THE 4 QUESTIONS

A framework for creating a new social norm for hearing

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THINK TANK FOR HEARING

Author's Note

Because of the various audiences this publication is intended for I have chosen to keep all the references out of the main text in order to maintain the flow.

However, some readers will be coming from an audiological or clinical background and are therefore less likely to have encountered many of the principles on which the framework is based. This is because they are primarily rooted in disciplines outside of audiology, such as the research surrounding attitudes and attitude change.

For this reason I have referenced extensively for the reader who wishes to explore a subject in more detail or who wishes to know "where the evidence is".

There is in actual fact so much research available that is directly appropriate to hearing care that the challenge has been in deciding what *not* to include in the references. It is hoped that one side-effect of this publication will be to inspire others to begin exploring what hearing care can learn from these "foreign fields", and perhaps in the not too distant future we will see more studies that combine audiology with psychology and social cognition.

In addition to the references, I have also included a number of short essays or observations which didn't really fit the main flow of the text but are no less applicable to the present subject. It is hoped that those who take the effort to read them will find themselves enriched for having done so because they will often demonstrate a perspective that runs counter to inherited wisdom or perhaps confirm an intuition that may have long been suspected but for which few reaslised there was external support for.

You will find both the references and the notes in Appendix 3 beginning on page 75. They are linked to the main text using a standard number notation system.

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INTRODUCTION

A framework for change

You hold in your hands a framework for changing the social norm for hearing.

Whether you are a hearing aid manufacturer, hearing care professional, or an organisation or individual with an interest in hearing healthcare you will know that the *current* social norm results in the majority of people today generally ***avoiding*** hearing care. This publication will explain the steps we must take in order to systematically change this norm to one where people's default inclination is to ***approach*** hearing care.

It centres around four questions that society must be able to correctly answer about hearing before they consider it relevant enough to take action. It's the responsibility of all of us involved with hearing care to use the principles set out within these pages to ensure we are each providing society with the information it needs to answer those four questions correctly.

Social change is a process

Changing the social norm requires a change in people's hearts and minds. This cannot be accomplished with one-off campaigns or product launches – although, as we'll soon see, they each play a vital role in this process of social change when aligned with the principles of the **4 Questions**.

Because changing the social norm *is* a process, and when we see it this way everything we do and say becomes an opportunity to either accelerate or hinder that process, so we must use those opportunities wisely. The **4 Questions** has been specifically formulated to take the guesswork out of moving things in the right direction. With the prevalence of social media spreading information at world-changing speeds, there has never been a better time.

We each have our role to play

Every time one of us puts the principles of the **4 Questions** into practice, it provides the raw ingredients for a person's attitude: their thoughts, feelings and actions. And it's a person's attitude that ultimately tells them whether or not to approach hearing care. Simply put, if they have the right ingredients, they'll have the right attitude so will be more likely to approach.

The more of us who apply these principles, the more quickly we'll see change in the wider social norm.

Making it happen

With this in mind, take a few moments to think of the most influential person you know who is involved with hearing care – even if it's one of your competitors – and pass the **4 Questions** on to them after you've read it yourself, encouraging them to read it too.

After you've done that, draw up a list of all the messages you are currently putting out there into society, remembering to include any future campaigns or communication you have planned.

Finally compare each one of those messages to the principles of the **4 Questions**. Do they match? If they don't, rework your messages until they do.

By each of us systematically working together in this way we will greatly accelerate the process of social change and create the future of hearing care.

So let's begin immediately by looking at the power of social norms.

THE POWER OF SOCIAL NORMS

Social norms guide expected behaviour

People often rely on social norms to guide their attitudes and behaviour.[1] It provides them with instant acceptance within their wider social group and saves them the cognitive effort of having to think through an issue for themselves.[2] It's as if we say to ourselves, "If in doubt, follow the crowd".[3]

At the same time social norms impose attitudes and behaviour on the wider group, so that when an individual deviates from the social norm they are seen at best as a maverick and at worst as an outsider. Hence we are all familiar with sayings such as "Don't rock the boat" and "Don't raise your head above the parapet".

A powerful tool for changing attitudes

Social norms are therefore a very powerful tool for implementing widespread change in attitudes, particularly when the attitudes they are replacing are either harmful or unhelpful[4] – as is the case with society's historical attitudes towards hearing care.

Any social norm for hearing should be guiding individuals towards the ***right*** attitude towards their hearing, and promoting appropriate behaviour – not only for the sake of the individual, but wider society too.

Society and hearing

Society itself gains much from having the hearing of individuals working at its best due to the prevalence of oral communication. Consider how everything from personal interaction, education, business, healthcare and the media take the presence of hearing for granted. So how we hear directly and indirectly affects relationships, personal effectiveness, general wellbeing, accessibility of services, and even a nation's economy through productivity at work.[5]

Social norms and hearing

Therefore the right attitude towards hearing is one that:

> **Encourages an individual to keep their hearing working at its best throughout life, in order to maintain their connection to the world around them, to other people and to the opportunities of life.**

When this is not within an individual's power – either because their hearing range is too limited or non-existent – then it is the responsibility of wider society to provide support or recognition for alternative modes of communication.[6]

THE 4 QUESTIONS: What a social norm for hearing needs to address

Any social norm for hearing needs to give society answers to the following four questions:

Question 1: When should I have my hearing checked?

Question 2: How do I notice a reduction in my hearing range?

Question 3: Who uses hearing technology and is that relevant to me?

Question 4: When should I personally use hearing technology?

A social norm should be such that by taking appropriate action an individual is made to feel *accepted* by society rather than penalised in some way for doing so. Equally, if an individual is unable to take an appropriate action for reasons outside of their control then society needs to demonstrate understanding and respect rather than denigration.

The historical Social Norm for Hearing

Even the most casual observer will confirm that there is something inherently wrong with our current social norm for hearing.

History has left us with an ironical legacy in which those who cannot hear – either partially or wholly – are denigrated to one degree or another because they are missing things, whilst at the same time many individuals who *might* avoid missing things by *using* hearing technology avoid doing so for fear of… denigration!

Somewhere along the line history has spawned a case of "damned if you do; damned if you don't".

This is wrong. And it needs to change.

When we look at how the four questions posed above might typically be answered currently we begin to see how this social norm has been allowed to develop. This is outlined in Table 1 (opposite).

The HISTORICAL Social Norm for Hearing		
Question	**Typical historical answer**	**Which society interprets as...**
Question 1 **When should I have my hearing checked?**	**Answer 1** **When you notice a hearing loss, or if you need hearing aids.**	*"When I am desperate enough!"* *"I should only have my hearing tested when I have reached the point where the problems I experience with my hearing outweigh any perceived negative costs associated with using hearing aids, **and** when I am ready to accept that I have 'lost' my hearing."*
Question 2 **How do I find out I have a hearing loss?**	**Answer 2** **By having your hearing tested.**	*"If I have my hearing tested I'll find that my hearing is not as good as I believed it was – because only people with bad hearing get their hearing checked (see Question 1).* *Learning this would have a negative impact on how I see myself, so I will protect myself from that threat by avoiding having my hearing tested."*
Question 3 **Who uses hearing aids, and is that relevant to me?**	**Answer 3** **The deaf, the hard of hearing and the elderly.**	*"If I do not consider myself to be deaf, hard of hearing or elderly then hearing aids are not relevant to me.* *Unless, of course, I am being pressurised into getting hearing aids by those around me. But then my motivation will be low."*
Question 4 **When should I personally use hearing aids?**	**Answer 4** **If you are deaf, hard of hearing or elderly.**	*"If I begin using hearing aids I am telling the world I am now deaf, hard of hearing or have grown old, and that I am now prepared to see myself that way and I am happy for people to see me this way. So not today, thank you."*

Table 1

Problems of the social norm we've inherited

The historical social norm for hearing (see Table 1) not only fosters a negative attitude towards hearing care but also creates so much ambiguity that people have no clear instruction on how to act in a way that's relevant to them.

Take the first two answers.

Notice how circular the argument is? You notice a hearing loss by having your hearing tested. But you only need a hearing test if you notice a hearing loss.

So it is not unusual to see messages that say:

> *"Are you suffering from hearing loss?*
> *Find out with a hearing test."*

Why would anyone want to "find out if they are suffering?" If I don't see myself as suffering, I won't get my hearing checked. It's not relevant to me.

A matter a personal interpretation

It all becomes a matter of personal interpretation: "Do you personally think your hearing is bad enough yet, or can you hold on longer?"

With so much ambiguity it is no wonder many individuals don't do anything about their hearing. As Chip and Dan Heath say in their book Switch, "What looks like resistance is often a lack of clarity."[7]

Hence an individual with a reduction in their hearing range may be quite happy with, or blissfully unaware of, their family and friends expending extra effort on their behalf to compensate for their own failure to follow conversation fluidly. But is this fair to their family and friends? To their colleagues? To their customers? Do we have a social responsibility to others to hear as well as possible – if it is within our power to do so and we're choosing to be part of a wider audiocentric[8] community?

Addressing the symptoms but not the cause

In the past a social norm for hearing has been allowed to sprout up by itself, and the Hearing Care Industry has simply tried to ***respond*** to that social norm rather than shape it.

So we have tried to *hide* the technology, in the belief that people were simply embarrassed to use it – rather than addressing the underlying reason *why* such embarrassment might exist.

We have tried to entice people in with free hearing tests, afraid we would scare them off if we suggested otherwise – rather than addressing the underlying reasons *why* people didn't respect their hearing enough to value professional expertise.

We have concentrated on refining our counselling skills to become better at getting

people to accept a "hearing loss" and the "need for hearing aids" – rather than addressing the underlying reasons *why* people see "hearing better" as such a tragedy!

> **Our traditional interventions have been addressing the *symptoms*** (the avoidance of hearing care) **rather than the *cause*** (a defective social norm that creates these symptoms).

It is therefore not surprising that such interventions have done little to increase the adoption rate of hearing aids, no matter how good the technology becomes. The adoption rate today is almost identical to how it was in 1984 when records began.[9]

Why our traditional approaches have failed

Such interventions have failed to increase adoption rates *because they currently focus on the point where hearing aids have **already** become relevant to a person* and this is too late if we want to increase the number of people utilising hearing technology.

Why? Because the historical social norm has been telling people that either hearing aids are ***not*** relevant to them (because their hearing's not "bad enough" yet[10]) or that hearing aids are something that you should avoid unless you really, really need them.[11]

Increasing the adoption rate by changing the social norm

To increase hearing aid adoption rates we need to increase the ***relevance*** of hearing aids to ***more*** people, and that means changing the social norm.[12] We need to *design* a new social norm that fosters an appropriate response towards hearing care, then systematically work to create the right conditions for that social norm to emerge.

This we must achieve by working together across the Industry and Profession to ensure that the same unified message is repeated and repeated and repeated until it becomes "common knowledge". Social norms do not change by themselves. They change because men and women work together to change them. They begin with a "dream" of how things *should* be,[13] then they work through the steps to get there.

Becoming the leaders of society's attitudes

As society's own experts in hearing care it is up to all of us to *lead* the public in their attitudes and behaviour towards their hearing, rather than taking our lead from them and reacting to their outdated notions. We must show society how things *should* be.

With this in mind it is time to answer the following two questions:

- **What should the social norm for hearing be?**
- **How do we create it?**

THE NEW SOCIAL NORM FOR HEARING

The three stages to creating a new social norm

There are three stages to creating our new social norm for hearing.

1. We have to decide *how* we want people to answer the four questions posed on page 10, remembering that the answers need to evoke the desired behaviour.
2. We must then use the tools of shaping attitudes to increase the likelihood of those answers springing to mind when one of those questions is posed.
3. Thirdly, we must consistently trigger those four questions in people's minds.

So before we formulate new answers for our four questions, let's summarise what the desired behaviour needs to be:

The Desired Behaviour

Individuals with any degree of hearing should:

- Actively monitor their hearing throughout life in order to detect any change in their hearing that compromises the integrity of their connection to the world, other people and the opportunities of life.
- Seek timely intervention for any reduction in their hearing range.
- Use appropriate hearing technology to keep the sounds of speech within their audible range wherever it is possible to do so.
- Keep their hearing working at its best for their own sake, the sake of others, and the sake of wider society.

We can of course argue about the detail, such as what is "timely intervention" and "appropriate hearing technology". We can also argue about our own purpose or motivation in fostering such behaviour. But these discussions are beyond the scope of this publication.

Suffice to say that the desired behaviour summarised above is based on addressing the age-old complaints of:

i) Why individuals are quick to fault other people's hearing but fail to address those same problems when fault is found with their own hearing.

ii) Why there is a significant time interval between knowledge of a reduction in hearing and taking appropriate action.

iii) And why society has consistently had more people *not* using hearing technology who may benefit from its use than it's had people using it.

Having established the desired behaviour we can now answer our four questions as follows:

The NEW Social Norm for Hearing		
Question	**DESIRED Answer**	**Which society interprets as…**
Question 1 **When should I have my hearing checked?**	**Answer 1** **Routinely throughout life, just as you do with your eyes and teeth.**	*"Routine hearing checks help me prevent problems – i.e. I can avoid loss of my connection to the world around me, other people and the opportunities of life."*
Question 2 **How do I detect changes in my own hearing range?**	**Answer 2** **You can't without routine hearing checks.** Changes are often so gradual that you won't notice them until everyone else has. Hence the need for routine hearing checks.	*"I don't like the idea of other people knowing something about me that I don't, especially if it puts me at a disadvantage; I'd rather be the first to know."* *"I've known people in the past where everyone but them knew they were mishearing. I don't want to find myself in that position. It weakens me socially."*
Question 3 **Who uses hearing technology, and is that relevant to me?**	**Answer 3** **Potentially everyone who appears to be hearing well.** It's often impossible to tell whether someone's hearing ability is natural or augmented because the effect often appears the same: their connection is strong and constant.	*"The important thing is to hear as well as possible.* *This is the 21st Century. We're used to the idea of technology augmenting natural ability to get the most out of life. So yes, hearing technology applies to me if it means I'll be hearing as well as possible."*
Question 4 **When should I use hearing technology?**	**Answer 4** **Anytime the situation demands it, so that you can be yourself**	*"We all know that some situations are more challenging to hear in than others. Hearing technology gives me an advantage that others may not have. That way I can always be at my best."*

Table 2

THE PRINCIPLES OF THE NEW SOCIAL NORM

PRINCIPLE #1
"Focus on the hearing, not the condition"

You may have noticed that all our new answers to the **4 Questions** have deliberately shifted the focus away from "having a condition" to "hearing at your best". This is the first and main principle of our new social norm. We will be referring to this throughout the publication.

PRINCIPLE #2
"Maintain an individual's self-consistency"

Nobody wants to be handed a condition. Nor do they want treatment for a condition they don't believe they have. But people *do* want to be consistent with how they see themselves,[14] how they *want* to see themselves,[15] and how they want *others* to see them.[16] Having good hearing – whether it's natural or augmented – is part of that consistency.

Moreover, people do not want to use something seen as a badge of being old or impaired or being different from normal;[17] in other words they don't want something that imputes negative attributes to them. But they *will* use technology as a tool to solve problem external to themselves (the situation) or as an extension of themselves (an empowerment), or if it sends a positive signal to others.[18, 19, 20]

People approach things they see as empowering them.
They avoid things they see as weakening them.[21]

Our new social norm is formulated to address all of this, as well as managing the Availability Heuristic (Question 2), and the Actor-Observer Difference (Question 4), both of which are discussed below.

PRINCIPLE #3
"Messages must mirror your audience's perception"

The Availability Heuristic describes the "thinking trap" of assuming that information that is most readily available to us is either more important or more relevant.[22]

With a reduction in hearing range the majority of people **still hear sounds**, with more sound being audible when the reduction is milder. These sounds are therefore **available**, whereas the sounds outside of our hearing – for all intents and purposes – do not exist. Because they are unavailable, they are also irrelevant and less important.

As a result we might ask someone with a reduction in hearing how they hear, and they will call to mind all the sounds they *do* hear, which will confirm to them that their hearing is perfectly satisfactory, because the sounds outside their hearing range

will not be available to refute this false perception. This is why many individuals with a reduction in their hearing range will say, quite 'truthfully',[23] "There's nothing wrong with my hearing."

Often it's not denial or stubbornness; it's ***observation****.*

Question 2 of our new social norm addresses this by making it clear that you are not the best judge of your own hearing. It's like a learner driver accrediting their own driving ability: it has no external validity.

PRINCIPLE #4
"Make it about situations, not shortcomings"

The Actor-Observer Difference is another thinking trap, in which we assume that others' shortcomings are due to their attributes, rather than the situation. However if we display those same shortcomings we will assume they are due to situational factors rather than our own attributes.[24]

So if someone doesn't hear us, it's because their hearing is bad (i.e. their attribute). But if *we* don't hear, it's due to situational factors: the speaker was mumbling, the background noise was too loud.

Many people avoid hearing aids because the old social norm says that if you use hearing aids you are telling others you have bad hearing, a negative attribute. But the Actor-Observer Difference informs us that a person is unlikely to accept such an attribute, because it's not consistent with how they (want to) see themselves.

However they are much more likely to accept the idea of the situation making it difficult to hear. If you provide them with a tool to improve that situation – without ascribing a negative attribute in the process – you are more likely to trigger an approach response. And if you do this whilst also imputing a positive attribute that enhances their self-image and their standing with others, all the better.[25]

PRINCIPLE #5
"Impute positive attributes to users of hearing technology"

What sort of positive attributes might we impute to someone who uses hearing technology? That depends on your own particular brand story. Consider how Nike imputes focused decisiveness to its consumers with the tag line "Just do it". Or BMW implies its consumers are ultimate drivers by calling the cars they drive "The Ultimate Driving Machine". Or Apple declare its consumers to be creative and independently-minded with the tag line "Think Different".

Our new responses to Questions 3 and 4 present hearing technology as the means for a person to maintain – rather than undermine – their self-congruency. So ask yourself how do people want to see themselves and for others to see them? That's your starting point.[26]

PRINCIPLE #6
"Create positive associations in people's minds"

It is then up to each manufacturer to build associations out in the real world through their advertising and marketing that embody **Principle #5**, so that the person who uses their technology is seen as possessing a trait or lifestyle desirable to others.

By linking hearing technology to the situation rather than hearing loss it liberates hearing technology developers to focus on imputing their own positive attributes through their own unique brand story, rather than the traditional approach of stating why their product is better at addressing hearing problems than their competitors, something that becomes increasingly harder as technology converges.[27]

Why is this important? Well aside from the fact that the product itself becomes more socially acceptable by its association with desirable personal attributes rather than with personal weakness, it also allows manufacturers to better differentiate themselves in an increasingly homogenised market where all technology claims to do the same thing.[28] It makes manufacturers more future-proof.

PRINCIPLE #7
"Create brand identities that extend the individual"

Strong brand identities enable individuals to say something about themselves by their choice of product or service: "I choose manufacturer X because it says I keep my mind sharp. I choose provider Y because I want people to think I'm sophisticated. I choose manufacturer Z because I'm a freethinker with a bit of a quirky side."

Where are they getting these ideas from?

From the manufacturers or providers own brand stories, as portrayed through their marketing, advertising and product endorsements.

People often choose their brands because of what is ***commonly known*** *by society about those brands.*

Choosing a particular brand extends what other people know about us by adding that brand's associations and values to ourselves. This is how manufacturers and providers should be creating brands to change the social norm.

Give people *other* reasons to choose your brand *other* than "because you have poor hearing". Give people a reason that is consistent with how they see themselves, or want to see themselves, or want others to see them.[30]

PRINCIPLE #8
"Avoid creating conflicting beliefs in an individual"

Maintaining an individual's self-consistency through the brands we give them minimises the likelihood of inducing Cognitive Dissonance, another reason that prevents people from taking action.

