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The Vision Impaired as a Radio Audience: Meeting Their Audio Needs in the 21st Century

Simon Order, Gail Phillips, Lauren O'Mahony, and Kylie Sturgess

ABSTRACT
Vision Australia Radio (VAR) is part of the Australian Radio for the Print Handicapped (RPH) community radio network providing a radio reading service to listeners with a vision impairment. Like mainstream media, it faces the challenge of ensuring the service is fit for purpose in the digital age. There is little preexisting research on the behaviour and interests of the vision-impaired as a discrete audience demographic. This paper reports on a survey of listeners to VAR in Perth, Western Australia, which gives an insight into their current listening habits and identifies some of the challenges in meeting their future needs.

According to the World Health Organization's estimates, there are at least one billion people globally who have a vision impairment (World Health Organisation, 2020). In Australia, the national radio reading service network Radio for the Print Handicapped (RPH Australia) estimates that 5 million people, or 22% of the total population, live with a print disability (RPH, 2020), most of them elderly. The term "print disability" here encompasses people "affected by a condition which limits their ability to access print" (RPH, 2020). This includes learning disabilities as well as physical, literacy and vision impairments (RPH, 2020). The "social model of disability" posits that "while bodies may have impairments" disability is "a status imposed by society" (Ellcessor, Hagood, & Kirkpatrick, 2017, p. 5). Taking this on board, in this paper we use the term "vision impairment" to cover the whole range of physical and functional problems that may impede access to print.

Notwithstanding the potential size of the vision impaired audience, it remains a neglected and under-serviced sector of the community. As far as print materials are concerned, despite the relaxation of copyright under the World Intellectual Property Organization (WIPO) Treaty for the Visually Impaired (Thomas, 2019), even now only a small proportion of print texts have been

converted to accessible formats for the vision impaired (Goggin, Hollier, & Hawkins, 2017, p. 7). In television, there have been advances in inclusive practices for those with disability through the increasing but still limited use of audio description. However, financial and social barriers often make these services unattainable for the target cohort (Ellis, 2019). In contrast to print and television, in Australia radio has been particularly effective as an information disseminator, with a network of dedicated community radio stations providing a daily radio reading service to the vision impaired. Radio has the dual advantage of accessibility and immediacy, and in relation to vision impairment also reaches those with less obvious reading problems, such as new migrants, whose understanding of spoken English may be better than the written form; those with low literacy levels or with a learning disability; those with physical impairments that make handling books and other reading devices difficult; and commuters for whom radio provides a convenient way of keeping up to date with news or current affairs when there is little opportunity for reading.

In the 21st century, the vision-impaired exists in all age groups and every stratum of society. This includes the younger "digital natives" who have grown up with computers and the internet (Prensky, 2001) and who now engage with a raft of communication technology tools outside of the traditional offerings. While many may still access linear one-to-many radio broadcasting (Edison Research, 2020) they are also increasingly likely to be eager early adopters within the modern digital audio delivery landscape with its range of streaming services and packaged podcasts on demand (Roy Morgan, 2019). New formats beckon, including those that are audio-descriptive, maximizing the immersive capacity for listeners to be present at stage performances, museum and art gallery exhibitions, and exotic locations anywhere in the world. In Australia, these formats have been under-utilized in traditional broadcast media with its need to appeal to a broad homogenized audience. Meanwhile, meager budgets and the reliance on volunteers have made it difficult for the community-based RPH services to explore the full creative potential of audio beyond a simple reading service.

In our modern era of technological transition, new insights are needed into how the vision-impaired audience access audio: what are they listening to? How are they listening? And how easy is it for them to transition to digital? Vision Australia Radio (VAR) in Perth, Western Australia forms part of the RPH Australia-wide network of radio services for the vision impaired. Using VAR Perth as a case study, this paper reports on a listener survey which sought answers to these questions.

The Audience Perspective

In the area of radio services for the disabled, some studies have focused on the programs and production practices. Kirkpatrick notes that people with

disability are often underrepresented within radio production and broadcast contexts, meaning they are often "spoken for" (Kirkpatrick, 2012, p. 166) as "silent consumers of culture rather than active producers of it" (2012, p. 169). Sweeney and Riddell (2003) explore the strengths and shortcomings of a BBC Radio 4 initiative in the UK to "mainstream" disability content in 1997. Through six interviews and a content analysis of program content, they found that while the program sought to carve a space in radio programming to explore disability issues and assist with the development of a positive representation of disabled people, it may have had the opposite effect. As one interviewee pointed out, the show reflected a "political perspective on disability [that] was outmoded and was ultimately stigmatising of disabled people by underlining their difference from others" (Sweeney & Riddell, 2003, p. 158). Similar research by Mary-Pat O'Malley (2008, 2009)) examined 15 randomly selected programs from an Irish talk show said to be "for and about disability" aired between 2001 and 2002. O'Malley (2009) argued that rather than broadening understandings of the lives and experiences of those with a disability, the show perpetuated and reinforced a view of those with disability as "other" through overemphasis of a medicalized view of disability.

