids that would fit my ears. And then especially when you go to the hospital and you as a patient at nine years old, and everybody else there is like 60 or 70 it's quite a, it was quite intimidating, but after a while it just becomes the usual thing for me. And I think more what I remember is the perception of other people when I got them, I don't really remember getting my hearing aid, but I remember being in kind of like year three or year two and people would ask me, Oh, what are they, why do you have them? And then that's kind of the memory that Id most have with early hearing aid having them.

Interviewer (02:02):

Yeah. That's great. Thank you. How has your experience in obtaining a hearing aid changed or improved over time?

Interviewee (02:14):

I think now, yeah, even kind of within my lifetime, I've seen a lot more variety and choice within the NHS, which you'd expect to be very prescriptive. And almost that I just have to say yes, I'm happy with a free hearing aid Give me whatever you offer. Well now that means they ask me more, what would you like? You can have this option, this option. And I think more of it, I just tend to be more and again, I don't know because my world, back when I was younger, where I liked school in Birmingham and I did didn't interact with that many people, well now I kind of at my world and meeting more people that got bigger, they just tend to be a lot more acceptance and knowledge about hearing aids about anything, different from what you've just been brought up as, being in a very kind of secluded isolated, well, not isolated, but just your very own, like when you're like 11, your whole world is your school and your home, whereas now that your world gets bigger. The more people you meet, the more kind of just acceptance and variety there is in all shapes and forms.

Interviewer (03:45):

Yeah. Okay. Thank you. What do you think of hearing aid product display in shops?

Interviewer (04:00):

What do you think of hearing aid product display in shops if you've been in one, how do you think they could be improved in terms of the perception of the product?

Interviewee (04:17):

I think, Yeah. I think for me, when I go into a shop and I see an advert for a hearing aid, it's always typically a 70 year old white woman who, who looks quite frail quite, she needs a lot of help. And I think part of me is kind of like, surely they should be normalizing it for people who need hearing aids at a much younger age. Yeah, just kind of broadening the scope of what the normal person is to get a hearing aid. But on the other hand, I feel like there is a stigma attached to it. Even within that, there's that kind of stereotypical person who gets them, so that 50, 70 year old woman or man. They don't want to be a weak, they don't want to acknowledge they're getting older, but feel like they also need it to be normalized for them as well to make it feel like, okay, I see a person that looks like me having a hearing aid. It's okay for me to get one. So yeah, I'm trying to put my individual aspect. I'm like, where are the 20 year old's with hearing aids being advertised, but I feel like kind of more generalized, I don't know the aspect that well, it makes sense from a profit perspective, why they're targeting people of that cohort, but also at the same time, I feel like that cohort also needed be accented and normalized for them just as much as I do me.

Interviewer (06:15):

Yeah. Have you always purchased or received your hearing aid in the same place and where, if yes. Was it like the quality of service, location or accessibility?

Interviewee (06:31):

So, the NHS in the same hospital in Birmingham I received it and yeah, and then I think for me a big part of it is I wouldn't really trust, I don't know. I just expect the NHS quality to be much better, they don't have any motivation other than just providing, like helping me while I feel like with a private, they have a motivation in that I'm paying money. So if it breaks easily, if I lose it, then they get more money. Yeah, I just always try and go to the NHS, no matter how long of a wait it. And also, yeah, I'm more comfortable with it. They know me, they got all my records. I know what the procedure is like. yeah, but there's also that element of I trust the NHS more than I trust Specsavers.

Interviewer (07:36):

Yeah. How would you describe the check-up service in terms of like the comfort and quality?

Interviewee (07:48):

I feel, yeah. I don't know because it's always, never describe it as comfortable. I always say, Hey, yeah. And again, it's just what I'm used to, so, but I'd say there is an element of it that not, I say, yeah, it's like in the middle, but more on the uncomfortable side, but the quality is always, as far as I'm aware, like it's not my specialist subject so I don't have really much knowledge of how hearing aids are built or made. So yeah, as far as I know the quality a hundred percent, but the comfort level. It definitely. Yeah. And then sometimes I, when they do it actually hurts like it presses on your skull and then I get why, but yeah.