Cognitive Dissonance tells us that when a person has to hold two conflicting beliefs simultaneously, it creates mental discomfort (dissonance) which they try to avoid or reduce.[31]

So when a person does not consider themselves to have bad hearing, why would they get their hearing checked, or get a hearing aid?

Under the old social norm they wouldn't, because doing so would create a conflicting belief for them: "I believe that only people with bad hearing get their hearing checked or use hearing aids. So if I have my hearing checked, or get hearing aids just to hear more easily in restaurants, it must mean I have bad hearing. But I don't believe I have!"

Consequently, under the old social norm, it is easier for someone to *avoid* having their hearing checked or getting a hearing aid than it is to try and reconcile these two conflicting beliefs.

Our new social norm sidesteps this risk of cognitive dissonance because people can now take appropriate action (i.e. have their hearing checked; use hearing technology) *without* those actions saying something inconsistent about themselves:

> *"I can have my hearing checked, because* ***that's what everyone does*** *to make sure their hearing is always working at it's best. And I can use hearing technology, because* ***sometimes the situation*** *demands it."*

PRINCIPLE #9
"Normalise hearing care by making it relevant to all"

Our new social norm normalises the idea of having our hearing checked and using hearing technology rather than reserving it for a 'special population *other than me*'. It is seen as "normal to keep my hearing working at its best", and these activities are now the means to that end.

Our new social norm signals that hearing care is relevant to every one of us, and this effect will only increase as we discover evidence for it in our own experience.

For when people see their sons and daughters having their hearing checked, it's much easier for older parents to have *their* hearing checked. When our colleague or neighbour comes back from a hearing assessment in which they've been advised they are hearing well, it reduces our own fear that attending a hearing assessment will automatically result in "bad news". And when our friend hears better than us in a busy restaurant we can't help thinking that maybe, just maybe, they're using the latest hearing technology – we just can't see it.

THE PROCESS OF CHANGING THE NORM

Step 1: Engineer a self-fulfilling prophecy

The secret to creating our new social norm is to begin with utilising the principles of social influence that we currently have the greatest control over, then building these into a unified message that we each adhere to.

The two principles most accessible to us in these early stages are:

- **Our authority as experts**[32, 33, 34]
  "It must be **right** – all the experts are saying it."
- **The availability bias**[35]
  "It must be **important** – everywhere I look they're talking about it."

Through repetition[36] and consistency the new social norm will automatically evolve into its own self-fulfilling prophecy,[37] with the confirmation bias eventually strengthening people's perception of evidence for the new social norm.[38, 39]

Seeing it everywhere

The confirmation bias is something we've all experienced from time to time. It works a bit like deciding on a particular type of car then finding yourself seeing that car everywhere: your attention becomes focused on "evidence" that confirms what's on your mind. It's therefore a powerful driver of social change and can be found in everything from religion, to politics, to racism, to fashion.

When it comes to creating a social norm, the confirmation bias will become a powerful ally. Because once our message has reached the stage where it becomes "common knowledge"[40] – through the tools we will be looking at in the next section – society will begin matching their own life experiences to our message, and vice versa.

And if that message is crafted correctly, it will find resonance with enough individuals who then adopt the desired behaviour and incrementally add to the growing social proof, creating the critical mass necessary to trigger a tipping point.[41]

Step 2: Work together to implement it

Now that we understand our objectives, it is up to every one of us involved in the promotion of hearing healthcare to use our **words**, **messages** and **activities** to implement this new social norm, in much the same way that brands create their identity through advertising and marketing.

A unified purpose with a unified message

Hearing Care has a tremendous advantage that brands do not have. Brands must rely on throwing lots of money behind their communications to create the widespread impact they need. But we have the *collective* resources of *many* organisations and individuals all over the world, all working together towards the ***same common goal***: to lead society in its approach to hearing.

> **By working together, with a unified purpose and a unified message, we can move the otherwise "un-moveable".**

We don't even need to find additional funding to make this happen. We simply have to ensure that what we are *currently* doing – what we are currently spending our money on – is aligned to the principles of the **4 Questions**. That we are **accelerating**, rather than hindering (however unintentionally), social change.

Fragmented approach

The historical approach to promoting hearing healthcare has been for each organisation to "do their own thing", with negligible co-ordination of messages, even though each organisation must lay the same foundation (shown in yellow) – i.e. when to have your hearing checked, how to notice a reduction in hearing, who uses hearing technology, and when – before they can begin to convey their own message.

Such a fragmented approach means that those "shared" foundational messages now appear proprietary, losing credibility. They also add to confusion as people attempt to work out whether the "different" messages conflict. Finally, fragmented messages do not add to the sense of "common knowledge" necessary for creating social norms.

Unified approach

In the unified approach recommended here each organisation involved in the promotion of hearing healthcare agrees to the Core Messages as represented by the 4 Questions. This acts as a shared foundation that each organisation can build their own proprietary message upon, tapping into society's "common knowledge".

This leads to cleaner, more effective individual messages undiluted by the need for organisations to separately lay their own foundation first within each message.

THE TOOLS OF CHANGING THE NORM

A person's attitude determines whether or not they approach or avoid something, and their attitudes are derived from the raw ingredients of their thoughts, feelings and actions, mainly at the point that "something" becomes relevant to them.[43]

To change society's attitudes towards hearing it is our responsibility to provide people with the right raw ingredients, then deliberately trigger attitude formation by increasing relevance.

The main tools we will be using to accomplish this are:

- **Repetition, repetition, repetition**

  Hear or see something often enough and it springs to mind instantly, especially if we make it memorable.[44] The more easily something springs to mind, the more likely it is to be used in the formation of our attitudes.[45] This process can be accelerated by using a number of techniques, such as rhyming[46] and elements that are unexpected[47] or incongruent[48].

- **Building associations in people's minds and emotions**

  Think of red and white, Montana and cowboys and it won't be long before we think of a certain brand of cigarette. The manufacturer has achieved this in our minds by repeatedly associating those images together. If they can achieve this for something that is, essentially, an unattractive proposition (an addictive product that decreases your life span and makes you smell), then there is no reason in the world we can't achieve it for a technology that empowers and enhances people. We just have to **deliberately control** what those associations are, rather than leaving them to chance or historical collective memory.[49]

- **Presupposition**

  Presupposition is a way of presenting things in a manner that implies the audience and everyone else already knows certain things. When presupposition is used, we tend to accept something as an established fact and move onto processing the next part of the message. It's a powerful way to create a social norm from nothing.[50]

- **Borrowing a crowd**

  People look to see if there's widespread evidence around them for carrying out particular behaviours: "If in doubt, follow the crowd."[51] At this point in time we may not be able to draw on our own social proof, so our crowd will have to be borrowed from comparable sources (such as optics and dentistry) until we can one day say that, "Everyone gets their hearing checked, don't they?"

These, then, are the main tools we will be utilising to build our core messages that are to underpin the New Social Norm for Hearing.

1. When should I have my hearing checked?

A. Routinely throughout life.

Until routine hearing checks throughout life[52,53] become the social norm we will need to 'borrow a crowd' in order to offer the social proof necessary to convince the public "it's the right thing to do".

How do we do this? By reminding people that they have their eyes and teeth checked regularly, then linking the act of having hearing checked to these two socially accepted behaviours.

Doing so has an additional advantage: the benefits and reasons behind regular sight and dental checks – that "prevention is better than cure" – become automatically transferred to hearing checks. This helps bypass some of the negative associations we've built into the "hearing test" over the decades.[54]

Making the message sticky

This message of routine hearing checks can take lots of different forms, but the simplest is a "sticky message"[55] that says:

> *"Eyes checked. Teeth checked. Hearing checked."*

The message can be made more memorable by linking it to the imagery of the three wise monkeys (see no evil = eyes checked; speak no evil = teeth checked; hear no evil = hearing checked).

Example 1

In Example 1 we are using green (for 'go') ticks with each of these actions/monkeys to imply that not only is such behaviour considered 'correct', but it's already been 'actioned' (think of a to do list). The overall impression is that if you haven't yet had each of these areas of health checked, you're not in sync with the social norm.[56]

Example 2

In Example 2 we have left the third box unchecked on the basis that there is something about empty tick boxes that makes us want to complete them, especially when it is the only box not to have been completed.

The empty box causes us to mentally check our own experience to see whether we should be ticking it or not. Ticking the box would mean we are declaring that we *have* had our hearing checked. But not ticking the box leaves that sense of incompleteness: "The other boxes are complete. This one should be too."

So if we haven't had our hearing checked then we create a dissonance, which "being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance,"[57] and we're reminded of it every time we visit the dentist or opticians. Having our hearing checked brings the consonance we are looking for.

Reinforcing the message with Rhyme as Reason[58]

The message can be further reinforced with the following rhyme:

> *"It's just being wise – to check hearing like eyes."*

Or, if you want to include teeth:

> *"It's just being wise – to check hearing, teeth, eyes."*

Building the same message into standard text

We can also build the same message into standard prose, as part of a public health message for example:

> *"We all know how important it is to get our eyes and teeth checked routinely; it's the same for hearing."*

Notice how we are using the phrase "we all know" to indicate that what comes next is "common knowledge", and therefore part of a social norm.

We can also use such presupposition to normalise the idea that hearing changes throughout the course of our life.

> *"We all know our hearing changes throughout life.*
> *That's why it's important to have it checked routinely,*
> *just as we do our eyes and teeth."*

Such a message is important because we don't want people thinking that *"it's only people other than me who get their hearing checked"*. It has to be relevant to everyone.

Framing hearing checks to *avoid* loss

Linking routine hearing checks to eyes and teeth means that we don't have to explain the need for routine hearing checks; people will work it out for themselves from the associations.

But sometimes it helps to explain the reason more explicitly. Here the important point is to frame the act of having routine hearing checks as **a way to avoid loss**, rather than as a way **gain** (knowledge of) **a** hearing **loss**. So we don't talk about screening and we don't talk about "finding out" if you are suffering.[59]

Here are two examples. The first is based on avoiding social embarrassment. The second is based on avoiding loss of stimulation of the brain.

Example 1

> *"If you don't have your hearing checked routinely*
> *you increase the risk of unknowingly missing things in front of others."*

Example 2

> *"If you're not having your hearing checked regularly*
> *how will you know your brain's not missing something it needs?"*

Targeting messages to specific audiences

Other messages can be formulated for specific audiences. For example, musicians:

> *"If you're not having routine hearing checks, how will you know*
> *you're not missing some of the more subtle nuances of sound?"*

It cannot be stressed enough here:

Hearing checks are NOT for detecting hearing loss.
They are for *keeping your hearing working at its best*.

That's the way we must frame our messages from now on if we want to change the social norm. Frame it the old-fashioned way and you hinder the change from happening.

2. How do I detect changes in my own hearing range?

A. You can't without routine hearing checks

The dilemma of only hearing what we hear

The problem here, of course, is that many people fail to recognise a change in their own hearing simply because we only hear what we hear. An unheard sound doesn't become blurry or fuzzy; it simply doesn't exist. And if it doesn't exist, how do we know it was there in the first place for us to have missed it?

As a result it is far more likely that we will notice a change in someone else's hearing but not in our own. And yet people often fail to apply this logic to themselves, believing they are somehow exempt from what they clearly see in others.

So it is a priority for us to get society to accept this fact as soon as possible – otherwise they will continue to live under **the illusion they are the one exception to the rule**[60] – which will of course delay their seeking intervention.

We need to have people saying to themselves:

> *"I notice changes in **other** people's hearing that they don't notice themselves. So other people will notice changes in **my** hearing that I don't notice myself."*

We then need to link this lack of self-recognition to the need for routine hearing checks. In other words:

> ***You can ONLY say you have good hearing if your hearing has been professionally assessed.***

Making the message sticky

This message can be summed up in a sticky message such as this one:

> *"Others will tell if I'm not hearing well;*
> *Better I know **before** problems show."*

The word "tell" in the first line is deliberately ambiguous, allowing people to apply it to their own situation for increased relevance. On the one hand "tell" can mean "notice" or "mark as different". On the other hand it means "report to others", recognising the fact that often society will discuss a person's reduced hearing ability behind their backs.

It's not me! It's the situation!

The other problem with noticing changes in our own hearing is due to the **Actor-Observer Bias** – the tendency to assume that if we have a problem, it's because of the situation; but if someone *else* has a problem, it's due to their disposition or shortcomings.[61]

So when we have a problem hearing, it's the background noise or people mumbling – i.e. the situation. But if someone else experiences the same problem, it's because their hearing is reduced.

So we need to help society realise that the only way to be certain that it's due to the situation, rather than their hearing, is with routine hearing checks.

In other words **each person must automatically assume responsibility for their own hearing whenever a situation occurs which calls their hearing into question:**

> *"If you ask to repeat – check your hearing's complete."*

This sticky message can be used as a prompt for ourselves, but also a rejoinder for others to use when someone keeps asking them to repeat. It becomes a trigger.

Framing for hearing, not the condition

You will notice in our sticky message on page 27 that we're ***not*** saying: "If you ask to repeat it may mean you have a hearing loss". Instead we're saying check your ***hearing*** is complete. Our focus is on how people *expect* it to be.

It's important to understand the subtle yet powerful difference in the way we're framing the message. We're deliberately not talking about "having a condition" – which is more likely to trigger a denial response. Instead we're focusing on the hearing itself, which everyone with hearing can relate to.

We are also introducing society to the concept of ***complete*** hearing to represent how people expect their *own* hearing to be and how *others* expect their hearing to be.

How would we define complete hearing if someone asked us to explain?
It's the ability to pick up the full range of speech sounds.[62]

The advantage of such terminology is that a person can have "complete hearing" either naturally or by using hearing technology; the end result is effectively the same: the ability to hear the full range of speech sounds.[63]

Changing the social grouping[64]

This shift from "having a hearing loss" to "keeping your hearing complete" means that the use of hearing technology no longer transfers a person from a "normal" category into a "deaf and hard of hearing" category, but instead includes the user of hearing technology within the definition for "complete hearing" *together* with those whose natural hearing ability preclude the use of hearing technology.[65]

This shift in grouping paves the way for it to become more socially acceptable to use hearing technology (when appropriate) than not use it.

Because:

- **Using** hearing technology means you are keeping your hearing complete (allowing for any biological and technological constraints).
- **Not** using it – when it is appropriate to do so – means your hearing is *incomplete*, which taps into the human drive to match how someone wants or believes they ought to see themselves.[66]

3. Who uses hearing technology, and is that relevant to me?

Being Relevant

Undermining change with our obsession for statistics

The hearing care industry seems obsessed with statistics and sharing them with the public. We often hear messages that tell us that "1 in X people have a hearing loss"; or that "1 in X *don't* get hearing aids"; or "X million have a hearing loss. Are you one of them? Find out here."

What do we hope to achieve by telling people this?

If we want to make hearing technology relevant to more people, we must stop telling our audience how many people out there do or don't have hearing problems.

Because when we use statistics in this way we are telling our audience that hearing technology is not relevant to the majority of people – that it only applies to a special population – "the old", "the deaf", "the hard of hearing".

And there are few people who want to be seen as part of ***that*** population, even if others would class them that way.

Using statistics is therefore counterproductive. It tells our audience that society is on their side if they choose to do nothing, because that's what *most* people do. It also tells them that they are *less* likely to have a problem with their hearing, because *most* people don't. Since our message doesn't apply to ***most*** people, it probably ***won't*** apply to our audience either. We are effectively telling them to ignore us![67]

Think about it: current statistics tell us that over 95% of the population ***don't*** use hearing technology! So if you happen to be one of the "unlucky 5%", do you *really* want to be seen by everyone around you as being part of some "special population that needs special treatment"?[68]

The desire to be normal

Most people want to be 'normal'; to be part of the majority – unless of course being something 'special' somehow endows upon them an otherwise unattainable advantage desired by others. This is how exclusivity works in luxury brands.[69]

But to be "deaf, hard of hearing or hearing impaired" is not generally considered desirable or advantageous, so why all the number crunching? The hearing care industry consistently finds itself breaking the rules of "social proof".[70] It's no wonder we've had such a hard time bringing about social influence up to now. We keep undermining our own message.

So we need to stop and ask ourselves: what are we trying to achieve with all our statistics? They're not helping. So drop them.

Instead focus on what 'the crowd' can relate to. Be relevant.

Creating relevance when we haven't a crowd

Remember that people say to themselves, "If in doubt, follow the crowd."

Since the crowd *doesn't* use hearing technology, and the crowd *doesn't* have a problem with their hearing either, how do we create relevance for hearing technology? Is it even *possible* for us to create a crowd here?

There are two approaches open to us.

Approach 1

The first approach is to say, well there's no point trying to create a crowd when the numbers simply don't work out.

In which case, we must work instead on creating an **attractive exclusivity**, in much the same way that luxury brands do.

Approach 2

The second approach is to direct people's attention towards those who appear to be hearing well – which just so happens to be the majority – then associate their hearing performance with hearing technology.

Doing so creates a presupposition that there is a secret crowd of people out there successfully enjoying the benefits of hearing technology, but because their technology is covert, the only indication you have is by how well they hear. This is in fact a reflection of the truth, because there *are* people secretly wearing hearing technology unbeknownst to others, and they *do* hear well because of it. But how *large* that secret crowd might be we can leave to people's imagination.

Let's look at these two approaches in more detail.

Approach 1: Attractive Exclusivity

With Attractive Exclusivity we say:

> *"We don't let just anyone get hold of our hearing technology; it's too good for the masses. We only allow the 'right kind of people' to have it."*

In this way we build desirability because to be "one of the chosen few" says something positive about you.

If we take this approach then we obviously need to ensure that we are building associations with *positive* attributes that people *want* to be identified with, such as being successful.[71] That way we maintain desirability and we keep the net of relevance as wide as possible.

So we would **not** put out a message that said:

> *"Sorry, only people with hearing problems can use our technology."*

That's not the kind of image most people will want to define themselves as. It may be exclusive, but it's not attractive.

Instead we would say things like:

> *"They say your mind is so sharp,*
> *it's as if you know things ahead of time.*
> *It sounds like we've finally found a match*
> *for our advanced technology."*

Here we're imputing to someone a mind that is sharp, and directly linking our product to this positive attribute. The implication is that if I use this advanced technology, I must be the 'right kind of person'. It's exclusive *and* attractive.

We could just as easily take *any* positive trait and link it to our technology, and the Aaker Brand Personality model provides an excellent starting point for doing so.[73] Our objective must always be to match the product personality to the way people want to see themselves.[74]

Advertising tells others what to think of me

Now imagine we were to use this as an advertising message that a significant proportion of the population was exposed to and could recognise.[75]

Once someone subsequently goes out and invests in this technology for themselves, two things happen.

Firstly, they see themselves as acting in a way that's consistent with how they (want to) see themselves,[76] because they already believe themselves to have a sharp mind. But just as importantly, they also know that others have seen that same advertisement too. So *others* will see their action as symbolising having a sharp mind.[77]

This is how brands work.
By aligning ourselves to a brand with our choice,
we are imputing its characteristics to ourselves.

This is especially important for us to understand in the hearing care industry, because a brand has the power to side step the historical associations with the "deaf and hard of hearing" which people have traditionally tried to avoid. If the brand is strong enough, using hearing technology suddenly becomes a positive thing.[78]

Creating a halo effect with Attractive Exclusivity

Attractive Exclusivity is a technique that hearing technology developers might consider using for specific product lines such as their "lifestyle brands" or with the introduction of a dedicated luxury brand[79] – and it would undoubtedly have a wider positive effect for the image of hearing technology in general, by creating a halo effect.[80]

Distancing your brand from negative associations

Even if there was no resultant halo effect, the very fact that you are keeping your product as something more exclusive – especially when combined with a strong brand image – acts to separate your own product in people's minds from the negative associations of the rest of the industry's products.