Other studies have focused on audience perspectives to provide insights into the needs of radio listeners with disability. In 2001 Karen Ross conducted surveys, focus groups and interviews with radio listeners with disability in the UK to ascertain their thoughts on radio representations of disability and disabled characters. A recurring and seemingly important theme to emerge from her interviews was that "radio stations should spend more time getting the 'right' messages over to non-disabled listeners, and less time thinking about what an imaginary 'disabled audience' might want from the medium" (2001, p. 421). Study participants had many suggestions for how disability issues, the language of disability, and disabled characters could be more thoughtfully and realistically represented. They also suggested that increased participation of disabled media professionals would reinforce preexisting programming for this audience as well as assist with "including disability as a routine element in mainstream consumer shows" (Ross, 2001, p. 432). A key finding from Ross's study was the so-called "invisibility of disability", whereby the lack of characters, voices and experiences of those with disability "serves to exclude disabled people from the routine radio landscape" (Ross, 2001, p. 432). A more recent Australian study by Stewart and Spurgeon also underscores the importance of increasing the participation rates of people with disabilities in media production if we are to improve the way they are represented and thereby change public attitudes (Stewart & Spurgeon, 2020).

These studies have focused on the disabled as a group but in Australia people with a vision impairment have a radio reading network dedicated to

their particular needs. This provides an opportunity to focus on them as a niche audience to gain their perspective on the service. Ellcessor et al. call for scholars to "move beyond textual analysis of media representations to consider more fully the role of media within economic and ideological circuits of production and reception" (2017, p. 4). They advocate seeking out "the voices and marginalized perspectives of people with disabilities as valid sources of knowledge" (2017, p. 8–9), to include them as collaborators and through "direct quotation" (2017, p. 23) allow them to communicate their lived experience to the wider community in their own words. In this way they can challenge the "normate subject position" (2017, p. 8) which perpetually identifies them as "impaired" and "disabled" within the "normal" and "able-bodied" mainstream (2017, p. 8). Stewart and Spurgeon go further, seeing listening as "a practice-led research approach" that

> can help to condition the community radio environment so that it is more accessible to people with disability and simultaneously support people with disability to use and develop their own forms, terms and means of expression in the research process. (Stewart & Spurgeon, 2020, p. 983).

It is clear that in the context of radio for the vision impaired, any consideration of improving the quality and range of media services needs to start by going directly to the target cohort itself for insights into current listening habits and to seek the listeners' views on existing and future services.

Radio for the Vision Impaired in Australia

Australian community radio stations have long championed and associated themselves with a diverse range of minority groups based on ethnicity, gender, age, sexual orientation, Indigeneity, religion, industry and music genre. Disability has naturally formed part of this group of niche and marginalized communities of interest (see Stewart & Spurgeon, 2020). In Australia, audio services for the vison impaired began in 1975 when Blind Citizens Australia, then the main advocacy group for Australians who are blind and visually impaired, set up the first Radio for the Print Handicapped service (Blind Citizens Australia, 2020a). While the focus up to then had been on the provision of Braille materials, the advent of community radio in Australia in 1975 now afforded the opportunity for this "organisation for people who are blind, governed by people who are blind" (Blind Citizens Australia, 2020b) to give their target audience access to the airwaves. In 1978, a national radio reading network was set up, Radio for the Print Handicapped (RPH). Its remit is to provide

> unique broadcast services aimed at meeting the information needs of people with a print disability; those who are unable to effectively access printed

> material due to visual, physical or cognitive impairment, age or low literacy. They provide a voice for people in our community with a print disability and cater directly to their information needs and interests. (RPH, 2019a)

In 2004, Vision Australia was founded as a national blindness agency following the merger of the Royal Blind Society (RBS), the Royal Victorian Institute for the Blind (RVIB), Vision Australia Foundation (VAF), and the National Information Library Services (NILS) (Vision Australia Radio, 2018). It established its own radio reading service, Vision Australia Radio. As a result, Australia currently has two volunteer-operated audio-based services for the vision-impaired: RPH's 19-station radio reading network in Brisbane, Melbourne and Adelaide, and Vision Australia Radio (VAR) with 10 stations in Victoria, southern New South Wales, Adelaide in South Australia and Perth in Western Australia. Both networks broadcast via web streaming and the IRIS DAB digital network; both serve similar communities; both stick closely to the brief of providing a reading service. In recent years a major change has potentially threatened the future viability of the network. In 2013 the Federal government introduced the National Disability Insurance Scheme, a user-pays finance model for the disability area (National Disability Insurance Scheme, 2020). This became fully operational nationally in 2020. Under the previous grant-based funding model through the Community Broadcasting Foundation RPH and VAR had the discretion to subsidize the radio reading service out of their general operating budgets. Under the NDIS model radio is not considered a "service" so the agencies now have had to seek their own additional external funding to cover the shortfall.