Interviewer (08:44):

Okay. Thank you. How satisfied are you with the design choices for hearing AIDS at the moment

Interviewee (08:56):

I think I am satisfied, but I, I feel like for me to mind, like I have two opinions about my hearing aid which contradict each other. On one hand there's a part of me that's very much tired of having to come out, as it were, like I have to come out for my sexuality. And then I also have to come out in a way for my disability. And then, so there's a part of me that just like, Oh, I wish I, there's a part of me that wants to wear the most lavish hearing aid, the most bright and colorful and be like F-you to the world. And like I am disabled and I'm proud of it. And like, and then it's an education lesson to people for them to realize that not everybody is like them. And that for the people that do have to go through difficulties and a part of me worries, like, if people see me on the street, they could think that I'm a straight white male who like, I am fairly privileged, but I do have parts of me that aren't so privileged.

Interviewee (10:10):

And so I want to make the people aware that, Oh, no, I'm not like you and kind of put myself out there so that other people who are othered as well can feel more comfortable around me. But on the other hand, I just want to live my life and not have to educate other people and just be like, Oh, I just can't be arsed sometimes Like if people see my hearing aid, then ask me questions about it. I'm just like, it's not an education lesson. I'm just trying to live my life. And you're just trying to learn something off me. So there's the part of me that's just like, Oh, I wish there were like, not visible at all and you could just hide them and then it worked fine. So yeah, there's two sides of me and then I'm probably more unsure of the side of wanting to hide it more than I do, being out and proud as it were.

Interviewee (11:19):

And then, yeah. And then, so, because I tend to think of it more than trying to hide it, I don't think about the design option, because I'm like, Oh, okay. As long as it's the least visible as possible, then the most optimal hearing aid solution for me. So, I used to have moulds which at my year for growing they helped them fit a lot more. Whereas now I have kind of like just a little tube and it is a bit uncomfortable, but it is less visible. So it's kind of a kind of conscious decision of me to decide that, Oh, okay. I want less visible. So if it means a little more pain, a little more annoying then yeah. I'll go with that. And yeah. And then in terms of design and then that's a thing as well, because I don't think about it. I don't know, what options are out there. So, so if there was kind of an option that I don't know about, but then id actually like then, but it just, I, I don't educate myself probably on it and there is not that much education out there. At least in the NHS. I feel like the NHS could be more kind of minimal in its design choices as well, but yeah.

Interviewer (12:50):

Yeah. It's quite a two-sided opinion on it. Would you like the opportunity to be able to customize your hearing aid or even design it completely? If yes. How would you like to do this in a store? It could be a digital interactive experience through a digital touch screen or a more hands-on experience, so like drawing the design and then picking out the materials and things like that?

Interviewee (13:21):

I think for me, that's a good question. I think for me, I think I'd be interested in designing it purely to see what I could do I think for me I'd have to more digital. Like I'm not a super creative person and I know that, so I feel like an option in a list for me and I'd be like, Oh, okay, let's try that. Let's try that. I think that would work a lot better for my particular personality type. But then, yeah, but yeah, I think, I feel like if I had too much choice and I could try it, hands-on, I'd be like, okay, Whoa, I've literally actually, but then actually yeh, but then I'd probably like to feel it, to get the comfort and all that. So I feel like maybe if there was a prescriptive choice of options that I could choose from, but then actually use the hands-on to actually check my comfort level.

Interviewer (14:39):

Yeah. That's very helpful. How would you make a hearing aid store space more desirable in the future? Like thinking about the comfort, service and just the overall experience of the space?

Interviewee (14:57):

Well, I feel like for me the most important thing is that level of trust in that I am getting the quality and service that I desire. So I feel like, I feel like it should be treated like an optician based on that it has to have that clinical medical edge to it almost, that makes you trust and I feel like there is an element of it where it almost has to seem like too specialized for your knowledge in a way, like when you go to an optician and you're like, okay, these guys know there stuff, they are much more knowledgeable than me in this subject. They know what's good for me, I'll probably go with what they say. It's very clinical, very medical it's an environment I'm not too used to, but I've had kind of good outcome relating to my health in similar environment, like this before. So therefore it has that implicit trust straight away.

Interviewee (16:10):

And I feel like the environment has to provide that, but then the service has to be the link to the human element where it's kind of like, I like this person I trust this person, they have the right motivations for me. Cause like, like what I was saying at the start, they will do what right for me. And then, yeah, I feel like also like an optician it has to be shown as include like, because when you think of glasses, you don't think of disability, you think, Oh, people just wear them. And so I feel like hearing aid it has to still make that leap to some way, and then I feel like the best way to do that is really show, like, I know it's very kind of cliche and very basic, but to just show different people in different environments wearing them and then just in adverts in the shop.