Why? Because brands create a bubble of their own reality.

Approach 2: Re-Direct Attention onto Hearing

Redefining the boundaries

The second way to approach our lack of a crowd is to find a bigger crowd, then include users of hearing technology within that crowd.

So instead of pointing to the small crowd of "people who are hard of hearing", we point to the much larger crowd of "everyone who is hearing well", then include within this group those who hear well because they are using hearing technology.

By doing so we are both normalising the use of hearing technology and building a positive association between hearing technology and hearing well.

This is simply a reflection of what happens in real life. If I am having a conversation with someone and I find them to be responsive, attentive and maintaining the flow of communication, I have no idea whether it's because their hearing has been technologically enhanced, or they just have good hearing naturally.

So the thought we want to spring to people's minds whenever they encounter someone who hears well in a difficult listening situation is:

"Might this person be using hearing technology?"

We don't need to say that they are. We simply need to create the question, and have the association ready in our audience's minds.

To change attitudes within society, hearing technology must no longer be portrayed as the symbol of a person who is impaired, but instead of someone who hears as well as possible.

It's time to believe in ourselves

To build positive associations like this, the hearing care industry is going to have to change its own mindset first.

For too long now the industry has been apologising for hearing technology. It's almost as if we say to people: "Sorry you have to wear this, but..."

We cannot continue like this and expect to see any change in attitudes. As anyone in advertising or marketing will tell you, you can only sell a message if you believe it yourself.

So it's time for us to believe in ourselves. We must become our own biggest advocates.

An incredible technology

Today's hearing technology is a phenomenal fusion of natural hearing ability and digital processing. This is the stuff of science fiction: personal augmentation. It's not some distant future reality. It's here today. Right now! And we should be celebrating the fact that we have it. In fact, this stuff is so cool that people should be wanting it, even if they don't need it! Or at least they should be wanting the *idea* of it.

How do we achieve such desirability? By the way we frame our messages.

How does the following passage make you feel about hearing technology? (Try reading it aloud. Try replacing "her" for "him/his" and "she" for "he".)

Hearing Technology Framing Example

"You walk into a room.
It's full of people you don't recognise.

Before you've even worked out whether you're in the right place, your hearing technology is already analysing the environment.

Searching. Sifting. Selecting.

Working out what's worth focusing on, and what's not…

Then you see her.
The moment she opens her mouth, your hearing is ready.

And you know. You know without a shadow of a doubt:

You're meant to be there."

The passage above frames hearing technology in terms of lifestyle. It uses our imagination to tell a story that shows the technology empowering someone, augmenting their own natural ability and equipping their personality.

So even if we don't "need" hearing technology ourselves, we still like the *idea* of what it might do for us.

It makes the *technology* attractive because the *idea* is attractive.

The effect of messages framed on hearing

Now imagine the effect such a message might have on someone who would benefit from utilising such technology.

Not only are they immediately focused on the benefits (which encourages an "approach" response), but they know that *others* will have seen the message too and will associate their own use of the technology with the positive attributes highlighted in the message.[81] Remember that this is the way brands work. They create their own pocket of alternative reality that we want to cloak ourselves with.

When those of us involved in hearing care – manufacturers and practitioners alike – begin perceiving hearing technology in this way, everything changes in the way we communicate:

Our audience believes because we believe.

Why traditional messages tell people to "Stay away!"

By contrast, messages born out of the old social norm tend to suggest there's something to be ashamed of. We say things like: "It's so discreet no-one will know you're wearing it."

Such messages imply that hearing aids are something to be ashamed of! That you need to hide!

Is it any wonder we keep inducing an "avoid" response in our audience?

Not only does this type of message reinforce the old social norm, it makes a serious and fundamental mistake in understanding who our audience really is.

Let's work it through…

A message based on the cosmetics of a hearing aid is *only going to be relevant to someone who is a potential hearing aid user*. But more specifically, to a potential hearing aid user ***who already sees themselves*** as a potential hearing aid user.

Finding the rest of our audience

Because of this, traditional messages focused on cosmetics or new technology tend to miss the other 75% of our target audience who do not yet see themselves as potential hearing aid users, even though in reality they are.

So here's the irony:

In order to reach the majority of potential hearing aid users, we actually have to stop aiming our messages at them.

Instead we must begin addressing our messages to wider society.

Why? Because the majority of potential hearing aid users simply see themselves as part of wider society… so it's in wider society that we're going to find them.

Preaching to the choir

The approach of hearing aid marketing currently is a bit like assuming that the reason more people don't go to the theatre is because they don't want to sit down for that long, then addressing this "objection" by telling people who are ***already in the queue*** for the theatre how comfy the seats are!

Such an approach is not going to get the theatre any new customers, because we are addressing our message to people who have already decided to see the show.

Instead, if you want to fill the spare seats, you need to go out "into the world" and convince people how great the show will be – so good, in fact, that ***they probably won't even notice how comfy the seats are!***

Notice here how we've focused on what people will *gain* (a great show), and we are using the comfy seats **only to reinforce the focus of our main message.** We're focusing on the destination, not the journey. People aren't persuaded to go to the theatre by comfy seats. They have to *want* to go in the first place. The comfy seats are simply a bonus to make the "journey" more enjoyable.

When the focus is wrong we send the wrong signals

In fact, if the message becomes primarily about the comfy seats, what signal are we actually sending? That the shows are long and boring! Likewise:

If our main message is about how discreet a hearing aid is, what signal are we sending?

That it's something to be ashamed of.

Wrong message!

The danger of implied messages

What if the theatre were to take another leaf out of the industry's "hearing aid marketing book" and put out a message that said: "Did you know that only 1 in 4 of our seats get filled for performances?"[82]

What signal does that send?

It says that there's *obviously a reason why most people don't want to go!*

What's more, when we hear messages like this we start coming up with our own conclusions as to why those seats aren't getting filled. And of course if we also happen to have seen one of the messages put out there about comfy seats, our conclusion is more likely to settle on "long and boring"!

Exposing people to the right message

Instead the theatre must find ways to get as many people as possible exposed to what theatre's all about and why people enjoy it so much.

They might perform snippets of the show out on the street or in a mall, perhaps leaving the audience on a cliffhanger. They might get some of the cast members interviewed on the radio. They might give advanced tickets to people who can write rave reviews before opening night enthusing about how unmissable a show it is. They might stress how the show is only available for a limited time, or that tickets are limited. *That's* what gets the seats filled with new people. Not advertising comfy seats.

It's the same with hearing technology.

Convince people in wider society that there's something to GAIN from hearing technology, and something to LOSE by not using it.

Only then will something like cosmetics become relevant enough to share with them. But we must always be careful that we don't unintentionally undermine our own primary message. **So always be aware of what the implied message is.**

Until the hearing aid industry understands this fundamental principle of finding our audience in wider society we will never see an increase in the number of people using hearing technology.

Example: How to promote discreetness without reinforcing the old social norm

Say we want to promote the discreetness of a particular product we might have, how do we convey that message without reinforcing the old social norm.

We do so by addressing our message to wider society.

Here are some examples of how we might convey such a message:

Example 1

"Just because their hearing's exceptional,
doesn't mean it's always because of our technology.
Sometimes it's nature too."

Example 2

"So discreet, you'll only know by the way they hear."

Example 3

"They hear so well.
Must be the [insert name of hearing technology]."

When we present messages like this, not only are we making the idea of hearing enhancement appear attractive, we're also building a close link between "hearing well" and "hearing technology", rather than "hearing technology" and "having a condition".

Link technology to hearing, not the condition

Our underlying aim for the social norm is that whenever people notice someone who is hearing well, we want their first thought to be, "Perhaps they're using hearing technology."

When we achieve this, instead of there being, say, 5% of the population using hearing technology, suddenly the perception is that it's *potentially* 100%. Because if I *can't* see that they're wearing technology, how do I know they're not simply wearing one of those covert hearing devices I've heard about? Why would I even think this? Because I keep seeing messages that tell me that "you'll only know by the way they hear".

Not sure how this would work? Well try answering the following question: How many people use contact lenses?

We just don't know. It could be everyone without spectacles for all we know, because there's nothing easily visible to tell us. And because of this, we create the perception of a widespread social norm.[83]

Remember you don't need lots of people using hearing technology to create a social norm; you just need people to *assume* that lots of people are using it.

To achieve this we need to tap into a bias we've touched on earlier: the Availability Bias.[84]

Easily brought to mind? It must be important!

Think of how we react when we hear of a train crash. For a while many people think twice about taking a train, despite the fact that there are millions of people who are safely taking train journeys every day. But it's easy to forget this fact because the news of the accident is the thing that springs to our minds the most easily.[85] This is an example of the availability bias: what springs easily to mind is assumed to be more important and therefore more relevant to us.

So when we make our message about the secret use of hearing technology easily spring to mind – *and when we link this secret use to when someone hears well* – we are tapping into this bias. Someone hearing well becomes the **trigger** to remind us that people may be secretly using hearing technology, which increases the perception of its prevalence.

Getting the message out there

So how do we get this message out there? Well this particular social norm will ultimately be created by forward-thinking hearing technology developers, in the way they begin to build brand images primarily aimed at the hearts and minds of consumers, rather than at their distributors.[86]

We don't expect famous brands like Apple and Nike to trust their distributors to do their branding to consumers for them. Imagine the impact this would have on the consistency of their messaging! Imagine the impact on their reputation! On their sales!

No. We must make the *consumer* want the brand, and they'll seek out the distributor most aligned with that brand.

This is not the same as saying a hearing technology developer should be retailing directly to consumers and bypassing distributors. Well-designed brands win the hearts and minds of consumers without having to directly retail to them. But they *do* have to invest in exposing consumers to their message.

Using your brand to change the social norm

Hearing technology developers must therefore ensure that the consistency of their carefully crafted brand messages is maintained through all their distributors. If distributors are allowed to dilute those messages or replace them with ones based on outdated social norms, the manufacturers contribution towards shaping society's attitudes will become undone.

Say a manufacturer has succeeded in creating an association for their brand with people who believe in "staying ahead". A manufacturer will not want one of their distributors/retailers undermining this positive message by presenting their product to the public as a "hearing aid" for "hearing loss". Presenting it in such an old-fashioned way would simply negate the message of "staying ahead" because of all the historical and linguistic associations those terms have.

Hearing technology developers must therefore give careful consideration to how they manage their brand image and messages. They must jealously guard their brand equity, as they would any other set of valuables. And all the more so now, as they begin to use their brand to change the social norm. They must guard it not only for themselves, but also for the way their users see themselves and how others see them, which in turn shapes the very future of hearing care.

Maintaining consistency with branding

At the most basic level, hearing technology developers must ensure that all uses of their brand image, and any appearance of their product, is approved before use to make certain it aligns with their brand values. This is something that many manufacturers already do, although much of the marketing currently carried out is "dual branded" with the partnering distributor. If not managed correctly such dual branding can lead to dual messaging, with one diluting the other. All parties must therefore resist any pressure to dilute their own message.

The right of someone to distribute a manufacturer's product should be subject to the distributor/provider receiving appropriate training beforehand, coupled with accreditation. Such training should focus not only on how to properly use the product to ensure its optimum performance (to build a positive reputation through a positive user experience), but also in how to present it to the consumer in a way that reinforces the brand image.

Some may argue that surely it's better to distribute through *any* channel that is available to them and willing, as this surely increases the number of units sold. However, it must be remembered that there remains a vast untapped market out there waiting for the right hearing technology developer, with the potential to double or even triple unit sales. But if a hearing technology developer really is concerned about restricting their distribution to those providers committed to protecting the brand image they should consider the development of a separate luxury brand alongside the existing portfolio, then limit its distribution and exploit the halo effect.

Designing a brand for first time consumers

A dedicated luxury brand would preferably be aimed specifically at first time users of hearing technology, particularly those individuals who historically are not acquiring hearing technology until many years have passed, if at all.

Such an approach has three practical advantages:

1. These individuals are a "blank slate" and more open to new messages and the subsequent formation of attitudes aligned with the new social norm.
2. The brand is sand-boxed to minimise risk to or cannibalisation of any existing business.
3. Any sales are *additional* to existing business, so new gain is clearly highlighted.

Why marketing directly to consumers makes best sense

Manufacturers should strongly consider marketing (as distinct from selling) directly to the consumer for such a brand, rather than the traditional approach of contributing towards the marketing of their distributors. This makes sense on so many levels:

1. **When a manufacturer markets mainly through its distributors, they are artificially restricting themselves to each distributor's own scope of influence.**
   This will be focused primarily on a distributor's existing database which will consist mainly of people who *already use* hearing technology; a case of preaching to the choir (see page 35). But remember that the purpose here is to influence those who wouldn't normally respond to hearing aid marketing.

2. **If manufacturers rely primarily on their distributors to market their product they risk diluting their brand because the distributor has its own goals when marketing.**
   Therefore such marketing often consists of dual messages or diluted messages which leads to confusion in the mind of an audience. We have just one chance to make an impression. Manufacturers and providers alike each need to ensure their own message hits home, *without* confusion or dilution.

3. **Larger scale co-ordinated marketing campaigns across a wider area create a shared common knowledge.**
   This greatly accelerates the impression of a new social norm for the reasons discussed under "Advertising tells others what to think of me" on page 31.

4. **Whoever controls the lead controls the sale.**
   By directly marketing to the consumer, any lead generated should come first to the manufacturer. It can then be forwarded to a distributor at the manufacturer's discretion on the condition that the product is presented and fitted to the consumer according to the manufacturer's exact criteria (see "Maintaining consistency with branding" on page 39).

Remember: the distributor would not have had this lead if it wasn't for the manufacturer securing it for them in the first place, so the distributor should consider themselves open to maintaining the brand experience of the lead generator, providing it doesn't cause a conflict of interest. In this way, the manufacturer can influence its own distributors towards the new social norm.

Keeping the focus leads to systematic change

By assigning the responsibility to manufacturers for delivering brand messages that modernise the social norm for "Who uses hearing technology, and is that relevant to me?" providers of hearing care are freed up to focus on promoting their own practices, which is the main mechanism for bringing new people into the system and the vehicle for harvesting any work carried out by the manufacturers.

But when manufacturers speciously follow the traditional model of using hearing care providers as the primary means of promoting their own brand, everyone loses out, including – ironically – the manufacturer. Why? Because it takes those hearing care providers *away* from their role of bringing new people into the system as users of hearing technology.

We already know that the majority of potential hearing aid users do not consider hearing technology to be relevant to them, so what's the point in hearing care providers promoting a manufacturer's brand to them? The target audience will ignore it.

Instead hearing care providers must be left to focus on the *immediate* areas of relevance for these potential new people, that is "When should I have my hearing checked?" and "How do I detect changes in my own hearing range?"[87]

And whilst hearing care providers are presenting these two messages to society, manufacturers should be separately and simultaneously delivering their own brand messages, preparing each person for the next stage of their hearing care journey by increasing the relevance of hearing technology and shaping someone's response to it.[88]

Creating desirability in consumers... ***and*** providers

If the manufacturer gets their own brand message right, and more and more consumers find themselves *wanting* to align themselves with that brand, individual hearing care providers (the manufacturer's distributors) would be foolish not to tap into this new consumer demand.

How do they do this? The same way high street shops do: *by marketing the* ***availability*** *of the desired brand.* When a brand becomes desirable, simply promoting the availability of that brand becomes a viable means to promoting one's own practice.

Manufacturers sow—distributors harvest.
Manufacturers throw—distributors catch.

The two pronged approach is stronger

We must see this two-pronged approach more and more in the hearing care industry if we want to change the social norm, because the old-fashioned way of bottle-necking everything through the hearing care provider is counter-productive. Not only does it dilutes each message, it confuses the consumer by giving them too much to process through one channel.

A two-pronged approach is much stronger, because each message is kept separate but complementary. Think how it works in dentistry. Toothpaste manufacturers will promote their latest product, and dentists will tell you to brush after every meal. Two separate messages delivered by two separate messengers, but both complementing and reinforcing the other. It appears to the public that all the experts are saying the same thing, so "it must be right".

Knowing our audience

Creating brands that change the social norm

In attempting to create brands many organisations begin by asking, "Who *currently* uses our products," then creating their brands to reflect this. This is a mistake, and especially so with hearing technology.

Why? Because we already know that 75% of potential users currently avoid the product, so why would we expect a brand centred around the 25% who *do* currently use hearing technology appeal to the other 75%?

Instead:

We have to CREATE brands that the other 75% want to align themselves with rather than trying to cajole them into becoming somebody different to how they see themselves.

Understanding who *really* uses hearing technology

Ask most people involved in hearing care, "Who uses hearing technology?" and they are likely to answer "the hearing impaired, the hard of hearing, those with hearing loss, the deaf." Is that how people *want* to see or define themselves? To be identified by their *condition*? No wonder people avoid hearing aids, if the solution is portrayed as a symbol of being "impaired".[89]

Also it's not really true, is it? If it were then *all* people who have a reduction in their hearing range would be using the technology. Or at least the vast majority would. But they don't; only a minority do.

So there's clearly something else that defines who uses hearing technology.

Perhaps it's those who are desperate? To an extent, this is true. Many hearing aid users have had to reach a point where the positive drive to overcome their problems exceeds the negative drive to avoid the historical associations of using hearing aids.[90]

The pitfalls of 'Point-of-Desperation' marketing

Indeed much of the current hearing aid marketing takes this point-of-desperation approach, and attempts to highlight or even amplify that feeling of desperation:

- "Are you struggling to hear conversation?",
- "Is hearing loss keeping you away from the things you enjoy?"
- "Are you suffering from hearing impairment?"

Unfortunately this point-of-desperation approach has two negative side effects:

1. **Limiting our relevance**

   If you do not consider yourself to be "struggling" or "suffering", and if instead you are "getting by" (a phrase commonly heard by hearing care professionals), the message won't be relevant to you *until* you've reached that point of desperation, and especially that point of desperation depicted in the messages of hearing care which will be acting as a reference point for them.
   In other words, we are raising the **Threshold of Action** with our language and messages (see pages 61-63).

2. **Limiting our appeal**

   People normally act in a way that is consistent with how they want to see themselves, and how they want others to see them. That affects a person's decision to respond to specific marketing messages: we respond because we want to align ourselves with that message.

   So if I respond to a message about struggling to hear, what does that say about me? Is that how I want others to see me?

It can sometimes be hard for those within hearing care to understand the effect such words and messages have on people's perceptions because we are too close to our subject. So a useful exercise is to try applying those messages to other areas of healthcare and seeing whether we would directly respond to them:

- "Are you struggling to get into your trousers?"
- "Is obesity keeping you away from the things you enjoy?"
- "Are you suffering from obesity?"

It is no accident that we rarely, if ever, see messages like this for products or services.[91] People don't like to dwell on how they *don't* want to see themselves. Which is why we're much more likely to see messages focused on the end result: "I lost X number of pounds in X weeks. You can do so too."

Point-of-desperation marketing: the effect on others

There is a third problem with the point-of-desperation approach in hearing care messages: it is often preceded by years of frustration to others.

Family and friends frequently reach a point-of-desperation long before the individual with the reduction in hearing does. Hearing care should see itself as responsible for ameliorating *all* the effects of reduced hearing, *and that includes the effects on others.*

So "people who are desperate enough" is ***not*** the way to define users of hearing technology, even if we're only implying it – and certainly not if we want to evoke an approach response.

Evoking an approach response

To evoke an approach response a message must:

- Be relevant
- Be consistent with how people *want to* see themselves
- Not weaken those who act on the message, either in their own eyes or in the eyes of others

With this in mind, what type of person uses hearing technology that meets all these criteria?