VAR Perth, the focus for this study of the vision-impaired audience, evolved out of Information Radio which was launched in 1991, but ceased broadcasting in January 2015. The service was resurrected in late 2015 under the auspices of VAR on the 990AM frequency (Order & O'Mahony, 2017, p. 31).

In accordance with the RPH protocols at least 75% of the material will comprise "defined RPH material" between 6am and midnight (O'Mahony, 2017, p. 31). As Order's 2013 study of the station volunteers showed, the program makers adhered very strictly to the concept of a *radio reading service* and were wary of experimenting with other formats (interview, talkback) that might provide more creative outlets but might appear to stray from the service's principle remit (Order, 2013). VAR Perth presents both locally produced and networked content focused mainly on readings from the daily mainstream and community newspapers, book readings, and selections from magazines on a wide range of topics including, film, the arts, health and well-being, history, finance, travel, religion, gardening, and sport. Financial constraints

following the introduction of the NDIS have made it more difficult for the organization to find funds to cover its transmission costs and have hastened moves to transition to a totally web-based streaming service. The question is: would their audience be able to follow?

The Digital Challenge

As has been noted earlier, while broadcast radio remains overwhelmingly popular with audiences, digital streaming formats and podcasts are gaining in popularity with the mobile phone the main source of delivery (Edison Research, 2020). However, those in the disabled community already experience the inequitable digital divide of poor access to modern communications (Park & Humphry, 2019). According to Goggin et al.:

> When it comes to wider internet accessibility, there remain many areas where people with disability lack effective access to operating systems, software, interfaces, hardware, platforms and content. (2017, p. 7)

While Australia opted to follow the World Wide Web Consortium Web Content Accessibility Guidelines (WCAG)[1] released in 1999, Goggin et al. maintain that "the approach by Australian governments (federal and state) was largely state-based and ad-hoc" (2017, p. 5) with few resources dedicated to tracking compliance. The last available statistics are from 2014 and indicated only 26% of federal government web sites met the agreed standards (ibid). Web accessibility for the disabled in Australia remains a slow work in progress (Goggin et al., 2017, p. 7). In their survey of accessibility standards, Brown and Hollier conclude that:

> there is still a clear gap between the policies designed to improve accessibility and their practical implementation due to the high degree of technical skill required to conformance test a Web site, the costs involved in such a process, effective resourcing to address this issue and a lack of awareness as to how people with disabilities are likely to engage with such content. (Brown & Hollier, 2015)

Contributing to the digital divide is the lack of funds needed to reduce it. In 2015 a consortium of agencies dealing with the blind and vision-impaired surveyed the sector to assess the ratio of supply to demand. It concluded that "demand for services exceeds current sector capacity" (Ah Tong, Duff, Mullen, & O'Neill, 2015, p. 3) with the over-65s and the under 18s identified as the cohorts most in need (2015, p. 13). The report notes that 93% of organizations said demand for aids, equipment and assistive technology had increased (2015, p. 12) and concludes that more government investment is essential "to ensure people who are blind or vision impaired have the services and supports they need to fully participate in the community" (Ah Tong et al., 2015, p. 4).

The arrival of new digital technologies has brought both challenges and opportunities to traditional broadcasters and, like the mainstream media, VAR is now having to consider how to reconfigure itself to remain relevant to its audience into the 21st century. The challenge for VAR is not to compound the digital disadvantage its target audience already faces with new systems that run the risk of creating additional barriers and harms.