Interviewee (17:17):

Yeah, I feel like I never, it's not very good, but I feel like that's the kind of baby step into kind of, again, normalising, I think for a lot of people seeing themselves reflected in a person wearing them and just be like, Oh, okay, it's not, well, it's not a disability in the same way that glasses are a disability. Or it's kind of like people wearing glasses are disabled, but we don't think that, so it kind of just had to be kind a equalizing and then, yeah. And then I don't know how people made glasses into this kind of cool, fashionable, desirable, but maybe, and actually, yeah, maybe if you kind of got like, Louis Vuitton or Dior wearing hearing AIDS on a runway, they certainly would become this fashion accessory.

Interviewer (18:16):

Yeah, definitely. The last question you kind of touched into a bit on that last one. What would it take to make hearing AIDS a more desirable accessory in the future? So like glasses. Yeah.

Interviewee (18:29):

Yeah. yeah. And then it just, I think, yeah, it just seeing people reflected in them, but seeing people that are like you and then I think it's always, a common thing is no one thinks they'll be old. No one thinks they'll be deaf in the future. And then seeing those adverts, Yeah. Do well, like help normalize it for those older, for the older generation who don't want to feel weak or like they are disabled, but I feel like, yeah, they just have to be some form of desirability in there. And then the only way I can think of desirability is, if like what I feel old saying this, but if you got like cool people on Tik TOK or like fashion designers wearing them.

Interviewee (19:35):

I don't think, I think the younger generation now, well like me hopefully at 25 are definitely more conscious of, you know, not everybody is the same, not everybody, everybody is different. And then so, you know, like it just, cause it kind of surprises me that so many people need glasses and then so it made me think that, okay, maybe there is just a lot of people out there who do need hearing AIDS, but they've only got a mild hearing loss and actually they can cope fine without it, like I'm moderate hearing loss, I usually don't wear my hearing aid except only at work. And so, indication piece though around, Oh, you might be able to hear fine. Like you might be able to cope fine, but have you struggled hearing the doorbell or like hearing the phone ring and then like just trying to get those mild cases because I'd be interested to see actually yeah, just how much, how many people wear hearing aids are mild or severely deaf. And then you're like, Oh, they're the people that really need it, but then the mild cases, I actually could benefit from it. They just go unnoticed because It's not on their radar, no one talks to them about it. They don't see other people wearing them. They can cop fine. so yeah, just, education that yeah. Two parts education and desirability. Yeah.

Interviewer (21:18): Okay. Thank you. This was all very helpful.

Interview Two:

Interviewer:

Hi, lets get started. Are you okay with me asking your age?

Interviewee: I'm 37

Interviewer:

How long have you been wearing a hearing aid?

Interviewee:

I think I was 2 and half years old, that's because I was diagnosed later because my mum put it down as learning difficulties, not realising that I was actually profoundly deaf.

Interviewer:

Can you describe how your first experience was when getting a hearing aid? Ie. The environment, how you felt and how the service was.

Interviewee:

I can't remember by first time, but I went to a deaf school and I remember not being able to understand what everybody was saying, but I thought it was just part of it, that everyone was the same, I didn't understand if what supposed to be like that. But when it was sussed out, I began to wear my hearing aid all the time, I didn't like it when I had to take it off, I was very dependant on my hearing aid. I had two but now I have a cochlear implant. But because I had my hearing aid fitted when I was in school, when I left school I was quite shocked by how different it was, I had to go to the hospital to sort out my hearing aid and I didn't like that because there was so many old people in the waiting room and then there's me, 16,17,18 year old sat there. But now when I go there's more people with mild hearing loss rather than people with complete deafness. It's very annoying when they call out your name, they don't have a way of letting you know when it's your turn to go into the wing and there is not interpreters, no sign language and they always seem to be asking me questions. But yeah, I don't like going to the hospital, you have to pay for parking and it's guite far from the hospital. For me, I'd much rather just go into the shops.

Interviewer:

How has your experience in obtaining a hearing aid changed or improved over time?