> *"People who want to keep their hearing performing at its best – whatever the situation – in order to be themselves."*

You'll immediately see how relevant such a message is to *everyone* who uses hearing as their primary sense: we've cast our net as wide as possible. It's consistent with how people *want* to see themselves. And it doesn't weaken a person who acts on the message because it's not based on "having a condition", or on desperation. It's based on the power of hearing – and the situation.

So if a situation makes it difficult to hear – no matter how good your hearing is – technology is there to enhance your natural ability. The goal is for your hearing to perform at its best no matter what the situation, so it's *you* who's there and not some shadow of yourself.

Presenting a story people can relate to

Even if you have the world's best hearing, modern life is such that we can artificially create difficult listening situations for ourselves that would never have existed in our hunter-gatherer past. We have loud music, traffic, machinery, air conditioning, televisions playing in the background – all relatively modern inventions in the history of the human race, but each impacting on speech intelligibility.

So there's a logic here people can relate to:

Since the technology of modern living makes listening difficult in the first place, it follows that modern technology is needed to overcome these modern problems.

So hearing well, no matter what the situation, is relevant to all.

When we start seeing hearing technology in this way – as a modern invention that enhances natural ability – we find we have the beginnings of a very exciting proposition for hearing technology with a much wider net of relevance.

Shifting the focus from condition to empowerment

By using our branding in the ways described above we use the power of repeated association to link "hearing well" with hearing technology. We shift the focus away from hearing technology being symbolic of a condition that reminds a person of their own mortality, to hearing technology being symbolic of someone who wants to get the most out of life.

Hearing technology is symbolic of an individual who believes in the importance of their own personal effectiveness: In business. In leisure. In life.

It is no accident that "being effective" in business, leisure and life suggests traits more often associated with youthfulness and vitality, the very antithesis of traits associated with hearing aid use in the past. Repeat it often enough and the old associations won't even get a look in.

Educating society: a welcome side-effect

Associating hearing technology with "keeping one's hearing at its best" has another powerful benefit: it educates society about the importance and purpose of their hearing, a subject very much neglected up till now.

The better someone understands what their hearing actually does for them, the more respect for their hearing they'll have. And the greater a person's respect for their hearing, the more likely they are to keep it working at its best.

And that means:

- Routinely monitoring it with regular (proactive) check ups throughout life;
- Guarding against things or people that would damage or compromise their hearing in any way;
- Using whatever technology is available to them to ensure it's always performing at its optimum no matter what life throws at them.

This all contributes towards changing the underlying social norm.

Summary

In this section we've seen the importance of widening our relevance and how we can achieve this by shifting our attention away from the condition and onto hearing well. Technology must be seen as the *means* to that end – the journey to the destination, rather than the destination itself.

In other words, the point is **not**:

> "You need hearing aids now that you are hard of hearing."
> **= Destination**

But rather:

> "You always want to hear as well as possible, no matter what the situation."
> **= Destination**
>
> "Hearing technology works with your natural hearing to get you there."
> **= Journey**

Focus on the EFFECT – it's relevant to everyone

When manufacturers convey this through the marketing of their brand, and hearing care providers show people enjoying their hearing, we steadily blur the boundaries of whether the hearing performance is due to natural hearing ability or augmented hearing. It actually no longer matters, because the **effect** (or destination) is that your hearing is performing at its best – whether you're harnessing hearing technology or just relying on your natural hearing.

In doing so we successfully shift the age-old perception of hearing aid users being grouped in society with "the deaf and hard of hearing", grouping them instead with "normally hearing" people, in much the same way that those who wear spectacles or contact lenses are seen as having good vision because that's the resulting **effect**.

Be persistent and change will come

Be persistent with this message and before long we'll see people choosing to use hearing technology because it *prevents* them being seen as "deaf and hard of hearing" and instead maintains the **effect** of normal hearing.

It will happen slowly at first, one individual at a time, then another, and another – gradually building momentum. Until one day we stop and realise there has been a complete reversal of the historical attitude we've fought so hard with over the years.

We'll have created a new social norm.

4. When should *I* use hearing technology?

Transforming relevance into action

If Question 3 is about expanding the relevance of hearing technology, the final question is about **transforming** that relevance into action:

- When should someone ***start*** using hearing technology?
- What should be the ***trigger*** for someone to take action?

Answering this question is important because it tackles head on the traditional objections of:

- "I'm not ready."
- "My hearing's not bad enough."
- "I hear well enough."

Leaving people to their own judgement

People often wait until they consider themselves "old enough" or "deaf enough" or have "lost enough hearing" before they do anything about their hearing. It's as if they have a threshold in their own mind that they have to reach before taking action. This threshold is established by the stereotypes of the past and their own experience of other people who have difficulties hearing.

Left to their own judgement, people will constantly compare themselves to what they see as "the typical hearing aid user" and often wait until they match their own stereotype. And if that stereotype is based on someone "*older* than me" or "*deafer* than me" that threshold may never come.

Such stereotypes are typically related to the outdated associations people have had when answering the question, "Who uses hearing technology?" So the new social norm we discussed in Question 3 will go a long way towards answering this question for society, particularly for future generations of hearing technology users.

But shifting the association away from "a person with a condition" to "being yourself no matter what the situation" only lays the foundation for this social norm to change.

Society still needs to know WHEN to take action.

When to take action

To change the social norm we must therefore ensure that society is not left to invent its own fallacious answers for when to use hearing technology. The answers we provide must therefore address the following two questions for them:

1. What is the ***situational trigger*** that tells me when to use hearing technology?
2. What is the ***attributional trigger*** that tells me when to use hearing technology?[92]

Often only one answer will be relevant to a specific individual, but unless we define both types of triggers for society we will leave a vacuum in which incorrect ideas can form and fester.

Action triggers explained

A ***situational*** trigger is one that is based on external factors. It may be an event that happens or a situation that arises. An example might be:

Action: "When should I brush my teeth?"
Trigger: "After every meal."

Having a meal is the external prompt that reminds us to clean our teeth. It is nothing to do with the state of our teeth or an individual trait. If it were, many people would find it difficult to know whether or not brushing their teeth applied to them.

An ***attributional*** trigger is one that is based on internal factors such as our state of health or an individual trait.

When health attributes act as a trigger they are normally established by health professionals or authorities as a Threshold of Action. Examples include:

- When you have reached a specified age where the risk for a condition is known to be higher. This is often the case with cancer screening and cardiovascular monitoring and may be linked to who's paying for the service, funding availability and service priorities.
- When your level falls outside of an agreed range, such as your visual acuity for reading or driving, or your cholesterol level.

Situational triggers for hearing technology

In Question 3 we laid the foundation for when hearing technology should be used, which we can now summarise in this way:

> *"Whenever the situation demands it,*
> *in order to be me and not some shadow of myself."*

This is the answer we want people to formulate when answering Question 4 because it maintains their self-consistency by framing hearing technology as a tool for solving external problems, rather than as a symbol of "having a condition".[93]

Talking our audience's language

Such a response directly answers the Actor-Observer Effect[94] described earlier which informs us that people are more likely to assume a problem is due to the situation, rather than to their own shortcomings. So by focusing on the situation in our response to this question we are "talking their language". We immediately become relevant and go a long way towards resonance.[95]

Just because a situation can be challenging doesn't mean you have to miss out or compromise on who you are or what you can be, does it?

People should have the power to be themselves, no matter what life throws at them.

Technology has always been about extending our own abilities to overcome the constraints of what life brings us. In the same way hearing technology should be presented as a way to ***avoid*** loss, rather than symbolise it (which has been the historical approach).

Avoiding loss: a powerful human driver

The desire to avoid loss is one of the most powerful drivers there is, more powerful even than the desire to gain something.[96]

Consider how even the most reluctant cell phone user will often "keep one handy in case of emergency". They are using technology as a loss avoidance strategy, preparing themselves for "when the situation demands it", a situation that may never arise.

Think too how we take out insurance policies to avoid *potential* loss, confident we're covered for if some misfortune befalls us. Or how we lock our doors at night, avoiding *potential* loss from burglary.

Notice how in all these cases, the loss is both potential and preventable. This is key.

Sometimes the drive to avoid loss becomes so strong it will lead to seemingly irrational behaviour. There are many famous sports players known for engaging in superstitious rituals or wearing a lucky piece of clothing to 'prevent' losing.[97]

Even socially we'll do what we can to avoid loss. We find ourselves tuning in to other conversations, especially if it's about someone we know, so as to avoid losing information that will help us within our social group.

Or we'll participate in an activity we don't actually enjoy just so we don't lose the acceptance of the group. After all, none of us like that feeling of "missing out" when we discover there's been a get-together everyone was invited to but us.

Loss avoidance is the reason time-limited offers work, why we hang onto worn out sweaters, and why we stockpile for the holiday season even when we know stores will be open the following day.

Tapping in to loss avoidance

So let's summarise what we've established about loss avoidance so far:

- It is more powerful than the desire to gain something
- It make us do things we'd not otherwise do
- It is powerful enough to override seemingly rational thought
- It prevents us missing out
- It keeps us prepared for the unexpected
- It motivates us to hold onto things we already have
- We can use technology to avoid loss, or give us the *illusion* we're avoiding loss

When we apply this to hearing technology, presenting it as the means to ***avoid*** loss, rather than symbolise a loss (of hearing), we tap into a very powerful ally indeed.[98]

Using hearing technology to avoid loss

We saw above that the desire to avoid loss is more powerful than the desire to gain something. So a message about "hearing better" (i.e. a gain) will be less effective than a message about avoiding a potential loss.

Notice the distinction we are making here: our message must *not* be about ***accepting*** a (hearing) loss, which is the way traditional messages about hearing aids tend to be framed. Such framing is what leads to hearing aids becoming a symbol of that loss, a symbol many find difficult to associate themselves with.

Instead our message must be about ***avoiding*** potential future loss. Hearing technology must therefore be portrayed as the means to ***prevent*** the loss of something of value, something that by using hearing technology it gives people the power to keep hold of.

But what? What loss, or losses, can people avoid by using hearing technology?

Preventable losses

To understand what loss or losses hearing technology can help prevent, we need to see hearing technology *less* as "treatment for a condition" (gain) and more as the means to keep our hearing working at its best (loss avoidance).

When we see hearing technology in this way, we find we can ask ourselves the same question, but slightly differently:

> *What loss or losses does* ***keeping your hearing performing at its best*** *help prevent?*

For many of those who have never experienced a reduction in their own hearing range it can be a challenge to answer this question, because they have no alternative experience to compare it to.

So it is often easier to uncover those same avoidable losses by asking successful users of hearing technology what *they* miss when they are unable to use their hearing system for any reason.

And it turns out to be a lot, as it happens, which you'd expect for one of our primary senses:[99]

- Sharpness of mind[100]
- The ability to lay down new memories[101]
- Attention and concentration[102]
- Mental and physical energy[103]
- Awareness and safety[104]
- Interaction with others[105]
- The ability to respond in the right way at the right time
- The ability to take hold of opportunities as and when they happen
- Effectiveness at work[106]
- Ability for others to depend on us[107]
- Confidence[108]
- Independence[109]
- Involvement in daily life[110]
- Quality of life[111]
- Music and humour[112]

This list is by no means exhaustive, but is useful as a starting point for developing our messages. They also serve as potential **situational triggers** for using hearing technology. For example, if we notice our memory fading, or our effectiveness at work, or our interaction with others becomes strained, or our ability to respond in the right way at the right time is called into question, it becomes a prompt for us to check for undetected gaps in our hearing.

Hearing and brain function

In the future, solid research will no doubt become available that better informs our knowledge of the relationship between hearing ability and cognition, and in particular the role hearing technology may play in mitigating the risk or effect of mental disorders such as Alzheimer's and Dementia.

At the time of writing the research remains undecided, mainly due to the multitude of variables involved and the fact that intervention is often many years after the onset of a reduction in hearing range which may have resulted in other changes in the brain having taken place as compensatory measures.

What we can be clear on is:

- Remaining socially active is generally better for mental health,[113] and hearing well makes it easier to remain socially active,[114] especially if there has been no opportunity to withdraw from such activity.
- When someone isn't receiving the necessary speech information through their hearing, they must find other ways to "fill in the gaps", shifting responsibility to either another area of the brain[115], the visual system[116], or other people[117].

We can encapsulate both these ideas by presenting hearing as our 24/7 connection.

Hearing: our 24/7 connection

In every area of life we know how important it is to keep our connections strong and constant: electricity, water, our internet connection, our road network, to name but a few. We come to rely on our connections and expect them to be there for us as and when we need them, and it frustrates us when the flow is interrupted.

With any connection we rely on, it's very easy to take it for granted.
Hearing is no exception.

Hearing is our connection. Our 24/7 connection.
Even on duty when our eyes are taking a break.
That's how important it is.

It connects our brain to the outside world,
keeping it sharp and stimulated.

It connects us to one another:
our loved ones, friends and colleagues,
the stranger we meet for the first time so we make a good impression.

It connects us to opportunity, so that it's us who responds
and not some shadow of ourselves.

Hearing technology: keeps the connection strong

When hearing is presented as a connection like this, hearing technology becomes the means to keep that connection strong and constant. It's no longer seen as a "treatment for a condition", but rather as the means to "keep what I already have". It taps into a person's loss avoidance instinct.

When hearing is the focus of our message, hearing technology becomes the handbrake at the top of the hill:

It *prevents* us rolling down that slippery slope.

In this way hearing technology enables you to ***avoid*** the symptoms of old-age, rather than represent them. This is an exact reversal of how the historical social norm has understood hearing aids, as a sign of getting old.

We can convey this idea in the following sticky message:

"Hear to stay – Not fade away."

Labelling and attitudes

Labelling can be a potent tool in shaping attitudes. It can be used to change the way people think about others and themselves, including some whilst ostracising others.[118] They can be used positively or negatively. In the playground children label their classmates with insulting monikers whom they wish to exclude from their social group, whilst social reformers will promote politically-correct terms in place of offensive labels as a foundation for fostering equality.

As we saw in Question 3, historically those who use hearing technology have been lumped in with the "deaf and hard of hearing", even though they are actually more akin to a "hearing person" (which is how they are often described by the Deaf) because they display less of the effects of being "deaf or hard of hearing" than they would do without the use of such technology.

Such historical labelling has kept people away from using hearing technology for fear of being stigmatised, whilst at the same time wrongly implying that those who are deaf and hard of hearing are somehow less than equal. This needs to change.

Instead:

We should be labelling in a way that *promotes* the appropriate use of hearing technology, whilst signalling to society how it should properly relate[119] to those who are "deaf and hard of hearing".[120]

Incorrect labelling confuses society

Consider the following three generalisations that currently come under the label "deaf and hard of hearing":

Group 1 Individuals who display the *effects* of being hard of hearing, even with the use of correctly-fitted hearing technology. These individuals have done all they can to "keep their hearing working at its best", but the limits of current scientific knowledge prevents a better result.

Group 2 Individuals who use a visual language as their primary means of transient communication, such as the Deaf.

Group 3 Individuals who know they have difficulties with their hearing but choose to do nothing about it, even though it is within their power to do so.

Notice the difference? Groups 1 and 2 generally have no alternative, and it is therefore arguably the responsibility of wider society not to exclude them.

By contrast, the individuals within Group 3 are excluding themselves – whatever their underlying motive may be. By doing so they are imposing the ***effect*** of that choice on those around them who must expend additional effort to compensate for that individual's reduction in hearing. Think of all the families that find themselves frustrated and strained as result of such inaction.[121]

Using labelling to separate our audiences

Should those in Group 3 be allowed to give those in Groups 1 and 2 and bad name by sharing the label "deaf and hard of hearing"? Are we not confusing our messages by lumping them together?

We tell society that we should be making it easier for the deaf and hard of hearing by being patient and communicating clearly. But those very same strategies make it easier for those in Group 3 to *avoid* taking action! Surely those in Group 3 need a *different* message, one that encourages their individual responsibility to the rest of society?

We often forget that hearing is the social sense, and ***our*** hearing is relied upon by ***others*** as much as it is by ourselves. You only have to think how much strong emotion lies behind the simple question, "Are you listening to me?"

So we have in fact two different audiences, but our labelling has erroneously lumped them into one.

Two different audiences; two different messages.
We need two different labels.

The fade-away label

When hearing is presented as a connection that must be kept strong and constant, allowing it to simply fade away means our brain's connection to the outside world fades, our connection to other people fades, and our connection to the opportunities of life fades.

You could say we become a **fade-away.**

A fade-away is an individual who doesn't keep their own connection strong and constant and, as a result, fades away. It is a label that clearly applies to Group 3 above, but not to Groups 1 and 2 who require alternative means for staying connected, so we have successfully separated out our audiences and our messages.

Visually we can imagine such a fade-away sitting in a corner with the world going on around them. It is an image of ourselves we wish to avoid, because it implies we have opted out of life and have nothing more to give.

It therefore taps into the human desire to avoid loss, and all those things that hearing keeps us from losing listed under **Preventable Losses** on page 51.

Using technology to NOT fade away

Hearing technology now becomes the means to **avoid** becoming (seen as) a fade-away. If you use hearing technology, you are keeping your connection strong and constant, rather than allowing it to wear out.

You are:

> *"Hear to stay – Not fade away."*

Because:

> *"It doesn't pay to fade away."*

Making hearing technology synonymous with hearing

You may have noticed that we have been presenting hearing and hearing technology almost as synonymous. That's because what's important is a person's *overall* hearing ability, whatever components are used to create that final result.

You *always* want your **hearing** to be performing at its best so that your **connection** is *always* strong and constant. It doesn't matter whether your hearing ability is natural or whether it's the result of technological augmentation. In the same way that if you drive, it doesn't matter if your visual acuity is natural or the result of augmentation so long as the effect is the same.[122]

This is possibly the most important shift in social perception we must make, and all our messages must align with this.

Using technology to be yourself

Creating messages that convey the principle of "staying connected" by keeping your hearing complete should follow this basic rule:

Situation + My hearing = Ability to be me

Note that the focus is on hearing, not the technology. The technology is simply the means to that end (see page 46).

With this in mind, consider the following messages and ask yourself how they link in with avoiding preventable losses (see page 51) and self-consistency*.

Example 1

"When the moment counts, you can count on me."

Example 2

"Miss out on life's opportunities? I leave that to the fade-aways."

Example 3

"Because the party's never the same without you."

Notice in each of these examples that we are also introducing an element of the *scarcity principle,*[123] the idea that as humans we place more value on things that are scarce, whether it's gold, tickets to see someone famous… or an opportunity.

Moments are precious

Many things that rely on our hearing are transient by nature. We can't just repeat them. If we miss them, they are gone for ever.

What is scarcer than a moment or opportunity never again repeated?

Hearing gives us the ability to join ourselves to each and every moment we encounter. Such transience is a factor that perceptibly differentiates hearing from vision.

With eyesight we often have the opportunity to take a second look if we miss something first time round; the object frequently remains unchanged in the environment. Components within speech, however, last mere milliseconds. Miss one, and it's gone forever. The situation has already moved on. You've lost it.

Even if you ask someone to repeat, you've already changed the parameters of the situation. The spontaneity has gone. And there are few things more frustrating than to be told, "It doesn't matter." It leaves us feeling somehow incomplete.

*The easiest way to check a message aligns with self-consistency is by asking "Does it resonate with how I (want to) see myself, and want others to see me?"

Increasing respect for hearing

Hearing is as important for humans as vision,[124] yet many of us grow up with the idea that seeing is more important than hearing to such an extent that hearing is often regarded as an optional extra, that a person could readily live without.

It is not unusual for someone to say, "I'd rather lose my hearing than my eyesight", as if it's a rational choice that must be considered. Yet you will rarely, if ever, hear that same individual say that they would rather lose their arms than their legs!
So why do they feel justified doing so with their hearing?

Such a discussion is outside the scope of this publication,[125] but it is important we realise that society's respect for hearing directly affects how they will treat it.