Methodology

As Stewart et al. note, "People with disability are not often, specifically included in research" (Stewart, Spurgeon, & Edwards, 2019, p. 52). Following Elcessor et al.'s call for researchers to allow the voices of the disabled to be heard the researchers' aim was to gain an insight from the vision-impaired listeners to VAR Perth as to their radio and audio habits in the evolving digital landscape.[2]

Broadcasters have tended to rely on quantitative data to measure their audiences, generated by expensive commercial ratings services that characteristically focus on reach rather than impact (Napoli, 2011; O'Sullivan & Lewis, 2006) or engagement/attention (McQuail, 1997). In comparison, this study was keen to explore participants' qualitative experiences of radio and audio consumption more broadly and deeply. Thus, open-ended or semi-structured interviews were adopted as an appropriate methodology for investigating respondents' experiences (Dicicco-Bloom & Crabtree, 2006, 316; Mason, 1994, p. 90). A written questionnaire provided an outline for the interviewer in order to conduct a more "controlled conversation" and to ensure interview subjects were kept to topic (Gray, 2013, p. 186). The open-ended format of the questions was designed to encourage a conversational discussion and to elicit descriptive responses. In line with the focus on access, offerings, improvements and transition to digital, vision-impaired listeners in Perth, Western Australia were asked questions in the following broad areas:

Access:	When, where and how much are they listening?
Offerings:	What content is preferred and why?
Improvements:	What suggestions did they have for future improvements to programs and service?
Transition to digital:	What advantages and disadvantages did they perceive for themselves in the online digital environment?

These questions were aimed at exploring audience needs currently and discovering whether there was room to more fully utilize digital technology and the Internet into the future.

To facilitate the study, the Program Coordinator of VAR Perth functioned as a liaison or "gatekeeper" (Neuman, 1997, 350, p. 374), a critical intermediary who facilitated access to the VAR community and helped build the trust when gaining approval and consent for interviews. The Program Coordinator's choice of participants was guided by the principle of "purposive" sampling where the aim was to maximize the quality and depth of the data collected and provide a wide representation of the stakeholders (Neuman, 1997, p. 206). There were 22 interview participants (9 men, 13 women), all active station listeners and comprising 11 VAR audience members, 6 vision impairment advocacy group managers and 5 Vision Australia clients. They were grouped according to three demographic categories by age:

Under 39, Young (Y): 4 respondents

40–59, Middle Aged (MA): 4 respondents

60+, Senior (S): 14 respondents

The skewing of the sample toward the elderly reflects the greater proportion of people from this age group categorized as vision impaired. The participants were contacted by phone and the interviews were recorded, eliminating the need for written responses to questions or misinterpretation of questions owing to reading issues (Trujillo Tanner et al., 2018, p. 5). This more relaxed and conversational approach allowed time to clarify questions or add to any previous answers given so that the participants were encouraged to feel comfortable with the time taken and the responses given (Trujillo Tanner et al., 2018, p. 4). The recording of participants also allowed for the extraction of "verbatim quotes" during the data gathering process. The discussion, therefore, foregrounds their voices allowing them to speak for themselves rather than be spoken for.

The interviews yielded both quantitative and qualitative data. Quantitative data covered the frequency of access to radio/audio services and time spent listening. Qualitative data covered the role of radio/audio in their lives, the types of programs listened to, the strengths and weaknesses of offerings, their access to and use of technology, the suitability of programming to the cohort, and the ways offerings could be improved.

Results

The following section describes the overall listening trends and notes variations according to age group where relevant. Individual respondents have been anonymized and any quotes are identified according to demographic group (Y, MA, S) and interviewee code number.

ACCESS

The first key theme to emerge from the interviews related to access. This comprised insights into the amount of time spent listening and the reasons for doing so.

Time Spent Listening

In terms of the time spent listening, all age groups of participants revealed that they spent many hours listening to audio media. Older listeners reported longer listening sessions with radio, attributable to the radio medium following them around in locations like the house and car. As participant S4 stated: "I have the radio going all day, from waking at 5am to bed at 7pm".

The amount of time spent listening to radio was related to the importance of radio in the lives of study participants. Most respondents (8 out of 11 who answered this question) illustrated how radio was an important part of their lives. Participant Y15 explained: "It's like having the light on – you know how people turn on the light when they get home? I turn on my radio."

Reasons for Listening

The MA and S groups had very clear ideas of why they listened: to be informed, to be entertained, for company and for local content. MA13 for example stated: "I always take my radio with me wherever I go because I get a slice of life." Radio was also described as being a vital tool for getting information with participant MA3 explaining: "because I'm blind and [radio is] my primary sense and mode of obtaining the information that I need." Other participants referred to listening to feel connected with the community, for keeping up to date and for keeping the mind active. For one respondent, radio helped to alleviate depressive thoughts:

> To settle my mind down, I go to a bit of talkback, storybooks, otherwise my mind will drift away because I am a stolen generation and I go back into my negative drive and I don't want to go down that road. (S20)

OFFERINGS

The second key theme to emerge from the interviews related to the radio listening preferences of audience members. This included listener views toward radio generally including community, public and commercial stations, as well as the offerings and content programming of VAR specifically.