Interviewee:

Ah that's the thing, because I've actually lost my hearing 15 years ago, so I've stopped wearing my hearing aid as much, I wasn't getting any benefit out of it. But now I've got my new hearing aid and it's actually too loud for me. So I have to go back to the hospital to sort it out, but I've stopped wearing it because it's too loud. But for me growing up using a hearing aid, I got full benefit from them, I never actually needed the cochlear implant. I realised that two hearing aids was not good enough, so I thought the cochlear implant might help, but when I had it done it was the same as having two hearing aids. My expectation was too high, I thought it would be magic, but it was just the same.

Interviewer:

Okay thank you. What do you think of hearing aid display in shops, if you have been in one? If so, what do you think could be improved in terms of the perception of the product?

Interviewee:

I walked past one on my way to the dentist and I thought because of this interview I would take a look. It was open but appointment only. But I thought I'd go in and have a look because no one was there. It was just an empty room with a reception desk, I think you could go behind the back to get to the audiology room. I was looking round and thinking, right, I can see why you're doing this project because it was very bland and just had four posters but was just not very appealing at all. There were no hearing aids on display, there was just a poster and a computer.

Interviewer:

Yes, they are very boring designs.

Interviewee:

But I like how I can just walk in, so if I have a problem with my hearing aid, I can just go in and get it sorted out.

Interviewer:

Thankyou. Have you always purchased/received your hearing aid in the same place and where? If yes, why? IS it the quality, service, location or accessibility?

Interviewee:

School, and then the hospital, always been the hospital but different ones and the experience has always been the same. They are not concerned for deaf people, the young people especially.

Interviewer:

Okay, thank you. How would you describe the check-up service in terms of the comfort and quality?

Interviewee:

I went to hospital last august to get this hearing aid, the service was just awful, the person was wearing a face mask and I asked for an interpreter but they never came. She didn't know anything about it. I asked if she could move her face mask down, she said no we are not allowed to do that, so she wrote everything down because she refused to remove her mask down and they don't have any clear masks. And she was acting more like, me accusing her for wearing the mask. But I was lucky because I moved, and I was referred to Winchester so I don't have to go to the other hospital. But I lost my hearing aid just before Christmas and I was in a right panic, I phoned Winchester three times asking if I can be seen urgently and they emailed me later with the appointment, so I went and the woman there was so helpful, she put her mask down and went to find a clear mask and was calming me down because I was crying because I couldn't bear the thought of not being able to hear my parents over Christmas, but she was very nice and gave me a temporary hearing aid and I was very grateful. So I think it's just dependant on who you get, she didn't make me feel like I was weird for being profoundly deaf.

Interviewer:

Yeah, thank you, that was very helpful. Okay, Question eight, How satisfied are you with the design choices for hearing aids at the moment?

Interviewee:

I want to be able to have one that's updated.

Interviewer:

Yeah, I have my hearing aid and it's not nice.

Interviewee:

My hearing aid has a dodgy centre and the ear mould needs changing and I have to wait four weeks for the ear mould, so I have to keep going to the hospital for a new ear mould. I can understand going to the hospital for a proper audiology hearing test, but for things like batteries, new tubes and new ear moulds, it would be good to just have a place where I can go to just pick it up. And I want to have different designs, I don't get any choice.

Interviewer:

Thank you.

Interviewee:

Do you know if we are able to have different designs?

Interviewer:

I think at the moment it is still quite limited. There are designers currently starting to make hearing aid accessories, things like making jewellery. Young designers are starting to create these like works of art hearing aids, so yeah, people are starting to become more aware of the design, I think it just needs to be pushed more.

Interviewee:

I would like that idea of going into the shop and having a look around and be like, yeah I like the look of that.

Interviewer:

Okay, Question nine. Would you like the opportunity to be able to customise your hearing aid or even design it completely? If yes how would you like to do this in a store? It could be a digital interactive experience through a digital touch screen or a more hands-on experience, like drawing it and picking out physical materials.

Interviewee:

Oh wow, I'm quite creative, I've got loads of art stuff around there. But I like the idea of having flowers and peacocks that kind of thing. Having my own design, that would be amazing. And it would make me more confident about showing my hearing aid because a lot of the time I have my hair down, but for me yeah, I'd quite like to have my own personality, because I can it through my shoes, my phone case but I can't put it on my hearing aids. I can show it on my glasses as well, but it depends on what designs there are out there, whether I choose from that or create my own, I think for me I'd like to have mine purple or pick. Because children, they get to have different colours and I'm like why can't they have that for adults. But yeah, I would like to be able to go somewhere where I can choose the design, design my hearing aid and do something interactive, it would make me more confident.