If an individual does not value their hearing in the first place, they are less likely to seek the appropriate intervention should they experience a reduction in hearing. After all, what's the point if hearing is an optional extra they can do without?

If we want to change the social norm, and see the evidence for it in an increasing number of people successfully using hearing technology, we must systematically educate the public.[126]

Educating the public about hearing

Our goal in educating the public must be:

- To highlight the role hearing plays in our own lives and in society
- To minimise the inclination of people to compare hearing with eyesight

Society must learn to regard hearing as the primary sense it is, and whilst its role may be *different* from seeing, it is no less important.

One of the side-effects of messages that present hearing technology as synonymous with hearing as described above is that it also subtly educates the public as to the role hearing plays.

When we present hearing as a 24/7 connection, for example – *because we are educating the public about when to use hearing technology* – it also provides society with a way to understand the function of hearing within their own lives.

Eyesight is easy to appreciate; we just have to close our eyes to realise what it was doing for us. Hearing is less tangible because it's always "switched on". So our messages become the way to make the intangible tangible for people, just as words allow humans to grasp abstract ideas.

The role of hearing versus eyesight

We saw earlier how hearing is tightly integrated with being in the moment, more so that eyesight. We can convey this idea in the following sticky message:

> *"Missed it seeing? – Quickly glance!*
> *Missed it hearing? – Lost your chance!"*

Such messages are very well suited to educating children so it becomes part of their general attitude about hearing. Children in turn often educate their families.

But the same message can also be introduced into conversations with adults in the following way:

> *"There's that saying, isn't there?*
>
> *Missed it seeing? Quickly glance.*
> *Missed it hearing? Lost your chance!*

You might then go on to make it personally relevant to them. For example:

> *Say you're in a restaurant and someone says to you, "Don't look now, but I'm sure that person over there is so-and-so from such-and-such."*
>
> *Even if you don't look right then, you can take a look in that direction a bit later on and they'll still be there for you to "quickly glance".*
>
> *But say someone speaks to you and you miss it, you've lost your chance. You could ask them to repeat, but people only have so much patience. Meanwhile, the moment's gone.*
>
> *That's because our hearing keeps us in the moment."*

In this way, hearing technology too becomes the means to keep someone in the moment, because the better your hearing, the more tightly integrated with the moment you are.

Summary of situational triggers

This concludes our exploration of situational triggers. We've not only looked at what those situational triggers are, but we've also looked at the emotional and rational reasons behind them, both of which are necessary when formulating persuasive messages that change attitudes.

Situational triggers are about using technology whenever ***the situation*** demands it.

Q. How do we know a situation demands it?
A. It's anytime we're not ourselves because of how we're hearing in that situation.

It doesn't matter whether the reason is the distance involved, the noise in the background, the way the person is speaking, or the limitations of our own hearing. All that matters is that I have the best possible hearing, whatever the situation.[127]

The best way to convey this message is by showing people of all ages in situations in a way that people ***want*** to see themselves. They may be enjoying a restaurant. They may be winning a memory contest. They may be closing a business deal. And it's even better if they're real people and it doesn't look staged.

Or alternatively, show **idealised** characters that **represent** how people would like to see themselves in their fantasies, such as the Marlboro Man or a certain British spy who wears a certain well-known watch.

However we portray people, it needs to be something that others can relate to, that is consistent with how they want themselves and others to see them.

Portraying people in this way holds up an ideal, a threshold against which to compare ourselves that reverses the historical thresholds based on stereotypes of "older than me, deafer than me".

We want our audience to say to themselves:

Am I hearing as well as the person in this message? If not, I want what they have.

Hearing technology then becomes the means to achieve this end – and because every moment is precious, the sooner the better. Such urgency helps to reduce the time it takes for someone to transform relevance into action.

Attributional triggers for hearing technology

We now come to what is perhaps the biggest weakness the hearing care industry has in providing a clear and unified message to society: it's the point at which *we tell people they should be using hearing technology.*

To put it another way:

- How "bad" does someone's hearing need to get before they should use hearing technology?
- How *early* in a reduction should someone begin using hearing technology?

The historical answer to such questions has essentially been, "It depends."

It *depends* on how much difficulty you perceive yourself to be having with your hearing; it *depends* on cost-versus-benefit; it *depends* on whether you consider yourself "ready" to use amplification; it *depends* on your lifestyle.[128]

Such a subjective approach leaves a lot of room for avoiding action.
No wonder so many people say, "I get by."

Whose hearing is it anyway?

"I get by" is a very one-sided approach. It implies that the person with the reduction in hearing is the sole arbiter of whether hearing technology would be beneficial, whereas in the early stages of a reduction in hearing it is more usually the family and friends who are most affected by it. They're the ones that have to repeat themselves. They're the ones that have to listen to the TV louder. They're the ones who can't go out because the person with the reduction in hearing no longer 'enjoys' it.

And what about employers? If an employee's hearing is reducing their effectiveness at work, but the employee considers themselves to be "getting by" without the use of hearing technology, should the employer not have any say in the matter?

Our hearing belongs to *others* as much as it does to us.

Hearing is the Social Sense. It is the **only one** of our five senses[129] where a change is more readily noticed by people *other* than ourselves.

So should hearing care *really* be leaving this to an individual's own judgement without providing them with any solid guidelines?[130] It could be argued that we are being irresponsible to wider society.

Defining the purpose of hearing technology

Before we can establish guidelines as to **when** someone should begin using hearing technology we first need to understand **the purpose** of using hearing technology. We define it here as follows:

The purpose of hearing technology is to keep one's hearing performing at its best.

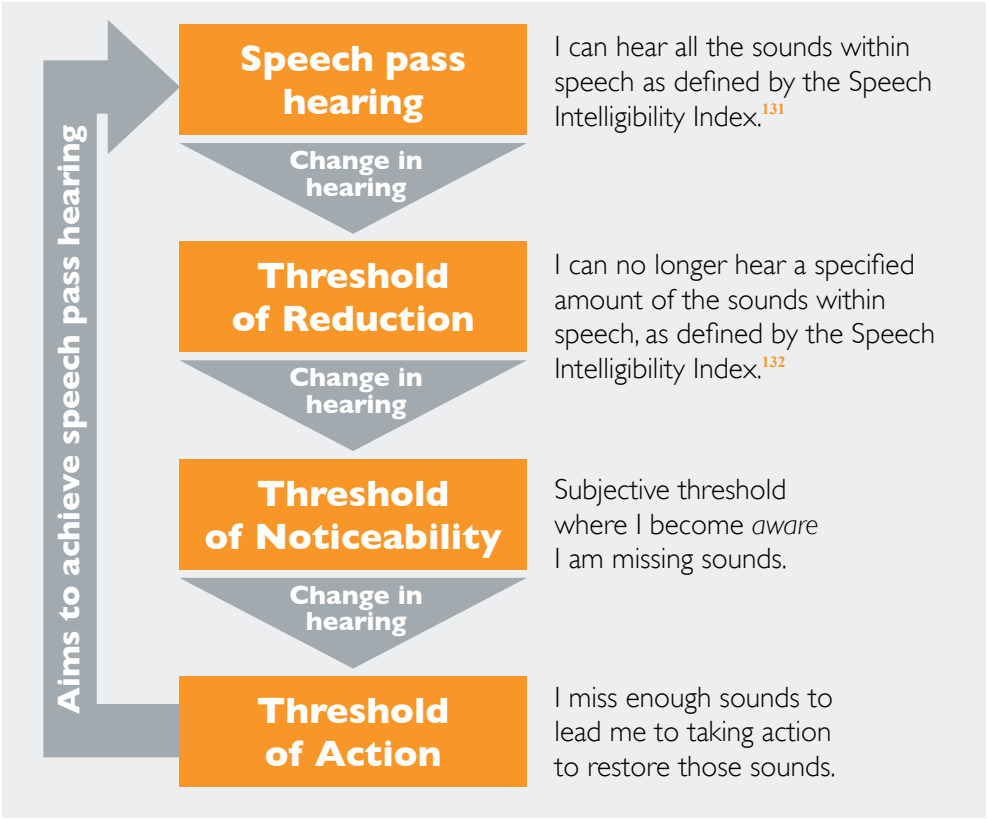
Secondly we need to understand what it means to "keep one's hearing performing at its best", which we'll define here as:

To provide the brain with as complete a range of usable sound—especially speech—as constraints allow, in the manner most consistent with the brain's natural expectations.

These two definitions have been deliberately formulated to be future-proof. As our understanding of hearing and the capability of technology improves these definitions will continue to hold true. Constraints may be biological, physical or technological.

The journey to hearing technology use

We can now establish the following stages an individual must progress through before they will begin using hearing technology:



Accelerating the decision to use hearing technology

In order to accelerate the point at which someone begins to use hearing technology it is necessary to bring each of the three thresholds closer to one another in time, the theoretical optimum being to make them one and the same.

Currently an individual must pass through each of these three stages before taking any action, and many never even reach the threshold of action. They will not take action unless they:

- Notice a change in their hearing
- Believe they *should* be taking action

To add further delay there is often a period of many years between when an onset of reduction takes place and the actual noticing.

Closing the gaps between each of these thresholds therefore requires a twofold process:

- **We must make it easier for someone to notice a reduction in their own hearing range**

  This we can do through routine hearing checks throughout life.
  See Questions 1 and 2 for more details.

- **We must define both the Threshold of Reduction and the Threshold of Action**

  These two thresholds should ideally be one and the same, so we can say: "There are enough sounds of speech falling outside of your hearing range to require action."

Defining the threshold of action

At what point should someone take action?

We should begin with the premise that the brain expects to receive a certain amount of auditory information in order to successfully follow speech.[133] When it doesn't receive this information—when the signal is degraded—it must rely on compensatory measures such as:

- Using other parts of the brain (e.g. increased load on working memory)
- Using the visual system (e.g. lip reading)
- Using other people (e.g. repetition, dependence)

We then need to determine the point at which this shift in responsibilities introduces other problems. To our knowledge the research necessary for determining such a point has yet to be established and so we have included a more detailed discussion and an interim recommendation in Appendix 2: Establishing a Threshold of Action.

Avoiding age-based triggers

Some organisations and individuals have proposed hearing screening for individuals over a certain age such as 50 or 60. The problem here is threefold:

- It reinforces the notion that only older people use hearing technology.
- That hearing problems are always age-related.
- It sends a "condition-based" signal. It's like saying we are looking for something you won't like, which encourages an avoid response.

Routine hearing checks **throughout life** and the establishment of a Thresholds of Action avoid these unnecessary hindrances to changing the social norm.

Summary of Attributional Triggers

This concludes our exploration of attributional triggers. We have seen why the hearing care industry must prioritise the establishment of a Threshold of Action to provide clear guidance to hearing care professionals and society alike, and we have provided an interim recommendation in Appendix 2.

Such a threshold will go a long way to modernising the social norm for hearing because it will remove the ambiguity over whether and when someone should consider using hearing technology.

Imagine a couple, one of whom is frustrated because their partner refuses to take action. Their partner believes they "get by" and prefers instead to wait until their hearing becomes worse. Meanwhile they fail to realise the unfair strain it is putting on their family. A Threshold of Action would help to reduce incidents like this by sending a clear signal as to what society expects.

We would recommend such a threshold is based on a percentage figure, such as the Speech Intelligibility Index, which tends to be easier for people to relate to. In the future, audiologists should be equipped to demonstrate that their intervention has resulted in a Speech Intelligibility Index closer to 100%.

Summary

In this section we have focused on transforming relevance into action by establishing Situational Triggers and Attributional Triggers.

Situational Triggers are things in the environment that prompt people to take action because they are "not being themselves" on account of the listening situation (not a condition). This keeps the net of relevance as wide as possible and maintains consistency with how people see themselves – particularly when a reduction in hearing is milder. Attributional Triggers are thresholds of action established by the Profession that can be used as unambiguous guidance to the public, such as when a person's Speech Intelligibility Index falls below a set percentage.

PUTTING THE PRINCIPLES OF THE 4 QUESTIONS INTO ACTION

We have now finished looking at each of the **4 Questions** that society needs to answer correctly in order to establish the new social norm for hearing.

We have also seen how:

It is the combined responsibility of the Industry and Profession to provide the right ingredients for individuals within society to form an appropriate attitude towards their hearing.

When each of us align our messages to the principles explained in the **4 Questions**, we accelerate that change. Those who perpetuate outdated messages, hinder it.

It therefore means that every event we hold, every letter we send out, every product we launch, every advertisement we publish, every article we write, every campaign we run becomes an opportunity for us to either **accelerate** or **hinder** the process of changing the social norm. It becomes our choice.

The principles of the **4 Questions** are flexible enough to be tailored to our own organisations, yet definitive enough to ensure we are presenting a unified message to society across all messengers.

The role of the messenger

When working to change attitudes the *kind* of messenger is every bit as important as the message itself,[134] so our greatest impact will come by working together in a systematised fashion, with specific kinds of organisations (and individuals) taking responsibility for getting specific types of message out into wider society.

Action Plan

1. Look at Table 3 and identify the role most closely related to your own.
2. Ask how you might create exposure for the message assigned to your role, perhaps using existing projects or developing new ones specially.
3. Consider pooling resources with others like yourself to create a bigger impact through joint campaigns.

Whilst it is often tempting to simply 'do our own thing', changing the social norm benefits everyone; it's common ground. So by working together **with a unified purpose and a unified message** we all reap results individually far greater than if we had tried to protect our own little corner.

Change will come. It's up to us how quickly we want it to happen.

TABLE 3: MESSAGE FOCUS & RESPONSIBILITIES

Question	Responsibility	Primary Focus	Message Examples
1. When should I have my hearing checked? **Page 23–25**	• Hearing care professionals • Charities and "third sector" organisations involved with hearing care • Professional bodies & organisations • Governmental health authorities	• Promote routine hearing checks throughout life. • Present sticky messages so as to become "common knowledge". • Frame services in terms of getting the best out of one's hearing range rather than a finding and treating a condition.	• "Eyes checked. Teeth checked. Hearing checked." • "It's just being wise to check hearing like eyes."
2. How do I notice a change in own my hearing range? **Page 26–28**			• "Others will tell if I'm not hearing well." • "I'd much rather know before problems show." • "If you ask to repeat, check you hearing's complete."
3. Who uses hearing technology and does that apply to me? **Page 29–46**	• Developers of hearing technology	• Present hearing technology as synonymous with hearing well. • Develop brands that people want to align themselves with because they focus not on having a condition, but upon positive human traits that are consistent with how people want to see themselves. • Advertise your brand directly to consumers rather than leaving it to distributors to do so on your behalf.	• "So discreet you'll only know by the way they hear." **Always ask:** • Can someone see themselves in your product or brand? • Does responding make them feel good about themselves? • Are they happy with the way others would see them if they responded to your brand?
4. When should *I* use hearing technology? **Page 47–63**	• Hearing technology developers • Hearing care professionals	• Present hearing technology as the means to ***avoid*** loss and promote self-consistency.	• "Hear to stay, not fade away." • "To be yourself, whatever the situation."
	• Professional bodies & organisations • Researchers	• Establish a Threshold of Action as unambiguous guidance for when someone should use hearing technology.	• Speech Intelligibility Index below 70% ±5 (to accommodate more challenging listening environments).* *See Appendix 2.
INCREASE RESPECT FOR HEARING **Page 57**	• All organisations and individuals involved with hearing care	• Understand the role hearing plays in your own life and in society. • Educate the public.	• "Missed is seeing, quickly glance. Missed it hearing, lost your chance." • "Hearing is one of our two primary senses, connecting your brain to the outside world."

Calls to Action

- If a message is **negative** (e.g. "If you ask to repeat, check your hearing's complete"), **do not include** a direct call to action for a specific product or provider. Instead keep such campaigns general. They are best suited to health campaigns run by professional or public bodies which don't require direct interaction.
- Negative messages send out **avoid** signals. They deter people from taking action with a messenger bearing "bad news", hence the saying "Don't shoot the messenger!" Negative messages are therefore like barbed wire: they keep people from going in the wrong direction, but people aren't attracted to them!
- If you want a direct call to action, build **positive** associations. People must feel **good** about responding.

GETTING INVOLVED

The Audira website is a nonprofit, non-partisan website established as a hub for like-minded individuals and organisations to help facilitate the creation of a new social norm for hearing.

1. Show your support

If you support the goal of changing the social norm for hearing please do register on the website if you haven't done so already. Not only will this make it easier to keep updated with new developments and resources, but it will help us to build a stronger community of individuals united by a common goal. You never know where people power will eventually lead.

2. Join the discussion

Start a discussion on the website with other like-minded individuals or add your voice to an existing one. Take the ideas described here and elsewhere and take them to the next level. Audira is all about working together to change the social norm, whatever your background or involvement with hearing care. The goal is bigger than any one of us individually, but together we can move the unmoveable.

3. Collaborate with others

We are introducing tools to the Audira website to make it easier for you to begin your own initiatives and collaborate with others to make things happen in your own community or on a larger scale than could be done individually. By registering now you will be informed as soon as these services become available.

4. Share resources

Found something that's worked for you? Seen evidence of changing attitudes because of something you or others have done. Please share it with the rest of us and help accelerate change.

5. Give your feedback

We love hearing from you. Whether this publication has inspired you, challenged you, or even angered you – do let us know. Feedback is always useful. So is animated discussion! Plus, if you've found any errors or believe there are areas that need expanding or improving upon, please use it as an excuse to make contact!

6. Invest in change

Have you directly benefited from the resources provided through Audira? Consider giving something back to the Audira project with a contribution. Audira makes no charge for its online resources, and has reached this point without funding, even though considerable time and effort have been spent developing them on behalf of the wider community. Any contributions received will be put towards funding the development of further resources, campaigns to change attitudes, printing and hosting costs and research projects to better inform change.

7. Inspire others

Pass this publication on. Tell your colleagues and peers what we need to do and how to do it. Share the website with them. Show them the presentations. Let's spread the word so there are more of us accelerating the process of change.

8. Fan the flames

Caught the vision, but finding it a challenge to inspire others? Or working with organisations or individuals that haven't yet "got it"? Want to train your staff? Perhaps you are planning a campaign or literature rewrite but need guidance on messages or the right language to use? Or maybe you just want to be certain you're aligning your own strategy with the principles of the 4 Questions?

Audira is able to provide lectures, presentations, private training and consultancy work. Please contact us through the website with a brief outline of what your requirements are. Your confidentiality is assured.

Website: www.audira.info

Email: info@audira.info

APPENDIX 1

Having a Hearing Test Needn't Be 'Risky'

Health recommendations that involve the potential detection of an illness or condition involve a risk for the person who responds because there is the possibility of an undesirable outcome (Rothman & Salovey, 1997; Rothman et al, 2006).

At the same time *not* responding to the recommendation also carries a risk: that of not knowing whether or not you have the condition (Levin et al., 1998).

So whether or not you respond to such a health recommendation depends partly on how much of a threat you believe having the condition is (Norman et al., 2005). On the one hand, if the condition is not perceived as being particularly serious – and especially if the consequences of failing to detect the condition are not life-threatening – there will be less inclination to respond.

But at the other end of the spectrum, if a condition is considered *too* serious or if it cannot be treated effectively, people also become less inclined to respond, in an unconscious effort to protect themselves from a threat they can do nothing to minimise (Ditto et al., 2003). In fact studies have found that in such situations people will even avoid seeking further information about the condition (Dawson et al, 2006).