What They Were Listening To

All demographics were eclectic in their choice of listening, with respondents very clear about their preferences. The younger demographic

preferred music stations, while the middle-age cohort trawled more widely for international content on iTunes and YouTube. The senior group overwhelmingly preferred local AM talk and talkback: VAR, ABC Radio National, and local commercial talk station 6PR. This group enjoyed the variety of content and input from listeners via talkback on the talk stations. Most referred to interesting, thought-provoking content, in particular items relevant to people with low vision or vision impairment:

> Local stuff, local people, local artists, local bands, things to do, heritage, local markets. I want to know what's going on closer to home and community stuff. (Y1)

I love the shows where vision-impaired people take on different challenges … Because you're blind doesn't mean you have got to be stuck in a box. Anybody that knows me will verify the same thing. (S16)

Several respondents mentioned that they "hated ads" and tried to avoid commercial radio services as a result.

Views on VAR

When asked specifically about what they knew about VAR or the RPH network, respondents' knowledge was rather vague. Most had heard something about the history of Information Radio in Perth and knew that VAR took over after the previous service ceased broadcasting. The most detailed response came from one younger respondent:

> I think it's a really important role in the community. I think there is still a lot for them to do to be able to reach a few target audiences that they might not be reaching such as young people but it is still really important. (Y7)

The same respondent mentioned the Christian programs (which occupy a large part of the Sunday and early morning weekday timeslots on VAR) and how they related to the station identity:

> The other thing I am a little bit curious about – we have a lot of Christian content and I am not sure why … I don't know whether we have an affiliation. (Y7)

Despite the lack of detailed organizational knowledge, all the respondents accessed the VAR radio service, though there was no evidence of them accessing VAR via the internet.

Older demographics were more regular listeners. One respondent described how VAR fitted into their listening day:

> I start from newspapers at 6 o clock right through to 10 o'clock, then I will listen to some of the talkback, then in the afternoon I will listen to some of the stories. (S20)

Listeners appreciated content relating to blind people and content informing them about and keeping them in touch with the local community:

The programs specifically mentioned by the MA group were: Talking Tech, Computalk, and The Tourist (a short series of audio-described guides around various Perth landmarks). The S group enjoyed the local daily news programs, Men's Health, Talking Vision and It's All About The Music. Other programs mentioned were The Seeing Eye Dog Show and the daily television roundup (part of the morning weekday live local news program).

Respondents noted some repetition in content. They also noted that a portion of content seemed to cater to stay-at-home people. A number commented positively on the fact that VAR was ad-free.

Ways Var Could Be Improved

The third key theme that emerged from the interviews focussed on suggestions as to how VAR could be improved for listeners. Opportunities for improvements related to programming as well as station and program information and search optimization to find suitable content.

Programming

All the demographics believed there was scope for broadening the range of programs on VAR. The Y respondents commented on a lack of appeal of programs to their demographic, for example:

> Not really targeted at our age range, boring to listen to, I'd like to hear something from a young person's perspective or something with a little more zest or casual light-hearted feel to it. (Y1)

Maybe something more relatable, more topical, if you had two young people talking about the week. There are a few different programs keeping people up to date about what is happening in Australia or their specific capital city, but maybe if it was a young person's program that might be more appealing. (Y7)

An MA respondent felt VAR needed to be more attention-grabbing and "out there". In his view,

> I would have liked a talkback session where you discuss relevant issues. I would have loved to have had more documentaries. The content just got a bit too dry. Needed to snap it up a little bit. (MA13)

Most of all, respondents expressed a desire to hear more content relevant to people with a vison impairment – soundscapes that allowed them to experience different events and locations, local interest and community news, information about activities involving blind people, consumer affairs

and rights for people with disability, the arts, and more on technology, particularly specialized technology for the blind. For example, respondents explained that VAR could carry more information about community facilities available to the vision impaired such as cinemas offering audio description or festivals offering tactile tours.

In short, respondents wanted VAR to take more advantage of opportunities to bring the outside world to the blind listener:

> If you're blind, it's not a case of being blind, it's just that people see better than you do. There's a lot of people out there that have now lost their vision and sit there and they wonder what such and such a place is like now, but they've got no idea because unless you can see it on TV you don't know. (S16)

I would like to see more audio-described reality, whether it is touristy or other activities, or having audio-described theatre or films. (MA13)

According to one Y respondent, radio offered the opportunity for blind people to share their experiences to help others in a similar situation:

> When this happened to me, I didn't have anyone to talk to. I had no one to really listen to me. I wasn't offered counsellors or they didn't connect me with anyone in the community. So, having someone that had been through this to listen to me or for me to listen to could have been quite beneficial at such a traumatic stage in my life. So, maybe some content like that. (Y1)

Transition to Digital

The fourth key theme to emerge from the interviews concerned the way that audience members more generally listened to radio content. Within this theme, respondents made general observations about their radio listening habits, particularly how they accessed programs and the technology used to do so.