Interviewer:

Question 10, How would you make a hearing aid store space more desirable in the future? Thinking about the comfort, service and the overall experience of the space.

Interviewee:

Number one, have somebody there that can sign, that would be essential. But I would want it to be somewhere where you can go in and get excited by the hearing aid, maybe having them in glass boxes would make it feel more luxurious, I would like to see posters of younger people or point in the store where you can meet other young people with hearing loss. Maybe have events and make a bigger thing out of it. And maybe have white walls to make it a bit more modern. And then if I wanted to, if I had the money, I want to have that opportunity to go yeah I might pay a bit more to have that. But right now I don't have that opportunity.

Interviewer:

Thank you, okay last question.

Interviewee:

Oh also, I would like to have that area In a shop where you can sit down and have tea or coffee and just have a nice area where you can wait.

Interviewer:

Yeah, definitely, I'm planning on having a smoothie bar in the space

Interviewee:

Maybe as well you could have an Ipad to look through the hearing aid designs whilst you're waiting. There could also be more examples of young people wearing the hearing aids on screens to make the hearing aids seem more desirable.

Interviewer:

Yeah, definitely, okay so last question. What would it take to make hearing aids a more desirable accessory in the future (eg. Like glasses)?

Interviewee:

Um like my glasses, if had the chance I would want to have matching hearing aids to go with it. And maybe have clip-ons with different designs. Because if I had that with the hearing aid I could choose. I can't really think of anything else. I just want to be able to walk into a shop and choose my hearing aid, have it kind of like a Pandora shop.

Interviewer:

Yeah, thank you, that was all really good and really helpful. Yeah, it gave me a different perspective on it.

Interview three: This participant answered the questions over email as they were unable to attend a face-to-face interview.

Q.1 – I am 30

Q.2 – I have been wearing hearing-aids since I was diagnosed as profoundly deaf at the age of 2.5

Q.3 – Unfortunately I cannot explain this as I was too young to remember this experience but apparently, I adapted to wearing my hearing-aids very well and got used to them more or less straight away.

Q.4 – I have always gone with my Mum to the audiology appointments until I was about 18 years old when I was transferred to the Adult Services and then started going by myself. This was a difficult experience sometimes because none of the Audiology Staff are deaf aware at all (I have lived in Blackpool from the age of 13 to 28 before I moved to Birmingham) and it's the same experiences in both Audiology Depts. In all of my audiology appointments, I have to continually remind the staff to face me as I need to lip-read etc, and not to talk when I have my hearing-aids out. Over the years, I have had several types of hearing-aids and in the last 5 years I have been asked whether I would consider in having cochlear implant. I have never been interested and sometimes I feel bit pushed to consider in having one.

Q.5 – I have not really seen a hearing aid display in the shops, as I have always got mine from NHS Audiology.

Q.6 – Same as above, I always have my hearing aids are from NHS Audiology. Q.7 – I do sometimes have a check-up appointment after having new updated hearing-aids, but in the case where I do not have a follow up appointment, I was told to contact them if I have any issues. The follow up service is fine, no real issues.

Q.8 – I think the design choices for hearing-aids are good and I love when NHS offer different colour or pictures in the mould impressions!

Q.9 – It would be great to be able to design my own hearing aids, as I have had one hearing aid that was supplied from NHS about 5 years ago and it was my favourite style and colour (black) but I have had to update it since which I was gutted about. Would be great to be able to do it via digital interactive experience I think that would be best. I am sure all of the physical materials are quite similar for hearing aids and you can't really have too many different ones.

Q.10 – Better deaf awareness!!! Make it like a private hospital clinic with warm, soft colours and furnishings with like coffee or drinks machine on standby. Have subtitles on TV all of the time and please do not have a loudspeaker announcing which client is next or have a staff member calling out the name as its very difficult to hear.

Q.11 – offering more design choices would be a good start to make hearing aids more fashionable and maybe having well known celebrities modelling them (especially if they have hearing loss or deafness)