The likelihood of a response therefore depends largely on whether or not the recommended behaviour enables someone to prevent or minimise a potential loss. Or to put it another way, will adopting the recommendation enable them to maintain their status quo? (Kahneman et al., 1991; Samuelson & Zeckhauser, 1988)

For example:

- Using sunscreen *prevents* a person *losing* their (already) healthy skin; it therefore enables them to maintain their status quo.
- Using dental floss *prevents* a person losing their (already) healthy teeth; it therefore enables them to maintain their status quo.
- Early detection of cancer allows for more effective treatment and reduces someone's risk of losing their life or functional wellbeing; a screening programme therefore enables them to maintain their status quo or minimises their risk of losing it.

By contrast, detecting a condition or illness when there is no cure leaves someone feeling *more* vulnerable and *more* powerless than they were before, and we tend to avoid things that weaken us (Keltner et al., 2003).

The problem with hearing tests as loss detection

When we consider recommended health behaviours as a way for a person to avoid loss and maintain their status quo we find that hearing tests present a problem, because they are frequently presented as a way to detect hearing loss.

To examine why this is a problem consider the following questions :

1. **Does detecting a hearing loss reduce the risk of loss?**

   No, because hearing loss is itself a loss. If I have a hearing test I risk upsetting my status quo of believing my hearing is normal.

2. **Does the treatment remove the loss?**

   No.

3. **What costs are associated with me discovering that I have hearing loss?**

   – I may have to wear hearing aids for the rest of my life.

   – I will be seen as one of the deaf, hearing impaired or hard of hearing.

4. **Do these costs maintain my status quo?**

   No. It means a change to how I see myself, how others see me and a change in lifestyle and daily routine.

5. **If I *don't* have my hearing tested and I *don't* discover I have a hearing loss will I maintain my status quo?**

   Yes, because I won't have to wear hearing aids and I won't be seen as one of the deaf, hearing impaired or hard of hearing. I remain in the same 'group' as my family and friends which is where I am used to belonging.

When the hearing test is presented in the same manner as an illness detection activity (e.g. screening for hearing loss; find out if you are suffering) we increase the risk to someone of having their hearing tested because the cost of an undesirable outcome is too great and isn't outweighed by the perceived benefits.

Some may argue this problem is simply inherent in the very nature of hearing loss itself, stressing that it *is* a condition and it *does* need to be detected in order to treat it. But such notions are misguided, especially when viewed in terms of loss aversion and maintenance of the status quo. Seen this way we discover that the *real* problem lies in the way we *communicate* the health recommendation.

We need to re-frame it.

Re-framing the hearing test as loss avoidance

To illustrate how we might re-frame the recommendation of a hearing test let's begin by rebuilding our message on the basis that people seek to avoid loss and maintain their status quo.

1. **What status quo do people wish to maintain when it comes to their hearing?**

   To hear as *they* expect to and as society expects them to.

2. **What do they lose by not maintaining this status quo?**

   The ability to be themselves whatever situation they happen to be in.

   This loss of status quo impacts on everything from how they appear in front of others, to their involvement in relationships, their effectiveness at work, and their ability to respond to the opportunities of life.

3. **How do they maintain their status quo and avoid loss?**

   By keeping their hearing performing as expected.

4. **How can they be certain their hearing is performing as expected?**

   By having it professionally checked routinely as we do for eyes and teeth.

5. **If it's not performing as expected what can they do to maintain their status quo?**

   Use hearing technology to complete the parts they would otherwise miss.

By taking a Loss Avoidance approach we have done two things:

1. We have shifted the risk of loss onto *not* having one's hearing checked.
2. We have re-framed the purpose of both the hearing test and using hearing technology to one that is positive, one that maintains a person's status quo.

You could say we have re-framed a **detection** behaviour as a **prevention** behaviour.

Message Framing

The way a message is framed has been shown to influence the likelihood of people adopting a recommended health behaviour (Levin et al., 1998; Rothman et al., 2006).

As Rothman, Bartels, Wlaschin and Salovey explain:

> *"Information about a health behavior emphasize the benefits of taking action (i.e. a gain-framed appeal) or the costs of failing to take action (i.e. a loss-framed appeal)". (Rothman et al, 2006)*

With this in mind there are four different ways we might frame a message about having one's hearing checked:

Frame	Behaviour	Outcome	Consequence
Gain	**If you <u>do</u> have your hearing checked routinely...**	...you will know your hearing is picking up all it should.	Attain desirable outcome
		...you reduce the risk of unknowingly missing things [in front of others].	Avoid undesirable outcome
Loss	**If you <u>don't</u> have your hearing checked routinely...**	...you increase the risk of unknowingly missing things [in front of others].	Attain undesirable outcome
		...you will not know your hearing is pick up all it should.	Avoid desirable outcome

Table 4

To our knowledge the effects of message framing have never been applied empirically to recommendations for hearing tests to determine optimal wording and frame, and we believe this is an area which requires further research.

In the absence of specific research within hearing healthcare we would make the following recommendations based on the findings of the extensive research in other domains (Rothman et al., 2006; Maheswaran & Meyers-Levy, 1990; Levin et al., 1998).

- Use a **Loss-Framed message** for audiences who are likely to be concerned about their hearing, such as:

  "If you don't have your hearing checked routinely you increase the risk of unknowingly missing things in front of others."

- Use a **Gain-Framed message** for audiences who believe they have good hearing, such as:

  "By having your hearing checked routinely you'll be confident your hearing is catching everything it should be."

- Do not frame the hearing test as "screening" which implies you are trying to find a condition that nobody wants. Instead frame it in terms of keeping your hearing performing at its best. In this way the hearing test becomes a way maintain a person's status quo and reduce their risk of loss.

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APPENDIX 2

Establishing the Threshold of Action

Establishing a point on the Speech Intelligibility Index (SII) that can be used as a guideline for when someone should begin using hearing technology would assist audiologists and patients alike. It would reduce the influence of other, more subjective variables such as whether the audiologist or patient feels they are "ready", and other more impermanent factors such as how socially active someone *believes* they are during the snapshot that is a single-event communication needs assessment.[135]

Basing Threshold of Action on avoiding a shift in responsibility

Such a threshold should be based on when a reduction in hearing ability results in the shifting of responsibility for speech processing to other systems to such an extent that detrimental consequences are made more likely.

An example might be that if someone has to rely more on their working memory to "fill in the gaps", does that reduce the availability of working memory for other tasks?[136] And if so, how much should it be allowed to reduce? And does it increase the likelihood of future changes in the brain taking place, such as a reduction in episodic memory?[137]

Or if that individual must rely on other people repeating themselves, to what extent is such reliance acceptable to society?

The difficulty with carrying out such research with individuals known to have a reduction in hearing is that those shifts in responsibility are often hard to isolate, especially if measured in individuals who have relied on a combination of compensatory strategies for some time. Such reliance may even have resulted in plasticity changes in the brain that make it hard to know whether the change is the *result* or the *cause* of the reduction in hearing.

An alternative approach may be to take a group of normally hearing individuals and artificially induce a reduction in their SII by presenting filtered sounds through headphones.

Such individuals might be presented with a series of tests to measure changes in cognition, visual perception and reliance on compensatory strategies such as repeating or asking for a sentence to be re-worded. FMRI may provide additional information as to which areas of the brain automatically volunteer their support, which may provide clues for further research into the effects of an untreated reduction in hearing.

To the author's knowledge such research has yet to be carried out.

Basing a Threshold of Action on minimum intelligibility

Research by Jorgensen (2012) finds that "for a young normal hearing person, about 40% audibility is necessary for accurate speech perception. Below this 40% cut off, top down processing is necessary to accurately understand the stimuli."[138]

It should be remembered that background noise will reduce the overall amount of speech information available, so someone with a SII of 40% may be able to follow a conversation in an ideal listening environment, but if background noise reduces audibility by 30% then their SII is reduced to 10%, which is no longer sufficient.

We should also remember that "real life" outside of a research laboratory bombards us with multiple demands on our cognitive resources (including sifting for relevance and comparing to current motivational goals) so the decision as to which signal to "tune into" out of all the possible information is transient and not task-based (i.e. single motivational goal and narrow relevance) in the same way a diagnostic test would be.

So whilst 40% is a good starting point for a minimum guideline, it is inherently restrictive.

Basing a Threshold of Action on auditory lifestyle

There are two approaches we could take here. The first is to ask whether an individual's SII is sufficient for their perceived auditory lifestyle. Someone who lives a solitary life with no socialising may get away with an SII of 40% providing their lifestyle does not change, the signal is ideal, and providing their lifestyle is actually appropriate for them and not just the fallout of "living within their auditory means".

By contrast someone who is socially active and likely to find themselves in situations involving multiple noise sources will require a higher starting SII to allow room for the degraded signal of different listening situations.

So the second approach is to build a database of typically encountered situations across a diverse population and calculate the average SII for each of these situations then relate this to different hearing levels. This should provide a foundation for establishing a minimum hearing level SII for different environments. To our knowledge no such study has been carried out.

Interim Recommendation for a Threshold of Action

Whichever approach is best, what we do know is that the "correct" threshold lies somewhere between 40% (minimum) and 100% (maximum), and the higher the starting SII, the better equipped someone is to cope with whatever situation their hearing encounters.

In the absence of dedicated research to answer this question, if we were to work on the basis of "somewhere between the two" as a guideline we are unlikely to be far out. By far the easiest calculation, therefore, is to find the half-way mark between the minimum and the maximum, which would give us a Threshold of Action of 70% SII. A margin of ±5% might be included to provide flexibility for more or less socially active individuals, giving us a Threshold of Action of between 65% and 75%.

APPENDIX 3: NOTES & REFERENCES

1. See Cialdini, R.B. & Trost, M.R. (1998). *Social influence: Social norms, conformity, and compliance.* In D.T. Gilbert, S.T. Fiske & G. Lindzey (Eds), The handbook of social psychology (4th edn, Volume 2, pp. 151-192).

2. See, for example, Chen, S., Duckworth, K. & Chaiken, S. (1999). *Motivated Heuristic and Systematic Processing.* In Psychological Inquiry, Vol. 10, No. 1 (1999), 44-49.

3. Cialdini, R.B. (2009). *Influence: Science and Practice (5th Edition), Chapter 4.*

4. See, for example, Berkowitz, A.D. (2004). *The Social Norms Approach: Theory, Research, and Annotated Bibliography.* http://www.alanberkowitz.com/articles/social_norms.pdf

5. For a review of the psycho-social and economic impact of untreated hearing loss see Shield, B (2006). *Evaluation Of The Social And Economic Costs Of Hearing Impairment.* http://www.hear-it.org/multimedia/Hear_It_Report_October_2006.pdf

6. See Alcock, C.J. (2013). *Staying Connected: Rethinking Hearing and Deafness.* http://www.audira.info/en/presentations/item/89-staying-connected-rethinking-hearing-and-deafness

7. See Heath, C. & D. (2010). *Switch: How to Change Things When Change is Hard, Chapter 1.*

8. The term 'audiocentric' describes those who use hearing as their primary means of receiving transient communication, as opposed to 'visiocentric' which would describe someone who uses their visual system instead. A person who uses Sign Language or relies primarily on subtitles who be considered visiocentric. A fuller discussion will be provided in a separate Audira publication focused on the Language of Hearing Care.

9. Kochkin, S. (2009). *MarkeTrak VIII: 25-Year Trends in the Hearing Health Market.* In Hearing Review, October 2009.

10. Kochkin, S. (2007) found, for example, that "About three-quarters of respondents (77%) demonstrated a tendency either to minimize their hearing loss or to report a lack of need due to their life circumstances. More than half the respondents (53%) indicated that they hear well enough in most situations."
MarkeTrak VII: Obstacles to Adult Non-User Adoption of Hearing Aids.

    Hougaard S. & Ruf S. (2010) and (2012). *EuroTrak: Survey of the market for hearing aids in Germany, France and the UK.* One of the top reasons for non-adoption was found to be "hearing loss not severe enough" and "hear well in most situations".

11. See Kochkin, S. (2009). *MarkeTrak VIII: 25-Year Trends in the Hearing Health Market.* In Hearing Review, October 2009.

    Kochkin finds that the average time between knowledge of hearing loss and decision to use hearing aids is 6.7 years mean (3 years median) for owners compared to 12.4 years mean (8 years median) for non-owners. The most significant factor in influencing the decision to use hearing aids was found to be their "hearing loss got worse". However the number of non-owners was found to be three times the number of owners. In other words, people don't do anything unless they really, really have to.

12. This belief the hearing care industry has that people "wait x number of years" is actually misleading because it implies that people do *eventually* seek intervention and are just "putting it off", whereas the evidence is that many people never even seek it. But by *believing* that people are "putting it off", and by *believing* the purported waiting is evidence of a journey an individual must take through denial results in us overlooking

the main underlying driver for non-adoption: that hearing aids have to be relevant to someone in the first place. If a person thinks they hear "well enough" and "in most situations", then why are hearing aids relevant? It's only ***once they become*** relevant that people actually consider whether the perceived pros outweigh the perceived cons.

As an analogy think of a car manufacturer advertising to a non-owner. Their data may show that x number of people would benefit from using a car because they live a certain distance from their place of work. But the individuals they are targeting consider themselves not just non-**owners**, but non-**drivers**.

Is that manufacturer likely to attract them with new car designs? Better technology? Better fuel efficiency? Making them feel guilty for not using a car? Special offers? Demonstration drives? Of course not! Those messages are just not relevant to someone who doesn't see the need to drive.

The manufacturer is better off getting together with other manufacturers to promote the *benefits of driving* in a way that's relevant to those non-drivers. They might promote the convenience of "coming and going" when they like, of the time saved not having to rely on public transport, of having their own space away from the crowds. Once driving becomes relevant, then each manufacturer can begin promoting their own product. They've grown their potential market.

Therefore, if we want to increase the hearing aid adoption rate we first have to increase relevance and ensure that people's perceptions of hearing technology, and indeed their hearing, are correct. This is why we must address the underlying social norm, whilst simultaneously continuing to lower any barriers to ownership.

13. Consider the words of Martin Luther King in his famous speech of 1963: *"I have a dream that one day on the red hills of Georgia sons of former slaves and the sons of former slave-owners will be able to sit down together at the table of brotherhood…"*

    His words painted a clear picture of where society needed to be at a time when such change must have seemed impossible to many. Yet by working together, with a unified purpose and a unified message, the men and women of the American Civil Rights Movement were able to make it a reality. Social norms can and do change, but never by themselves. They always require instruments or agents of change.

14. Albarracín, D. & Wyer, R.S. (2000). *The Cognitive Impact of Past Behaviour: Influences on Beliefs, Attitudes, and Future Behavioural Decisions.*

    See also Cialdini, R.B. (2009). *Influence: Science and Practice, Chapter 3.*

15. See Fiske, S.T. & Taylor, S.E. (2013). *Social Cognition: from brains to culture, 2nd Edition (Chapter 5, pp 136-144).* Sage.

16. Swann, W.B., Jr., (1983). *Self-Verification: Bringing Social Reality into Harmony with the self.* In J. M. Suls & A. G. Greenwald (Eds.), Social psychology perspectives (Vol. 2, pp. 33-66). Hillsdale, NJ: Erlbaum.

17. Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity, Chapter 2.* Simon & Schuster.

18. Katz, D. (1960). *The functional approach to the study of attitudes.* Public Opinion Quareterly, 24, 163-204.

19. Shavitt, S. (1990). *The Role of Attitude Objects in Attitude Functions.* Journal of Experimental Social Psychology, 26, 124-148.

20. Shavitt, S. & Nelson, M.R. (2000). *The Social Identity Function in Persuasion: Communicated Meanings of Product Preferences.* In G.R. Maio & J.M. Olson (Eds.), Why We Evaluate:

Functions of Attitudes (pp. 37-57). Mahwah, NJ: Erlbaum.

Shavitt's research has important implications for hearing technology. Do hearing aids have a utilitarian, social identity, or self-esteem maintenance function, and can this function be manipulated? The answer will make a difference to the way it should be marketed.

21. Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). *Power, approach, and inhibition.* Psychological Review, 110, 265–284.

22. Tversky, A., & Kahneman, D. (1974). *Judgment under uncertainty: Heuristics and biases.* Science, 185, 1124-1130.

23. "We accept the reality of the world with which we're presented." Quoted in Eagleman, D. (2011). *Incognito: The Secret Lives of the Brain, chapter 4.* Canongate. Chapter discusses the concept of *umwelt*, how our experience is completely limited by our biology, especially our senses.

    See also Sharov, A.A. 2001. *Umwelt theory and pragmatism.* Semiotica, Vol. 2001, Issue 134: 211-228.

24. Jones, E.E., & Nisbett, R.E. (1972). *The Actor and the Observer. Divergent Perceptions of the Causes of Behaviour.* In E.E. Jones et al. (Eds.), Attribution: Perceiving the causes of behaviour. Morristown, NJ: General Learning Press.

25. Shavitt, S. & Lowrey, T.M. (1992). *Attitude Functions in Advertising Effectiveness: the Interactive Role of Product Type and Personality Type*. In NA - Advances in Consumer Research Volume 19, eds. John F. Sherry, Jr. and Brian Sternthal, Provo, UT : Association for Consumer Research, Pages: 323-328.

    By presenting hearing technology as "utilitarian" (i.e. a tool for improving a difficult listening situation) and shifting the current "value-expressive" aspect from "wearing this says I have a condition" to attributes seen as positive (e.g. "wearing this says that I keep my mind sharp"), we appeal to both high and low self-monitors.

26. Zinkhan, G.M., & Hong, J.W. (1991). *Self Concept and Advertising Effectiveness: a Conceptual Model of Congruency Conspicuousness, and Response Mode.* In NA - Advances in Consumer Research Volume 18, eds. Rebecca H. Holman and Michael R. Solomon, Provo, UT : Association for Consumer Research, Pages: 348-354.

27. Ehrenberg, A., Barnard, N., & Scriven, J. (1997). *Differentiation or Salience*. Journal of Advertising Research November/December 1997. Contains the following pertinent quote from Professor Tom Robertson: "The last few demanding years have drilled into us all the vital need to innovate to gain a competitive edge. But when we really do steal a lead we find the advantage is only temporary. Why? Because our competitors have been working to the same pressures, usually with similar resources. So we rapidly lose our edge and off we go again striving to get ahead once more. Thus the battle of the brands continues, over time the with broad competitive parity normal and natural state of most of our markets."

28. Kapferer, J.N. (2012). *The New Strategic Brand Management: Advanced Insights & Strategic Thinking, Chapter 7: Brand Identity & Positioning.* Kogan Page.

29. Achouri, M.A., & Bouslama, N. (2010). *The Effect of the Congruence between Brand Personality and Self-Image on Consumer's Satisfaction and Loyalty: A Conceptual Framework.* IBIMA Business Review, Vol. 2010 (2010), Article ID 627203. http://www.ibimapublishing.com/journals/IBIMABR/ibimabr.html

30. A classic example of using a brand message to change the social norm is recounted in Sedivy, J., & Carlson, G. (2011). *Sold on Language: How Advertisers Talk to You and What This*

Says About You. Wiley-Blackwell.

In 1929 the cigarette company Lucky Strikes recognised that they could increase revenue by selling more cigarettes to women. At the time there was a social taboo against females smoking in public. They developed a very clever marketing campaign involving 10 debutantes who participated in a public parade in which they "lit up" as a protest against sexual inequality. It made the papers and caused a national stir, leading to a more women smoking. That single, planned act helped change a seemingly intransigent social norm.

31. Festinger, L. (1957). *A Theory of Cognitive Dissonance.* Evanston, IL: Row, Peterson.

32. Cialdini, R.B. & Goldstein, N.J. (2004). Social Influence: Compliance and Conformity. Annual Review of Psychology 2004. 55:591–621.

33. Chaiken, S. (1980) *Heuristic versus systematic information processing and the use of source versus message cues in persuasion.* Journal of Personality and Social Psychology, Vol 39(5), Nov 1980, 752-766.