How They Listen

The respondents listened to a mix of real-time broadcast programs and podcasts. However, in the S demographic, real time was the predominant form of listening. Whether their preference was music or talk, even the members of this older demographic showed they were adept at searching for and finding content that suited them, be it via broadcast media, online services like Spotify or podcasts.

> I listen to live talkback radio for two hours in the morning, (7-10am). I often listen to a podcast or radio stream for another two hours. I regularly listen to podcasts for two hours during the evening. I listen to a mix of live radio, radio streaming and podcasts most of the day on weekends. (S14)

Technology

Most respondents owned or had access to digital devices including iPhones, iPads, or laptops. With such devices available to them, they

could take advantage of technology created for the blind and vision impaired. Participants specifically mentioned Spotify, Alexa, Daisy Players, talking clocks, talking watches, Victor reader stream, Pen Friend/Pen Memo, Zoom text, Jaws screen reader, NVDA, and Voice Over. One respondent mentioned VA Connect and Voice Dream Reader apps.

The Y and MA cohorts used the web and social media to guide them to potentially interesting audio content in various formats (streaming, podcast). Two respondents (Y7, MA12), also mentioned the advantage of being able to speed up listening with digital apps so that they can fit more reading/listening in. Nevertheless, there was still some reliance on analogue radio even in this group:

> I like the solidity of the radio. There is a reliability about it, I got into a pattern of scanning. I would go from one end of the dial to the other and you would know where everything was going to be. You knew where everything was and that is comforting. (MA13)

The S cohort relied more heavily on traditional analogue broadcast media, "flicking around the stations" or "twisting the dial" to find content of interest.

One young respondent commented on their perceptions of generational differences between listeners:

> For me specifically being brought up in the new age of technology it has been quite easy, it is usually based on personal preference. I am really lucky to have that. But I know for other people the barriers might be that they live in a place without reception, they might not know how to use technology especially if they are losing their sight. It's a lot to deal with trying to learn how to do everyday tasks while learning how to use the internet, or a phone or a digital radio. (Y7)

Another Y respondent similarly commented on the accessibility of radio in comparison to newer technologies:

> There's a lot of people that the radio targets that don't have access to online, don't have money for digital radio, don't understand, they don't even have a mobile. Cannot download an app … (Y1)

These observations by participants Y7 and Y1 were confirmed by some of the older respondents. In addition to the challenge of mastering one or more seemingly alien technologies, some expressed frustration with the difficulties of channel surfing with digital – tuning DAB is not as easy as analogue where it can be done by touch and sound. Expense was another factor raised as an impediment to accessing digital services, both in terms of the equipment and the cost of WiFi connections.

Lack of sophistication of the VAR web search facility was another source of frustration. One MA respondent described the difficulties of finding VAR content on the web site, and described how the absence of individual program summaries posed real problems:

> There is [sic] no show notes for the episodes. They are the only podcasts I have ever seen without show notes. I am not going to download every episode to find one that I am interested [in]. This absolutely turns me off looking for your podcasts. (MA12)

For participants comfortable with technology, there were issues with VAR not being available on ALEXA and other apps.

In summary, the interview responses show an appreciation for the VAR service currently offered. However, respondents have indicated areas where there is scope for improvement. These areas include broadening VAR's appeal across age groups, extending the range of content for the target audience of the vision impaired, catering more effectively for the web or mobile digital audience, and minimizing the financial impediments to access to digital technology.

Discussion

The overwhelming view expressed by the survey participants in this study is that radio and audio are vital services for the vision-impaired community: there is clearly a large potential audience and a need for content designed to cater to that audience. In relation to the issue of access, all age groups spent many hours listening to some form of audio, with radio often remaining a constant companion throughout the day, especially if they were housebound. In this demographic as in the population generally, broadcast radio remains by far the most popular form of access to audio.

In relation to the offerings (the kind of content they consume) most of the respondents were avid listeners of information-based programming and were as keen to access news about their local community and events as they were to access news from the world at large. They appreciated the capacity for radio to transport them virtually to exotic locations and to relay experiences that might otherwise be denied them because of their impairment. Many of the programs they commented on went beyond the strict radio reading brief, incorporating audio description and interview formats.

Regarding improvements, respondents believed that VAR content could be more dynamic. This was emphasized by the younger demographic which described some of the program material as "boring". In relation to the type of content that might appeal, there were two dominating views. On the one

hand the vision-impaired were keen to hear more content relating to their own experience, dealing with topics such as new developments in vision-impaired technology and information regarding advocacy services, content providers, and events for their community. On the other hand, they wanted audio which brought the wider world to their ears. They did not consider themselves an audience apart and were just as interested as the mainstream audience in all that was going on locally, nationally and internationally. They wanted to experience rich soundscapes and be able to immerse themselves in events, arts, places, and people. Like the studies of Sweeney and Riddell (2003), O'Malley (2008, 2009) and Ross (2001), these findings from VAR's audience provide additional evidence that the content could be enhanced to better meet the needs of the intended audience.

In relation to the transition to digital, the listeners confirmed the reality of an ongoing and persistent generational divide in the use of digital technology versus broadcast radio. Younger listeners naturally gravitated to new technology for the vision impaired while older listeners tended to favour traditional radio and even its analogue formats. However, there was also evidence that many of the older age groups were accessing podcasts and on-demand audio on the Internet in their search for appropriate content. Most respondents had used some form of specialized technology for the vision impaired, but the younger participants were using the Internet and social media more significantly. It was noteworthy that packaged audio podcasts, while a relatively recent technological innovation, were already seen as affording expanded opportunities for personalized content curation from globally sourced programming. The lack of sophistication of the VAR search engines and paucity of supplementary materials relating to the programs were a source of frustration when it came to finding and consuming content on the VAR web site. There continued to be financial barriers to access, especially to DAB and Wi-Fi which required expensive internet connections and investment in modernized equipment. This was a major constraint, which limited the capacity to access the VAR services already streaming, and would have to be taken into account if there were moves to transition to a totally web-based service in the future.

Conclusion

This case study, while small, is nevertheless a useful start in allowing the under-researched vision-impaired audience to have a say in the types of audio services offered to it. Following Ellcessor et al. (2017) it went outside the radio station to allow listeners to tell their own stories of their radio use. The paucity of this sort of feedback up to now shows the extent to which the traditional RPH services have maintained an outdated and creatively conservative format which has failed to keep up with the

evolving needs of their listeners. The evidence indicates that existing services in Australia are not yet taking full advantage of new disseminating technologies and the rich potential of the audio medium itself to create powerful and relatable experiences for their loyal and eager audience. It also provides evidence of the financial constraints preventing listeners from accessing the latest technology. However, it is impossible to ignore the impact of funding shortfalls on the service providers' capacity to deliver the kind of programming the audience wants and needs. The reduction in funding under the NDIS has put further pressure on a community radio sector that has always been poorly resourced and has had to rely on volunteer labour. The new funding model fails to acknowledge the contribution of the RPH service to the quality of life of its listeners, raising doubts about its capacity to survive even as it struggles to adapt to the new online formats.

Having said that, despite the financial gloom, RPH has been spearheading a series of initiatives to help the visually impaired to transition from passive listeners to a more active involvement as content creators with the service (Stewart et al., 2019, p. 50–51). In this effort the new technologies may help overcome traditional barriers to station and equipment access with volunteers able to create their own content on their home computers (ibid.). Initiatives like these, converting listeners into producers, will hopefully help to expand the range of content and align it more closely with audience needs.

Notes

1. https://www.w3.org/WAI/standards-guidelines/wcag/
2. This project, Vision Australia Radio Audience Study, was approved by the Murdoch University Human Research Ethics Committee (Project No. 2017/137).

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Ah Tong, B., Duff, G., Mullen, G., & O'Neill, M. (2015, August). A snapshot of blindness and low vision services in Australia. *Vision 2020 Australia, national disability services, Australian blindness forum, Sydney*. Retrieved from https://www.vision2020australia.org.au/wp-content/uploads/2019/06/A-snapshot-of-blindness-and-low-vision-services-in-Australia-1.pdf

Blind Citizens Australia. (2020a). Background. Retrieved from https://www.bca.org.au/history/#background

Blind Citizens Australia. (2020b). Objectives. Retrieved from https://www.bca.org.au/history/#objectives

Brown, J., & Hollier, S. (2015, September 7). The challenges of web accessibility: The technical and social aspects of a truly universal web. *First Monday*, *20*(9). doi:10.5210/fm.v20i9.6165

Dicicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education*, *40*(4), 314–321. doi:10.1111/j.1365-2929.2006.02418.x

Edison Research. (2020). The infinite dial. Retrieved from http://www.edisonresearch.com/wp-content/uploads/2020/05/The-Infinite-Dial-2020-Australia.pdf

Ellcessor, E., Hagood, M., & Kirkpatrick, B. (2017). Introduction. In E. Ellcessor & B. Kirkpatrick (Eds.), *Disability media studies* (pp. 1–28). New York: New York University Press.

Ellis, K. (2019). *Disability and digital television cultures representation, access, and reception*. London, NY: Routledge.