34. Petty, R.E., & Cacioppo, J.T. (1984). *Source Factors and the Elaboration Likelihood Model of Persuasion.* In NA - Advances in Consumer Research Volume 11, eds. Thomas C. Kinnear, Provo, UT : Association for Consumer Research, Pages: 668-672.

35. See Note 22.

36. See discussion on the role of repetition in changing attitudes in Hawkins, S.A., & Hoch, S.J. (1992). *Low-Involvement Learning: Memory without Evaluation.* The Journal of Consumer Research, Vol. 19, No. 2. (Sep., 1992), pp. 212-225. "Simple repetition increased subsequent truth ratings… with continued repetition, the consumer comes to believe the claim that is being made in the message.… simple repetition of a message can be an effective means of changing consumers' beliefs about products."

37. Advertising – whether used for the marketing of product and services, or for conveying public messages – has been found to have an indirect influence on people's perception. We see the message and make a judgment about how it will affect *others,* and respond to this presumed influence. This is called the "Third Person Effect". For example, if school children are exposed to more pro-smoking advertisements, they will assume that their peers have also seen those advertisements, which in turn leads them to assume that smoking is more prevalent, which then leads to social proof increasing the likelihood of them smoking to "fit in". Sometimes it is the mere perception that other people are acting on certain messages that change the social norm; it becomes a self-fulfilling prophecy. Applied to messages about looking after your hearing, people will assume others have seen those same messages. When they do, we need our audience to think, "What do others think about my own attitude to hearing care? Does it 'fit in' with what I perceive is the social norm?"

    See Gunther, A. C., Bolt, D., Borzekowski, D. L. G., Liebhart, J. L. and Dillard, J. P. (2006), *Presumed Influence on Peer Norms: How Mass Media Indirectly Affect Adolescent Smoking.* Journal of Communication, 56: 52–68. doi: 10.1111/j.1460-2466.2006.00002.x

    See also Park, S.Y., (2005). *The Influence Of Presumed Media Influence On Women's Desire To Be Thin.* Communication Research, 32, 594-614.

    For an overview of the Third Party Effect see Conners, J.L. (2005). *Understanding the Third Person Effect.* Communication Research Trends, Vol 24 (2005) No. 2, pp. 3-19.

38. Deighton, J. (1984). *The Interaction of Advertising and Evidence.* The Journal of Consumer Research, Vol. 11, No. 3. (Dec., 1984), pp. 763-770.

39. Nickerson, R. S. (1998). *Confirmation Bias: A Ubiquitous Phenomenon In Many Guises.* Review of General Psychology, 2(2), 175.

40. Common knowledge creates conventions in society that enable individuals to co-ordinate their behaviour with one another. Our purpose in creating a new social norm is to establish more appropriate conventions for how society should behave towards their hearing, using common knowledge to place expectations on individuals by the rest of society, whilst changing the underlying meaning of personally engaging in that behaviour to one that is seen as both positive and consistent with an individual's own self-image.

    See Vanderschraaf, P., & Sillari, G. (2013) *"Common Knowledge", The Stanford Encyclopedia of Philosophy (Fall 2013 Edition)*, Edward N. Zalta (ed.)

41. Gladwell, M. (2002). *The Tipping Point: How Little Things Can Make A Big Difference.* Abacus.

42. However, the impact can be greatly amplified by jointly contributing to "Generic Advertising" on core messages that benefit all parties. Generic advertising (i.e. advertising done with the purpose of expanding the category) in other industries has been found to increase primary demand for the product category itself which results in increased value for all "players". Examples include everything from beef to life assurance to computers.

    Bass, F.M., Krishnamoorthy, A., Prasad, A., & Sethi, S. (2004). *Generic and Brand Advertising Strategies in a Dynamic Duopoly.* Marketing Science, Vol. 24, No. 4, pp. 556-568, Fall 2005

    Brandenburger, A. M., B. J. Nalebuff. 1997. *Co-opetition*. Doubleday.

43. For an excellent primer on the psychology of attitudes and attitude change see *Maio, G. R. & Haddock, G. (2009): The Psychology of Attitudes and Attitude Change. Sage Publications.*

44. See note 36.

45. Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research.* Reading, MA: Addison-Wesley. See Chapter 6.

46. McGlone, M.S. & Tofighbakhsh, J. (2000). *Birds of a feather flock conjointly (?): rhyme as reason in aphorisms.* Psychological Science, Vol. 11, No. 5, September 2000.

47. See Heath, C. & Heath, D. (2008). *Made to Stick.* Arrow Books. Chapter 2.

48. See Dutton, K. (2010). *Flipnosis*. Random House. Chapter 6.

49. Building associations is so fundamental to learning, attitude formation and persuasion that the subject is too vast to cover in any detail here.

    For a comprehensive introduction to the research behind associative learning see Lieberman, D.A. (2011). *Human Learning and Memory.* Cambridge University Press.

    For its role in advertising see Perloff, R.M. (2010). *The Dynamics of Persuasion: Communication and Attitudes in the 21st Century (4th Edition)*, Chapter 11. Routledge.

50. See Sedivy, J., & Carlson, G. (2011). *Sold on Language: How Advertisers Talk to You and What This Says About You, Chapter 4.* Wiley.

51. See notes 1 and 3 above.

52. The reasoning behind routine hearing checks throughout life is outside the scope of this publication, but for purpose of context we will summarise it here.

    a) One of the key ways in which people form their attitude is by examining their own behaviour – see Bem, D.J. (1972). *Self-Perception Theory*. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 6, pp. 1-62). San Diego, CA: Academic Press.

    If I have my hearing checked routinely I am more likely to consider it important,

otherwise why would I be doing so? If it's important I am more likely to look after it.

b) Routine hearing checks keep our hearing at the top of our minds. Salience (i.e. how readily something springs to mind) is another key factor in attitude formation (see Note 45). If I am having my hearing checked routinely I am being constantly reminded of it, which makes me more likely to attribute any emerging hearing difficulties to my hearing range rather than to situational factors.

c) "Routine hearing checks" re-frames their meaning from "screening for a condition" (which people would prefer not to discover they have – i.e. loss acceptance) to "keeping your hearing performing at its best" (i.e. loss prevention). It increases the net of relevance to include those who might otherwise believe their hearing is "not bad enough to warrant a hearing check".

d) It breaks the association between "getting old", "being impaired", "needing hearing aids" with the action of having one's hearing check. This widens relevance and reduces likelihood of stigmatization of those who take action.

e) It increases the likelihood of early detection of hearing problems and provides opportunities for prevention through education (i.e. hearing conservation).

53. One question that has yet to be formally addressed by the hearing care profession is how often is "routine". Some may say "it depends on the individual", which may be technically correct, but it isn't useful as public guidance because it leaves too much room for personal interpretation and ambiguity (see also note 128). It is likely that "it depends" also applies to dental and optical care, but instead we hear messages from these two professions such as "every 6 months" or "every two years", i.e. very definite time intervals that people find easy to apply. A full discussion with reasoning is outside the scope of this document, but the interval between checks ups should be short enough to establish habit and normalcy, yet not so short it becomes burdensome or seemingly pointless. Therefore it should be no less than every two years and no more than every five years. An easy to apply mnemonic might be "If your age ends in 5 or 0, unless advised otherwise by your hearing care professional."

54. See Appendix 1: Having a Hearing Test Needn't Be Risky.

55. A "sticky message" is something that is easy to remember and easy to apply, just like a Post-It® Note. It is based on the ideas presented by Chip & Dan Heath in their book "Made to Stick". Stickiness itself is a term they borrowed from Malcolm Gladwell's book "Tipping Point" (see Note 41).

    Heath, C. & Heath, D. (2007). *Made to Stick: Why Some Ideas Take Hold and Others Come Unstuck*. Arrow Books.

56. See note 37.

57. Festinger, L. (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press. Page 3.

58. See note 46.

59. See Appendix 1.

60. For want of a better term, I propose we call this the Exception Bias – the belief that we just happen to be the exception to the rule.

61. Jones, E. E., & Nisbett, R. E. (1972). *The actor and the observer: Divergent perceptions of the causes of behavior*. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior (pp. 79-94). Morristown, NJ: General Learnign Press.

62. "Complete hearing" here simply means that if you measured a person's hearing using puretone audiometry they would have a Speech Intelligibility Index of 1.0 (that is,100%). For more information on the Speech Intelligibility Index see ANSI S3.5-1997 or visit www.sii.to

63. A discussion on the role of auditory processing ability and its relationship to speech understanding is outside the scope of the present discussion.

64. Hogg, M. A. (2006). *Social identity theory.* Contemporary social psychological theories, 111-136.

65. The profession would benefit from developing an appropriate functional hearing test that can be used for assessing people with and without hearing technology. This would strengthen the taxonomical link between those with naturally complete hearing and those with technologically enhanced complete hearing.

66. "There are three basic domains of the self: (a) the actual self, which is your representation of the attributes that someone (yourself or another) believes you actually possess; (b) the ideal self, which is your representation of the attributes that someone (yourself or another) would like you, ideally, to possess (i.e., a representation of someone's hopes, aspirations, or wishes for you); and (c) the ought self, which is your representation of the attributes that someone (yourself or another) believes you should or ought to possess (i.e., a representation of someone's sense of your duty, obligations, or responsibilities)."

    The above is a quote from Higgins, E.T. (1987). *Self-discrepancy: A theory relating self and affect.* Psychological Review, 94, 319–340.

    Self-Discrepancy Theory postulates that when there is a gap between our actual self and our ought or ideal self it produces feelings of anxiety or depression respectively, which can in turn lead to action to close the gap.

    Although we are not aware of any specific studies applying Self-Discrepancy Theory to a reduction in hearing range it is most certainly applicable. For example, an individual with a reduction in hearing may see themselves as having good hearing, which may be their lifelong experience up until recently. This is their ideal or ought self. So when someone close to them suggests otherwise, or they encounter a situation that calls their ideal self into question, it creates a discrepancy that may produce feelings of depression or anxiety. It might be assumed that this discomfort would generate a drive to close the gap, that they would seek professional gap. But this is often not the case.

    The reason is that historically the use of a hearing aid has not been presented as a way to close that gap. Instead it has been the wedge that keeps that gap open, because using a hearing aid has been seen as a symbol of being deaf and hard of hearing, so it reinforces that gap between someone's ought or ideal self, and their actual self. Much counselling within hearing care has therefore been about getting someone to *accept* that they are no longer their ought/ideal self and to update their self-concept accordingly, as one that is impaired or disabled. Such an approach has therefore been counter-productive because it deters more than it attracts.

    A key objective in changing the social norm therefore involves changing what it means to use hearing technology. That instead of it symbolising the self-discrepancy, it must be the means to reduce the self-discrepancy. Why? Because the ability to hear, whether natural *or* through self-enhancing technology, is the ought/ideal self so there is no self-discrepancy. The self-discrepancy comes when you don't hear as you expect or others expect you to because you choose not to make use of the technology available.

67. See for example Cialdini, R. B., Demaine, L. J., Sagarin, B. J., Barrett, D. W., Rhoads, K., & Winter, P. L. (2006). *Managing social norms for persuasive impact*. Social Influence 1, no. 1 (2006): 3-15.

68. There is a small minority of individuals who are deaf or hard or hearing who would prefer it if others knew they required "special treatment" because it enables them to secure the practical understanding they need from wider society to assists with communication strategies. There are two points to make here. Firstly, there are many others who would benefit from following their example but do not wish to be perceived as "different" within the context of the present social norm. This is one of the purposes of changing the social norm: to create a society in which people with a residual reduction in hearing are confident society will demonstrate practical understanding towards them. Secondly, there is an even greater majority of individuals whose hearing does not require any "special treatment" providing they use appropriately fitted hearing technology.

69. See for example Kapferer, J.N., & Bastien, V. (2012). *The Luxury Strategy: Break the Rules of Marketing to Build Luxury Brands, 2nd Edition*. Kogan Page.

70. See note 3.

71. Mandel, N., Petrova, P. K., & Cialdini, R. B. (2006). *Images of success and the preference for luxury brands*. Journal of Consumer Psychology, 16(1), 57-69.

72. Kressmann, F., Sirgy, M. J., Herrmann, A., Huber, F., Huber, S., & Lee, D. J. (2006). *Direct and indirect effects of self-image congruence on brand loyalty.* Journal of Business Research, 59(9), 955-964.

73. See Aaker, J. L. (1997). *Dimensions of brand personality*. Journal of Marketing research, 347-356. See Table 5 below.

Sincerity	Excitement	Competence	Sophistication	Ruggedness
Down-to-earth	Daring	Reliable	Upper-class	Outdoorsy
Honest	Spirited	Intelligent	Charming	Tough
Wholesome	Imaginative	Successful	Glamorous	Masculine
Cheerful	Up-to-date	Hard-working	Good-looking	Western
Family-oriented	Trendy	Secure	Feminine	Rugged
Small-town	Exciting	Technical	Smooth	
Sincere	Cool	Corporate		
Real	Young	Leader		
Original	Unique	Confident		
Sentimental	Independent			
Friendly	Contemporary			

Table 5: Aaker's Brand Personality Framework. See note 73.

74. Ross, I. (1971). *Self-concept and brand preference*. The Journal of Business, 44(1), 38-50.

75. Thus tapping into the Third Person Effect. See note 37.

76. See for example Kressmann, F., Sirgy, M. J., Herrmann, A., Huber, F., Huber, S., & Lee, D. J. (2006). *Direct and indirect effects of self-image congruence on brand loyalty*. Journal of Business Research, 59(9), 955-964.

77. See note 20.

78. For an excellent source on creating strong brands see Kapferer, J.N. (2012). *The New Strategic Brand Management: Advanced Insights & Strategic Thinking, 5th Edition*. Kogan Page.

    Those who believe it is impossible to build strong brands for hearing technology should never be placed in a position of leadership or marketing within a hearing technology

company! Doing so would be detrimental to that company's success as their competitors begin focusing on their own brand's strength and values.

79. See note 69.

80. The Halo Effect is a bias described in the psychology literature that refers to the tendency to make judgements about something or someone based on our overall impression of it. For example, a well-behaved student may be assumed to also be bright., or tall people may be assumed to be good leaders. The individual traits don't have anything to do with each other, but the one often affects our perception of the other. The Halo Effect has been applied to consumer behaviour, so that certain attributes of a strong product (e.g. a concept car) are automatically assumed to apply to the brand's other products.

    See for example Tafani, É., Michel, G., & Rosa, E., (2009). *Vertical product line extension strategies: an evaluation of brand halo effect according to range level*. Recherche et Applications en Marketing, 24 (2), pp 73–90.

    See also Ries, A., (2009). Creating The Brand Halo Effect. http://www.brandingstrategyinsider.com/2009/09/building-a-brand-halo-effect.html

81. See note 37.

82. See "Undermining change with our obsession for statistics" on page 29.

83. Of course people know that not everyone without spectacles wears contact lenses. But the possibility that they are will be there in people's minds if they have ever been exposed to contact lenses either directly or indirectly, and more so if they require visual correction themselves. This is due to the False Consensus Effect, our tendency to overestimate the degree to which other people are like us. Someone who requires visual correction is likely to overestimate the number of people who also require visual correction. So if they see someone not wearing spectacles, the use of contact lenses becomes a plausible explanation that fits in with their belief in the prevalence of sight problems. With the right messages the same False Consensus Effect can be applied to assumptions about the prevalence of hearing technology to create an illusion of a larger social norm.

84. For a very good introduction to the Availability Bias see Kahneman, D., (2011). *Thinking, fast and slow*. Chapter 12 & 13. Allen Lane.

85. This is also a good example of how "the unexpected" or "the incongruent" spring to mind more easily. A train crash is both unexpected and incongruent because we rarely hear of them, so the brain pays it more attention as a novel stimulus. Advertisers often tap into this bias towards novelty and surprise to increase the amount of attention we invest in their product or service, making it spring to mind more easily. We can amplify the effectiveness of our own messages by doing the same. See also notes 47 and 48.

86. Hearing technology developers have traditionally argued that their products should be marketed through their distributors rather than to consumers because they are medical devices that need prescribing by a hearing care professional. But does such an argument really hold true in today's world? Now that all the major manufacturers have a portfolio of products to cover virtually every hearing level, even if a specific product proves to be unsuitable there is a high chance that another product within their portfolio will be. Consumer marketing therefore increases exposure to their brand and brand values, which in turn increases the likelihood of a consumer choosing their brand over a competitor's. If manufacturers still feel unsure about the merits of consumer marketing, they should see it instead as "social marketing" – using their brand to help change the social norm for hearing.

87. The process of converting a non-user of hearing technology into a user can be viewed as a system, which allows it to be treated as any other system that can be optimised by identifying and eliminating inefficiencies within that system.

When viewed in this way it is possible to apply the Theory of Constraints (ToC). The ToC begins with the premise that every system has at least one constraint, a bottleneck that limits the overall efficiency of the system and reduces its ability to meet its overall goal, which in the context of the present discussion would be the number of people using hearing technology. The ToC has five steps, which can be applied to the provision of hearing technology as follows:

1. Identify the constraint – the weakest link in the system's chain

To increase the number of users first requires getting people to recognise that their hearing is reduced and would benefit from the use of hearing technology. So the constraint is the number of people currently having their hearing checked and having the correct attitude towards the use of hearing technology. This is evidenced in studies such as MarkeTrak and EuroTrak.

2. Maximise the constraint – get the weakest link working at its optimum

The more people who have their hearing checked, and the better equipped hearing care professionals are to advise people in a way that produces a positive attitude towards hearing technology, the higher the likelihood of people using it. So hearing care professionals need to concentrate on checking more people's hearing.

3. Subordinate everything else – all other components within the system must be adjusted to allow the constraint to operate at its maximum.

If hearing care professionals are concentrating on promoting hearing technology it is reducing the amount of time and resources they can put towards the promotion of hearing checks. So the developers of hearing technology can support the "constraint" by doing their own marketing to consumers rather than expecting their distributors to do it.

4. Elevate the constraint – but only if the steps above have failed.

This involves eliminating the constraint altogether. An example would be making hearing checks compulsory throughout life so that hearing care professionals do not need to concentrate on the promotion of hearing checks. Remember the constraint is not the hearing care professional, but the recognition of the need for hearing technology.

5. Return to step one, but beware of inertia.

When change is seen to take place it is easy to grow complacent which can become a barrier to further improvement of the system. Improvement must be a continual process. So once one constraint has been overcome, the next one can be worked on.

For more information on the Theory of Constraints, see Goldratt, E. M. (1984). *The Goal: A Process of Ongoing Improvement.*

88. Both the Elaboration Likelihood Model and the Heuristic-Systematic Model of attitude formation predict that how relevant an issue is to someone will affect how they form an attitude towards it. The more relevant it is, the more cognitive effort they will dedicate to forming an attitude. If it's not particularly relevant, the more likely they are to use "ready-made" attitudes, such as "follow the attractive", "follow the experts", "follow my feelings". See notes 2, 33 and 34. This is why advertisers will often use attractive models, experts or celebrity endorsements. Manufacturers of hearing technology can therefore "prepare the ground" for people who do not yet believe hearing technology is relevant to them by providing ready-made attitudes in much the same way. When a person later comes to a position where hearing technology has become relevant to them they will already have a solid foundation of positive associations on which to build.

89. See note 17.

90. In its simplest form this is a cost-versus-benefit analysis. On the one hand a person has difficulty imagining the benefits because they rarely appreciate what they are missing as a result of their untreated reduction in hearing (see page 26). On the other hand the costs are more easily observed because any problems with using hearing technology stand out. Examples include feedback, the physical look of them (e.g. an "earmold" that's gone yellow), insufficient amplification drawing attention to the wearer's hearing problem, and the way hearing aids have historically been portrayed as symbolic of having a condition.

91. Such messages can play a role in motivating behaviour, but should not be used to generate a *direct* response or be associated with any product or service you wish to attract people to, otherwise the product or service will become symbolic of the message. Such negative messages, if required, should therefore only be used as separate campaigns to shape attitudes and give people a state to avoid. But remember that a side-effect will be the likely stigmatization of the state depicted in the message.

92. Triggers (or cues) are a key principle of conditioning, which is fundamental to learning, including behavioural change and attitude formation. The trigger is a cue that helps the brain decide which pattern to expect or which learned behaviour to employ. For more information see Lieberman, D.A. (2011). *Human Learning and Memory.* Cambridge University Press. See also Duhigg, C. (2012). *The Power of Habit*. Random House.

93. See principle 2 of "The Principles of the New Social Norm" on page 16.

94. See note 24.

95. See Gardner, H. (2006). *Changing Minds: The Art and Science of Changing Our Own and Other People's Minds*. Harvard Business School Press. Resonance is listed as one of the levers involved in changing a person's mind.

96. See Kahneman, D., Knetsch, J. L., Thaler, R. H., (1991). *The Endowment Effect, Loss Aversion, and Status Quo Bias*. The Journal of Economic Perspectives, Vol. 5, No. 1. (Winter, 1991), pp. 193-206.

97. See Vyse, S.A. (2000). *Believing in Magic: The Psychology of Superstition*, pp 26-29. Oxford University Press.

98. The reverse is also true, that when hearing technology is presented as the symbol for (hearing) loss, as it has been traditionally, it will trigger a very strong drive to avoid it.

99. The author is not aware of any studies specifically asking this question as to what hearing aid users notice they miss most when they don't use their hearing aids. Most studies seem to revolve around those with uncorrected reductions in hearing. However "the hearing-impaired person is not always aware of the consequences" (Arlinger, 2003) most likely because they have no means of comparison and "people only hear what they hear". A hearing aid user, by contrast, is able to "switch on and off" their corrected hearing so have a direct comparison. The list I have drawn up here is therefore based on personal conversations with users of hearing technology, an understanding of the function of hearing from various sources (such as those listed below), and personal observation. This is an area of research I believe the profession would benefit greatly from.

    Arlinger, S. (2003). *Negative consequences of uncorrected hearing loss – a review*. International Journal of Audiology 2003; 42:2 S17–2 S20

100. See for example:

    Lin, F. R., Metter, E. J., O'Brien, R. J., Resnick, S. M., Zonderman, A. B., & Ferrucci, L. (2011). *Hearing loss and incident dementia*. Archives of Neurology, 68(2), 214.

Wingfield, A., Tun, P. A., & McCoy, S. L. (2005). *Hearing Loss in Older Adulthood What It Is and How It Interacts With Cognitive Performance*. Current Directions in Psychological Science, 14(3), 144-148.

Lin, F. R. (2011). *Hearing loss and cognition among older adults in the United States*. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 66(10), 1131-1136.

101. See for example: Ronnberg J, Danielsson H, Rudner M, Arlinger S, et al. (2011). *Hearing loss is negatively related to episodic and semantic long-term memory but not to short-term memory*. Journal of Speech Language and Hearing Research 54(2):705-26.

102. This topic is too vast to go into here in any detail, but there are several factors. Firstly, for someone to attend to something it has to come within their field of awareness. A reduction in hearing will reduce the amount of information a person is aware of and therefore has access to. Secondly, the ability to concentrate owes a great deal to working memory, which has a limited capacity. If this capacity is involved in tasks such as working out a word when phonemes are missing, this will reduce mental resources available for concentration.

    See for example: Rönnberg, J., Lunner, T., Zekveld, A., Sörqvist, P., Danielsson, H., Lyxell, B., Dahlström, Ö., Signoret, C., Stenfelt, S., Pichora-Fuller, M. K., & Rudner, M. (2013). *The Ease of Language Understanding (ELU) model: theoretical, empirical, and clinical advances.* Front. Syst. Neurosci. 7:31. doi: 10.3389/fnsys.2013.00031

    Baldwin, C. L. (2012). *Auditory Cognition and Human Performance: Research and Applications*. CRC Press.

103. See for example:

    Piquado, T., Benichov, J. I., Brownell, H., & Wingfield, A. (2012). *The hidden effect of hearing acuity on speech recall, and compensatory effects of self-paced listening.* International Journal of Audiology, 51(8), 576-583.

    Arlinger, S. (2003). *Negative consequences of uncorrected hearing loss – a review*. International Journal of Audiology 2003; 42:2 S17–2 S20

104. For example, someone who can't hear a car approaching from behind or when the smoke detector sounds is more at risk than someone who can.

105. See for example Mulrow, C. D., Aguilar, C., Endicott, J. E., & Velez, R. (1990). *Association between hearing impairment and the quality of life of elderly individuals.* Journal of the American Geriatrics Society.

106. Shield, B. (2006). *Evaluation of the Social and Economic Costs of Hearing Impairment, Chapter 11*. Hear-it.org

107. Significant others will often report that they don't know whether their partner has heard or not, and reduce their dependence on them for this reason. For example, "if a spouse serves as a confidant, hearing loss alters the extent to which he or she can fulfil this role. Further, activities carried out as a couple are potentially constricted." (Wallhagen et al., 2004)

    Wallhagen, M. I., Strawbridge, W. J., Shema, S. J., & Kaplan, G. A. (2004). *Impact of self-assessed hearing loss on a spouse: A longitudinal analysis of couples*. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 59(3), S190-S196.

108. See for example Loeb, R. C., & Sarigiani, P. (1986). *The impact of hearing impairment on self-perceptions of children*. The Volta Review.

See also *The Consequences of Untreated Hearing Loss in Older Persons*. The National Council on the Aging, 1999.

109. See for example Yamada M, Nishiwaki Y, Michikawa T et al. *Impact of hearing difficulty on dependence in activities of daily living (ADL) and mortality: A 3-year cohort study of community-dwelling Japanese older adults*. Arch Gerontol Geriatr 2011;52:245–249.

110. Arlinger, S. (2003). *Negative consequences of uncorrected hearing loss-a review.* International Journal of Audiology, 42, 2S17-2S20.

111. Shield, B. (2006). *Evaluation of the Social and Economic Costs of Hearing Impairment, Chapter 9*. Hear-it.org

112. Arlinger, S. (2003). *Negative consequences of uncorrected hearing loss-a review.* International Journal of Audiology, 42, 2S17-2S20.

    Chartrand, M. S. (2000). *The fear of being found out: The dilemma of denial*. The Hearing Review, 7(3), 72.

113. See for example Berkman, L. F. (2001). *Social ties and mental health*. Journal of Urban health, 78(3), 458-467.

114. Weinstein, B. E., & Ventry, I. M. (1982). *Hearing impairment and social isolation in the elderly*. Journal of Speech, Language and Hearing Research, 25(4), 593.

115. Rönnberg J, Lunner T, Zekveld A, Sörqvist P, Danielsson H, Lyxell B, Dahlström ö, Signoret C, Stenfelt S, Pichora-Fuller MK and Rudner M (2013) *The Ease of Language Understanding (ELU) model: theoretical, empirical, and clinical advances*. Front. Syst. Neurosci. 7:31. doi: 10.3389/fnsys.2013.00031

116. Ibid.

117. Wallhagen, M. I., Strawbridge, W. J., Shema, S. J., & Kaplan, G. A. (2004). *Impact of self-assessed hearing loss on a spouse: A longitudinal analysis of couples*. The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 59(3), S190-S196.

118. "Language, particularly in the form of labelling, can all too easily define an individual. A label can determine how other people see us and how we experience ourselves… If you change the language, you change the meaning. If you change the meaning, you alter the individual's experience." *Taken from Howe, D. (2009). A Brief Introduction to Social Work Theory, pp 88–89. Palgrave Macmillan.*

    The subject of labelling is too vast a topic to cover here in any great detail and will be covered in a separate Audira publication on the Language of Hearing Care.

    Briefly, society or groups often label individuals in terms of whether they see that individual as acceptable to the group (normal) or unacceptable (deviant). Such labels have been found to influence the way society perceives someone, and how someone perceives themselves which in turn influences their behaviour.

    Labelling can therefore be used both negatively (e.g. racism, stigma maintenance) or positively (e.g. encouraging people to be more charitable). It is therefore important to be mindful of the labels hearing care applies to individuals who have a reduction in their hearing range and to understand the effect such labels have. If those who use hearing technology are seen as "not normal" because it symbolises a lack of "normal" hearing, the implication is they are deviant. In which case, those who wish to remain part of the normal group will see hearing aids as a symbol of such deviance, which discourages their use.

    However it is unrealistic to dispense with labels in the belief that this will solve the problem; categorization is something humans do to help make sense of the world.

Instead the labels we choose must consciously be selected to influence "intended behaviour". People who use hearing technology should not be seen as "deviant", because to hear as well as possible should be seen as acceptable (normal) to an audiocentric society. Our labels should be amended to reflect this.

119. See note 6 for an initial proposal on how "properly relate" might be approached.

120. The topic of language and hearing care and its impact on attitudes will be dealt with in a separate Audira publication on the Language of Hearing Care.

121. For example Wallhagen, M. I., Strawbridge, W. J., Shema, S. J., & Kaplan, G. A. (2004). *Impact of self-assessed hearing loss on a spouse: A longitudinal analysis of couples.* The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 59(3), S190-S196.

122. See note 65.

123. Cialdini, R.B. (2009). *Influence: Science and Practice (5th Edition), Chapter 7.*

124. Purves, D. Brannon, E. M., Cabeza, R., Huettal, S. A., LaBar, K. S. Platt, M. L., Woldroff, M. G. (2008). *Principles of Cognitive Neuroscience, Chapter 6*, p. 147. Sinauer.

125. There are three main reasons why hearing is often considered less important than vision. The first is that because hearing is always active we cannot switch it off to compare the difference, unlike vision which simply requires us to voluntarily close our eyes. Therefore many of the things that hearing bestows on us are taken for granted and their dependence on hearing are not immediately obvious. This is likely to stem from the Availability Heuristic, that those things that are more salient to us are considered more important. The second reason is that when a sound falls outside our range it simply ceases to exist to us so there is nothing to indicate that we even *need* to have heard it, whereas with vision the object is more likely to become blurry so leaves an imperfect trace in our conscious perception that we need to resolve. The third reason is that many of the advantages of hearing are often more intangible and long term, centring mainly on psychosocial factors which are far harder to measure.

126. "Persuasion is enabled by a congruence between a persuasive message and accessible knowledge and goals;" *Maio, G. R. & Haddock, G. (2009): The Psychology of Attitudes and Attitude Change, page 168. Sage Publications.*

    With this in mind, if people do not know what hearing does for them and why it's important we will have a harder time changing people's attitudes. We therefore have to make it easier for people to access knowledge about hearing and align this knowledge to their goals. That is the purpose of public education. For example, if someone wants to succeed in business, we must demonstrate how hearing accurately first time is crucial. If someone wants to have better relationships, we must demonstrate how being a good listener requires hearing accurately first time.

127. People experiencing the effects of a reduction in hearing range – especially when the reduction is milder – will often find that it only affects specific situations. Frequently they will dismiss these situations as "acceptable losses", using excuses such as "what do you expect at my age?" or "I don't enjoy those situations anyway". This is a way for them to handle loss, but it is a slippery slope to social withdrawal and it's important that the hearing care professional helps them put a halt on in.

    Within a face-to-face context it can helpful to use the analogy of a house. You have complete freedom to go in any room you like. But the danger is that as you encounter situations you find difficult to handle, you begin shutting off rooms. First it starts with the one, then the next, then the next. Eventually you find yourself living in just one room in the house. Hearing at our best keeps all those doors open. You don't *have* to go in

any of the rooms – we've all got rooms in our house we rarely use, but you have the freedom to go in there if and when you need to. It's your choice. But if you keep shutting off doors one by one you become like one of those people restricted to one or two rooms. It's your house. Make the most of it.

128. It is important to draw a distinction here. In a context such as counselling where an individual is seeking professional advice regarding their hearing then "it depends" is often a sensible starting point – especially when responding to attitudes born of the historical norm – because it helps ensure that any guidance offered is personally relevant, which is crucial to motivation.

    Motivation "has been shown to be a key determinant of whether patients continue to use [hearing aids]." see Dillon, H. (2012). Hearing Aids, 2nd Edition. p. 255. Thieme.

    Part of the role of the hearing care professional is to assess and increase motivation. Dillon goes on to list the following factors: acknowledgement of loss, communication needs, consequences, self-image, expected-benefit, fear or uncertainty, costs, influence of others, and the hearing impairment itself.

    Indeed this is often the experience of many hearing care professionals in their task of addressing "patient motivation", and we will continue to require tools to increase our effectiveness in these areas whilst we continue to ***react*** to people's outdated attitudes rather than systematically ***shape*** them before they reach the stage that hearing technology is beneficial.

    The factors listed by Dillon and others stem from a perspective grounded in the historical social norm: hearing is seen by many as "optional" in the same way that possessing a video camera is: it's up to you if you have one and what you use it for.

    Yet there is real paralogism at work here, which hints at where the problem really stems from. Consider any other part of the human body, even something as "insignificant" as, say, the little finger of our non-dominant hand. Do we assess a patient's motivation when mending a broken finger? Do we ask them about the consequences of not using that finger if it continues to remain broken? Do we ask them whether they would be happy to wear a splint? Do we ask them to make judgements as to whether it is beneficial or not to address the problem? Would we ask them what they used it for? A little finger may not actually do very much for a lot of people, but we sure don't treat it as an optional extra. We don't even consider there to *be* a choice in treating it.

    Are we forgetting, then, that hearing is "as important to humans as vision" (see note 124)? It is one of a very limited number of ways to get information from the external world into our brains. If hearing was *really* that important, and we *believed* it to be that important, wouldn't we be doing all that we could to ensure that people had the best possible hearing and were educated to understand the importance of their hearing? Wouldn't we be doing all we could to change the underlying social norm responsible for outdated attitudes so that *when* people require hearing technology they see it as maintenance rather than loss? A positive step, rather than a negative step?

    Here, therefore, lies the irony. Because the hearing care profession is built on the pretext that we must respond to people's historical attitudes we are inadvertently perpetuating an outdated social norm. It's a vicious circle. But we can break it.

    So in terms of establishing social norms "it depends" is far too nebulous to guide acceptable behaviour and instil appropriate attitudes. As the new social norm becomes more widely established it is likely that "it depends" will eventually recede in importance within the counselling context too because more people will be seeking to keep their hearing as effective as possible.

129. It is now widely accepted by scientists that we actually have at least 10 senses. These are: sight, hearing, taste, smell, touch, equilibrioception (balance and acceleration), temperature, proprioception, pain and time. But the same rule applies: hearing is the only sense where a change will be more readily noticed by people *other* than ourselves. This is a powerful testimony to hearing being the Social Sense.

130. Normally our guidelines are based on "it depends" (see note 128), or studies based on who uses and persists with using hearing technology. The latter is faulty premise, because it assumes that an individual's reasons for seeking to use (or not use) and continue (or not continue) to use hearing technology are correct in the first place – but we've already seen how the historical social norm has been fostering incorrect attitudes! So looking at current adoption rates of hearing technology is no basis at all for formulating guidelines. It's like saying that a prejudiced group (such as minorities or women in some countries) are "less intelligent" and should therefore be advised not to go to school, then later examining them to discover they are indeed less intelligent! The system itself creates a vicious circle that 'proves' our specious premise.

    Instead our guidelines should be based on the goal. With education, that might be for *everyone* to receive the best possible education so *everyone* has the best possible opportunities in life, to the benefit of wider society. With hearing, we have to ask ourselves what our own goal is. If it's "to treat a condition" we would expect a lower adoption rate because we are telling people to only come if the condition is bad enough. But if it's "to keep your hearing performing at its best so you have the best opportunities in life, to the benefit of wider society" we would expect to see a greater uptake. Hearing care needs to learn to recognise its own vicious circles!

131. For more information on the Speech Intelligibility Index see ANSI S3.5-1997 or visit www.sii.to. Also see Killion, M. C. & Mueller, H. G. (2010). *Twenty years later: A NEW Count-the-Dots method*. Hearing Journal, 63 - Issue 1 - pp 10,12-14,16-17.

132. See Appendix 2: Establishing a Threshold of Action.

133. It is because of the importance of speech to human interaction that we recommend using the Speech Intelligibility Index rather than a Pure Tone Average or "degree" of hearing impairment.

134. Pornpitakpan, C. (2004). *The persuasiveness of source credibility: A critical review of five decades' evidence*. Journal of Applied Social Psychology, 34(2), 243-281.

Appendix 2

135. A communication needs assessment can realistically be no more than a snapshot based on an individual's reconstruction of their *current* communication needs and is therefore inherently limited. A person will find it easier to remember more recent events such as a meal at which they struggled, but are likely to forget examples further in their past. Add to this the principle that "we only hear what we hear" and they may not even be aware of other situations in which their hearing has let them down.

    This latter limitation might be mitigated by involving a "communication partner" in the assessment, but similar limitations apply: they too will only recall what is most salient to them. They can contribute little to their partner's experience outside of their own direct presence.

    To muddy the waters further, if a reduction in hearing has been allowed to develop unchecked for many years then the individual's lifestyle is likely to have become constrained by the limitations of their hearing (i.e. they are living within their auditory

means). Someone who no longer goes to social events may not list such events amongst their communication needs. That doesn't mean it won't become important at some time in the future. A typical example is the elderly person who lives alone and has a limited social life who later moves into a retirement home where meals are shared in a dining hall.

For these reasons, and more, a communication need assessments should be considered no more than a snapshot. A far better philosophy is to ensure that a person's hearing is optimised (or kept at its optimum) in preparation for whatever life throws at them.

136. For reviews of some of the research on the relationship between mental performance and hearing see:

Luxon, L. M. & Prasher, D. (2007). *Noise and Its Effects, Chapter 25*. Wiley.

Baldwin, C. L. (2012). *Auditory Cognition and Human Performance: Research and Applications, chapters 7 and 8*. CRC Press.

Thomas, L., Rudner, M. & Rönnberg, J. (2009). *Cognition and hearing aids.* 2009, Scandinavian Journal of Psychology, (50), 5, 395-403.

137. Ronnberg, J., Danielsson, H., Rudner, M., Arlinger, S., Sternang, O., Wahlin, A., & Nilsson, L. G. (2011). *Hearing loss is negatively related to episodic and semantic long-term memory but not to short-term memory*. Journal of Speech, Language and Hearing Research, 54(2), 705.

138. Jorgensen, L. E. (2012). *The potential impact of undiagnosed hearing loss on the diagnosis of dementia* (Doctoral dissertation, University of Pittsburgh).

Hearing is one of our primary senses. Yet society generally regards it as an "optional extra", allowing it to fade away unchecked until it has negatively impacted on a person's quality of life, relationships, personal effectiveness and access to opportunities.

It is often not until many years later that hearing care eventually "steps in" to pick up the pieces, only to find itself facing resistance from negative attitudes and an individual's desire to avoid the very intervention that will mitigate their acknowledged difficulties.

It is a quandary the hearing care profession and hearing technology industry have struggled with for decades without great success. Why? ***Because we have been trying to address the symptoms, rather than the underlying cause: a defective social norm.***

The ***4 Questions: A Framework for Creating a New Social Norm for Hearing*** *establishes a change in direction for hearing care by identifying the four key questions a person has to answer before hearing technology becomes relevant to them, then providing a framework for ensuring society has what it needs to answer those questions in a way that fosters an approach response to hearing care.*

Applying these principles at an individual level will make your own messages more effective, your response more certain and will reduce the amount of counselling and time required before someone says yes to using hearing technology.

Applying them systematically as an industry and profession will forever change the way society sees their hearing.

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