Goggin, G., Hollier, S., & Hawkins, W. (2017). Internet accessibility and disability policy: Lessons for digital inclusion and equality from Australia. *Internet Policy Review*, *6*(1), 1–18. doi:10.14763/2017.1.452

Gray, D. E. (2013). *Doing research in the real world*. London: Sage.

Kirkpatrick, B. (2012). "A blessed boon": Radio, disability, governmentality, and the discourse of the "shut in,"1920–1930. *Critical Studies in Media Communication*, *29*(3), 165–184. doi:10.1080/15295036.2011.631554

Mason, J. (1994). Linking qualitative and quantitative data analysis. In A. Bryman & R. G. Burgess (Eds.), *Analyzing qualitative data* (pp. 89–110). New York, NY: Routledge.

McQuail, D. (1997). *Audience analysis*. Thousand Oaks: Sage.

Napoli, P. (2011). *Audience evolution: New technologies and the transformation of media audiences*. New York: Columbia University Press.

National Disability Insurance Scheme. (2020). History. Retrieved from https://www.ndis.gov.au/about-us/history-ndis

Neuman, W. L. (1997). *Social research methods: Qualitative and quantitative approaches*. London: Allyn and Bacon.

O'Malley, M.-P. (2008). Voices of disability on the radio. *International Journal of Language and Communication Disorders*, *43*(S1), 18–29. doi:10.1080/13682820701697905

O'Malley, M.-P. (2009). Falling between frames: Institutional discourse and disability in radio. *Journal of Pragmatics*, *41*(2), 346–356. doi:10.1016/j.pragma.2008.07.008

O'Sullivan, S., & Lewis, P. (2006). Future directions for research on radio audiences. In F. Antoine (Ed.), *Nouvelles Voies de la Radio/The way ahead for radio research. Recherches en Communication* (Vol. 26, pp. 165–182).

Order, S. (2013). *Community radio in western Australia: Notions of value* PhD thesis. Murdoch University, Perth, WA.

Order, S., & O'Mahony, L. (2017). Building a purposeful identity in the older adult volunteer space: A case study of community radio station 6RPH (Radio print-handicapped). *Communication Research and Practice*, *3*(1), 31–44. doi:10.1080/22041451.2017.1271971

Park, S., & Humphry, J. (2019). Exclusion by design: Intersections of social, digital and data exclusion. *Information, Communication & Society*, *22*(7), 934–953. doi:10.1080/1369118X.2019.1606266

Prensky, M. (2001). Digital natives, digital immigrants. *On The Horizon*, *9*(5), 1–6.

Ross, K. (2001). All ears: Radio, reception and discourses of disability. *Media, Culture and Society*, *23*(4), 419–437. doi:10.1177/016344301023004001

Roy Morgan. (2019, July 22). Podcasts growing in popularity in Australia. Retrieved from http://www.roymorgan.com/findings/8056-podcast-listeners-australia-march-2019-201907190703

RPH. 2019a. RPH annual report 2018-2019. Retrieved from https://www.rph.org.au/wp-content/uploads/2020/01/RPHA-Annual-Report-2018-19.pdf

RPH. (2019b). RPH protocols. Retrieved from https://radio.visionaustralia.org/about-us/rph-protocols

RPH. (2020). Our community. Retrieved from https://www.rph.org.au/community/

Stewart, K., & Spurgeon, C. (2020). Researching media participation by listening to people with disability. *Media, Culture & Society*, *42*(6), 969–986. doi:10.1177/0163443719890536

Stewart, K., Spurgeon, C., & Edwards, N. (2019). Media participation by people with disability and the relevance of Australian community broadcasting in the digital era. *3CMedia*, *9*, 44–63.

Sweeney, B., & Riddell, S. (2003). Mainstreaming disability on radio 4. In S. Riddell & N. Watson (Eds.), *Disability, culture and identity* (pp. 143–160). London: Taylor and Francis.

Thomas, P. N. (2019). *Communication for social change*. London: Sage.

Trujillo Tanner, C., Caserta, M. S., Kleinschmidt, J. J., Clayton, M. S., Bernstein, P. S., & Guo, J. W. (2018). Conducting research with older adults with vision impairment: Lessons learned and recommended best practices. *Gerontology and Geriatric Medicine*, *4*, 1–6. doi:10.1177/2333721418812624

Vision Australia Radio. (2018). History. Retrieved from https://radio.visionaustralia.org/about-us/history

Vision Australia Radio. (2019). Protocols. Retrieved from https://radio.visionaustralia.org/about-us/rph-protocols

World Health Organisation. (2020). Blindness and vision impairment: Key facts. Retrieved from https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment