

UK live music industry perceptions of current practice and Information and Communication Technology improvements to accessibility for music festival attendees who are Deaf or disabled.

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SCHOLARONE™ Manuscripts Accessibility All Areas? UK live music industry perceptions of current practice and Information and Communication Technology improvements to accessibility for music festival attendees who are Deaf or disabled.

INTRODUCTION

The use of Information and Communication Technology ('ICT') is becoming increasingly central to the way in which music festivals are conceived and delivered. UNESCO (2019. 1) define ICT as the 'diverse set of technological tools and resources use to transmit, store, create, share or exchange information' which specifically includes the internet and live and recorded broadcasting technologies. Whilst describing festivals as events based on extraordinary experiences, Cudny (2016. 19) noted that they 'occupy a specified place for a specified period of time', however this may be subtly changing in the UK, where The Department for Digital, Culture, Media & Sport, Culture White Paper (2016. 38) stated that 'technology is expanding the ways in which we make and experience culture'. For music festivals, Bossey (2018. 415) noted that 'the digital arena opens up new opportunities across a range of artistic and operational process'.

Inclusivity is 'the fact or policy of not excluding members or participants on the grounds of gender, race, class, sexuality, disability, etc' (Collins English Dictionary 2019). Social inclusion 'might be an outcome of festival involvement and attendance', (Laing and Mair 2015. 8) but little research evidences how music festival promoters might help facilitate this. Indeed, festivals may have 'potential for emphasising exclusivity and superiority' (Wilks 2011. 7) and inclusivity at music festivals is contentious. Platt & Finkel (2018. 2) argued that; 'it is imperative that policy-makers and organisations in the planned events sector consider how gender, equality, and diversity are managed as a legal and moral imperative.'

The Chartered Institute for Personal Development (2016. 1) describes diversity as recognising that people have things in common with each other, whilst also being different in many ways and that 'inclusion is where those differences are seen as a benefit.' This paper considers inclusivity in the context of people who are Deaf or disabled, rather than from a broader diversity perspective.

Defining accessibility as; 'measures put in place to address participation by those with impairments' Finkel, Sharp & Sweeney (2019. 2) noted that impairments may be permanent or temporary, and physical and / or mental. Lazar, Goldstein and Taylor (2015. 18) defined accessible technology as 'technology that can be utilised effectively by people with disabilities' in a timely manner, free from modification. When accessible ICT is unavailable 'it results in discrimination, exclusion and substantial disadvantage' Lazar, Goldstein and Taylor (2015. 71). Article 30 of the UN Convention on the Rights of Persons

with Disabilities (2006) recognises the rights of people who are Deaf or disabled to 'take part on an equal basis with others in cultural life'. However, according to Giraud (2018. 1) people who are Deaf or disabled 'face many physical and attitudinal barriers which prevent them from accessing the arts'. Despite this, there is limited academic writing on accessibility for people who are Deaf or disabled at UK music festivals.

This paper reviews existing literature and contributes an informed narrative from UK live music industry professionals to consider the current state of, and existing best practice in, accessibility at UK music festivals. The paper discusses potential for ICT to improve accessibility for people who are Deaf or disabled. ICT developments enhancing design, marketing, operations and performances, are considered across all phases of music festival delivery. The paper makes recommendations to promoters, academics and public funders; to attempt to advance inclusion (or at least to mitigate current exclusion) and identify directions for future research into accessible digital experiences at music festivals for people who are Deaf or disabled.

The paper addresses the following questions: What do representatives of the UK live music industry perceive as barriers to accessibility and exemplars of current best practice for music festival attendees who are Deaf or disabled? What do representatives of the UK live music industry consider as the role of ICT to increase accessibility for music festival attendees who are Deaf or disabled?

The author uses People First Language which 'puts the person before the disability' Snow (2009. 3). The paper refers to people who are 'Deaf', with a capital D, 'to emphasise their deaf identity' Office for Disability Issues (2018. 2) and because 'Deaf people do not regard themselves as disabled' McDonnell (2017. 37). However, not all respondents used this terminology.

LITERATURE REVIEW

UK contexts

An individual can be classified as disabled if they have 'a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on (their) ability to do normal daily activities.' The Equality Act (2010. 6). The disability equality charity in England and Wales; Scope (2019. 1), stated there are currently 13.9 million people with a disability in the UK, although estimates vary with the Office for National Statistics reporting that their 2011 Census identified 11.4 million of the UK population as 'having a limiting long-term health problem or disability'.

The Equality Act 2010 introduced legal protection from discrimination across society; identifying protected characteristics including race, gender and disability. According to The Department for Work & Pensions ('DWP') (2010. 15); the Act introduced the concept of 'discrimination arising from disability'. From an international perspective; the United

Nations Convention on the Rights of Persons with Disabilities (2006. 3) is intended to 'promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities'. Adopting a broad categorization of people who are Deaf or disabled, it identifies areas where adaptations have to be made.

Many proponents of disability rights advocate the use of 'The Social Model' of disability. Shape Arts (2019. 6) state this 'frames disability as a social construct created by access barriers, rather than a medical 'problem', and provides a dynamic and positive model which identifies causes of exclusion and proposes constructive changes to remove barriers and increase access'. Walters (2018. 234) noted that 'accessibility must be considered as a broader umbrella concept which includes financial, physical and cognitive accessibility.'

According to Disability Sport (2014. 2) disability is 'more likely to affect older adults over State Pension age, who account for 45% of the disabled in the UK compared to 16% of working age adults and 6% children'. The Office for National Statistics (2018. 6) confirmed that the UK population is ageing and predicted that 'more than a quarter of UK residents will be aged 65 years or over within the next 50 years'. The Centre for Policy on Aging (2016. 1) stated that the older people become, the more likely they are to acquire a limitation or disability.

Webster, Brennan, Behr, Cloonan and Ansell (2018. 6) stated that audience survey respondents from the 2017 UK Live Music Census aged over 35 years old spent the most per month on concert and festival tickets. This may partially support suggestions that 'rock festivals have broadened their appeal to a wider age spectrum' Holt (2010. 251) and that 'contemporary culture is fertile ground for older role models at festival experiences' Yeoman (2013. 255). Given that age and disability correlate, potential implications for festival promoters of older audience profiles include increases in the proportion of festival audiences with a legal right to expect accessible solutions.

The 2017 UK Live Music Census stated; 'live music enhances social bonding, is moodenhancing, provides health and well-being benefits, is inspiring, and forms part of people's identity' (Webster, Brennan, Behr, Cloonan and Ansell 2018. 6) Whilst only 6% of responding audience members in the Census reported access requirements that need to be met as a prerequisite to attend live music events, 90% of responding promoters saw accessibility as 'an essential or desirable factor when booking venues'.

Accessibility and Inclusivity Initiatives:

Disability focussed UK charities campaigning to raise awareness, reduce discrimination and advocate for greater accessibility across society, include; the Royal National Institute for Blind People, Invisible Disabilities UK and the National Autistic Society.

Specific organisations and campaigns address the exclusion of people who are Deaf or disabled from music festivals: Attitude is Everything ('AiE') aims to 'improve Deaf and disabled people's access to live music by working in partnership with audiences, artists and the music industry.' (http://www.attitudeiseverything.org.uk 2019. 1). AiE receives feedback from disabled mystery shoppers at UK music festivals and developed a Venue and Festival Charter of Best Practice. The Association of Independent Festivals ('AIF') coproduced the 'Access Starts On-line' project to encourage all AIF member festivals to offer 'comprehensive and clear access information for potential Deaf and disabled customers' (https://aiforg.com 2019. 3). Disability Arts Online 'support disabled artists' (https://aiforg.com 2019. 2).

Additional projects address other elements of inclusivity in relation to the entire environment of the festival or 'festivalscape' (Wilson, Arshed, Shaw and Pret 2017. 201). For instance; Keychange is led by the PRS Foundation and 'encourages festivals to achieve a 50:50 gender balance by 2022' (https://keychange.eu 2019. 3). Some funders support organisations wishing to improve inclusivity using ICT. For example; the Paul Hamlyn Foundation (https://www.phf.org.uk/funds/access-and-participation-fund/ 2019. 4) considers applications for work that 'supports organisations to embed digital solutions in widening access and participation in the arts.'

Audience Co-Creation:

'The simplest way to define co-creation is the act of *creating together*' Stensæth (2013. 3). In the context of this paper; the term audience co-creation relates to attendees and promoters, or performers, creating or enhancing a music festival experience together. According to Robertson and Brown (2014. 224) 'audiences already have the opportunity to co-create in real time both live and virtually. However, in 2010; Aitchison identified that for many young people who are Deaf or disabled, 'the role of leisure in tackling social exclusion remains within the realms of policy rhetoric, rather than everyday reality.' Furthermore, Duffy, Mair and Waitt (2019. 13) note that 'the festival space may be simultaneously a site of social inclusion and exclusion', which may preclude co-creating accessible solutions with some young individuals who are Deaf or disabled.

To address this exclusion McKenna-Cress and Kamien (2013. 181) identified best practice in adopting 'a visitor-centred and empathetic approach' and suggested constructing and applying a broad range of visitor profiles / personas, to 'rapidly expose obstacles to creating extraordinary experiences for all visitors.' Getz (2018. 4) stated 'experiences are a co-creation of producers and attendees' and co-creation may offer potential to address exclusion. Furthermore, Jarman (2018. 120) suggested that festivals are markers in the evolution of societies, so that they are 'litmus tests for the state of relations within and between communities.'

Intersectional identities

The United Nations Convention on the Rights of Persons with Disabilities aims to reduce discrimination, which can increase at the intersection of disability, race, gender and poverty. Such intersectional identities 'take into account people's overlapping identities and experiences in order to understand the complexity of prejudices and privileges they face' (Kort 2019 3). Steinfeld, Maisel, and Levine (2012. 183) state that 'It is clear that the potential for discrimination is amplified when a person belongs to several different groups, each of which is subject to discrimination.' For example; 'disability and gender intersect to create negative outcomes for people with disabilities, for women and particularly for black women with disabilities (Moodley and Graham 2015. 31).

Intersectional identities can be considered as part of an inclusive design process. Tauke, Smith and Davies (2016. 260) define inclusive design as 'an approach that honours human diversity and acknowledges the right of everyone to use spaces, products, information, services, and systems in an independent, inclusive and equal way'. Sawyer and Bright (2014. 5) stated that inclusive design goes beyond simple accessibility so that; 'A design that offers a choice of stepped or ramped approach to a building addresses accessibility for all; however, one that incorporates a level approach for everyone to use is truly inclusive.' Steinfield, Maisel, and Levine (2012. 24) also identify "universal design" as having emanated from the disability rights movement and representing a substitute for "accessible design" as it 'benefits everyone, or at least a large majority'. Additionally, Froyen (2008. 249) identified that 'the notion of the normality of users of person-made environments is becoming less exclusive' so that it gradually includes persons of all ages with varied disabilities.

Making non-digital improvements

The 2017 UK Live Music Census stated that 90% of responding promoters 'attempt to ensure that all their shows take place in venues with step-free access and an accessible toilet.' However, the census suggested the current state of accessibility at venues and festivals requires significant improvement and stated that a high proportion of responding promoters had not received Disability Awareness training. The report recommended that venues and promoters 'develop policies to incorporate no-cost and low-cost initiatives for accessibility for Deaf and disabled customers' (Webster, Brennan, Behr, Cloonan and Ansell 2018. 93).

The census profiled Chase Park Festival, identifying examples of best practice including the provision of advance information, accessible toilets for people with more complex disabilities and affordable pricing for people who are Deaf or disabled. Alistair McDonald, from the festival stated 'venues and festivals shouldn't be frightened of accessibility; it isn't a headache and it needn't be expensive' (Webster, Brennan, Behr, Cloonan and Ansell 2018. 92). Other physical accessibility initiatives identified by the census include; dedicated blue badge parking, strobe lighting policies, dedicated seating positions/viewing platforms, step free access, assistance dog policies and facilities for performers who are Deaf or disabled.

Deploying existing ICT

Box office functionality for some audiences have been revolutionised by ICT. However, Nimbus Disability (2017. 17) stated that historically, online ticket sales to people who are Deaf or disabled 'have been rare and problematic', potentially due to a perceived risk of fraud associated with providing additional free tickets. The Department for Culture, Media & Sport (2015. 28) recommended that people who are Deaf or disabled should be facilitated to 'book tickets online as non-disabled spectators can' and this is equally relevant for music festivals.

Hudson and Hudson (2013. 221) stated 'the high levels of engagement with consumers at music festivals would suggest that social media has an extremely important role to play in the future of marketing of festivals'. Music festivals are using social networks so the audience 'can share the experiences they have at the festival' Calvo-Soraluze and Valle (2014. 169). Therefore, social networks may elongate the music festival experience. Whilst utilising ICT in marketing to audiences who are Deaf or disabled 'can overcome a number of communications barriers' (Cultivate 2019. 4), ICT also creates other barriers to accessibility. For example; The Society of London Theatre (2014. 17) emphasised technical considerations including ensuring web pages 'are structured using header tags and style sheets ... to enable screen readers to interpret them'.

ICT 'has inevitably heightened the expectations of event attendees' (Martin and Cazarre 2016. 218). Innovations in other sectors including for example the incorporation of British Sign Language ('BSL') into filmed content at museums including the science museum https://www.sciencemuseum.org.uk/see-and-do/information-age 2019 (2019. 4). ICT enhancements at theatre arts venues, which could potentially be deployed by music festivals, include audio description services for people who are blind or partially sighted. Audio description is the 'verbal depiction of key visual elements in media and live productions' (https://descriptionkey.org/index.html#1 2019. 4). The charity Vocaleyes (https://vocaleyes.co.uk/services/ 2019. 1) provides audio description for theatres. Web based enhancements are also common with Vocaleyes also providing a venue listing service.

The range of ICT enhancements and bespoke ICT products targeting audience members who are Deaf or disabled which could be utilised at UK music festivals is growing. Current examples include; audio versions of access facilities and downloadable accessibility maps for British Summer Time https://www.bst-hydepark.com/event-info/faqs/disability-access-faqs (2019. 5) and captioning services provided to music festivals by StageTEXT http://www.stagetext.org (2019. 1). However, there has been limited academic investigation of ICT enhancements to music festivals.

Potential digital futures:

Professor Klaus Schwab, Founder and Executive chairman of The World Economic Forum, identified that we are on the cusp of a fourth industrial revolution, which will 'even challenge our ideas about what it means to be human' Marr (2018. 1). According to Grudin (2012. 34): 'human-computer interaction will for some time be in its early days.'

Encouragingly, some commentators view the nature of music festival audiences as being conducive to adopting ICT enhancements and according to Sadd (2014. 213) festival audiences are 'continually seeking ever more stimulating experiences and so technology is being used more and more to provide this'. Furthermore, Robertson, Yeoman, Smith and McMahon-Beattie (2015. 587) suggested that future ICT will bring about a virtual experience trend. However, van Winkle, Cairns, MacKay and Halfpenny (2016. 216) cautioned that 'the relation between digital experiences and the specific festival context also needs to be addressed to understand digital experience offerings'. This could be particularly relevant to accessibility for people who are Deaf or disabled.

Existent ICT could be further developed or positively disrupted in this context. Streaming of live content, defined as 'listening to music or watching live video in real time' by www.bbc.co.uk (2019. 1) is popular with music festivals. Enhanced versions of traditional streaming by individual users may facilitate access to a live performance. However, Swarbrick, Bosnyak, Livingstone, Bansal, Marsh-Rollo, Woolhouse and Trainor (2019. 2) found 'enjoying music with other listeners may contribute powerfully to the concert experience'. Communal streaming experiences are increasingly available, where music performances are broadcast live into multiple secondary venues, often cinemas, with audiences growing for these 'livecasts' Barker (2013. 17).

Virtual Reality (VR) also offers potential and Jones (2018. 1) found it 'has taken some interesting leaps in music over the last three years'. Streaming and VR may be deployed to offer 'accessible' content away from a music festival site. Augmented Reality (AR) 'the technology of putting images or information produced by a computer on top of a real view...' (macmillandictionary.com ca. 2019. 1) can provide users with a personalised view on a collective experience from within a music festival. This 'has the potential to become the new reality for the industry' (Katz 2017. 13).

Shared group experiences and perceived authenticity appear important in regard to attendee perceptions of the quality of their experience of performances at music festivals, despite Auslander (2008. 187) asserting that live performances are often 'produced either as replications of mediatized representations or as raw materials for subsequent mediatisation'. Music festival audience's sense of engagement with a live event, or 'liveness' may be evolving, "as new models for communicating emerge in the media landscape, new forms of liveness are also likely to surface" (Van Es 2017. 161). In this context, the sensitive development of ICT to enhance accessibility and inclusion at music festivals, in terms of both usability and authenticity of attendee experience, may be important.

METHODOLOGY

The present research focuses predominantly on supply-side perceptions around accessibility for audience members who are Deaf or disabled and potential impacts of ICT. Primary research was carried out with a sample group of UK live music industry professionals. This expert sample was intended to supply, as far as possible detailed, accurate and current information about the industrial context of music festivals. The scope of the research was limited geographically to England and by artform to open-air music festivals, venues which host some music festival provision, and an Arts Council England Sector Support Organisation.

The principle investigator previously worked as an artist manager representing clients who performed at numerous international and UK music festivals and headlined Glastonbury Festival main stage. This enabled abductive research; supplementing prior knowledge of the UK live music industry with a literature review to identify the broad issues for questioning.

An initial conceptual framework was constructed to address the thesis that: Promoters can increase inclusivity at music festivals by improving accessibility for people who are Deaf or disabled and/or have intersectional identities using ICT solutions. To do this successfully, promoters must consider sources of exclusion alongside best practice in ICT and non-digital solutions within the UK live music industry. The research considers co-creation, inclusive design, communication & customer care, virtual experience trends, livecasts, communal musical experiences, 'off-site' VR, AR as a new reality 'on-site', liveness and authenticity.

Six respondents were recruited through a call for contributions through AiE and four via existing personal contacts. To ensure balance, selection criteria were devised to guarantee that a minimum of 30% of respondents worked on open-air music festivals and venues which host some music festival provision respectively and that a maximum of 20% were employed by a support organisation. A first phase of five interviews was carried out as a pilot study to explore and bring out themes that could be interrogated further. A second phase comprised of one interview and four e-mail questionnaires to discover new perspectives on the early concepts and themes.

Semi structured face to face interviews were carried out with six of the respondents, where 'the interviewer has a series of questions that are in the general form of an interview guide but is able to vary the sequence ... and has some latitude to ask further questions' (Bryman 2012. 716). Four respondents completed a structured, self-administered e-mail questionnaire. Open questions investigated topics relating to UK music festivals. Namely; awareness of accessibility and inclusivity initiatives; the potential for co-creation; implementing non-digital improvements to accessibility; current deployment of ICT enhancements to accessibility; and potential digital futures for accessible 'live' experiences. The desirability of digital formats conceivably replicating a

'live' music festival experience and possibility of ICT enabling additional engagement with 'as live' content from music festivals for people who are Deaf or disabled was considered.

All resultant expert evidence, in the form of qualitative responses, were transcribed and reviewed carefully to conduct thematic narrative analysis, which Walliman (2011. 146) stated is done 'to reveal the undercurrents that may lie under the simple narrative of the story.' The approach taken responds to Wilson, Arshed, Shaw and Pret (2017. 206) who recommended that 'festival studies embrace greater methodological diversity, including qualitative studies ... (to allow for) ... the effects of varying motivations, expectations and management practices to be understood better.' Data collection and analysis were carried out in parallel across the two phases of interviews/questionnaires, using open coding to identify potential narrative themes and categories. Axial coding was then used to make connections between the narrative categories and sub-categories. This responds to Charmaz's concept of constructivist Grounded Theory.

Ethical principles were considered including the author's professional relationship with some respondents regarding the researcher's responsibility to the academic community to remain objective. This was mitigated by ensuring that 60% of respondents were previously unknown to the author. The ethics of naming respondents was considered and found to be important in terms of maximising the credibility of the research given the status of the respondents. All respondents (please see Figure 1) gave informed consent to be named in the article. Their professional standing and breadth of roles within the UK live music industry is important as it speaks to their status as experts in a field that the literary review identified as requiring change. This approach has been approved through institutional research ethics process. Records of personal information relating to respondents (comprising of their names and records of their comments) will be stored securely and disposed of safely as required by GDPR legislation.

The limitations of this case study include the small sample size and limited scope in terms of geography and artform.

Figure 1: List of Respondents

Interviewee	Position	Organisation
Rob Da Bank	Founder	Bestival
Jane Beese	Head of Music	The Roundhouse
Suzanne Bull	Chief Executive Officer	Attitude is Everything
Ben Carrington	Event Manager	ILOW HQ / Boardmasters
Clare Griffiths	Head of Operations	The Roundhouse
Paul Hawkins	Festivals and Volunteering Manager	Attitude is Everything
Carole Humphrey	Assisted Access Coordinator	Green Gathering Festival
Emily Malen	Front of House Manager and Access	Theatre Royal & Royal
	Development	Concert Hall

Christine Swain	Head of Customer Service	Bristol Music Trust / Colston
		Hall
Jane Walsh	Programme Manager and Executive	The Hackney Empire
	Producer of Music and Comedy	

FINDINGS

Awareness of accessibility and inclusivity initiatives

Respondents who had engaged with accessibility support organisations were positive about provision of services and resources. Carole Humphrys confirmed that all disabled people at The Green Gathering Festival benefit from those schemes which "remove barriers and place everyone on an even keel with other customers". The Social Model of Disability was alluded to by a number of respondents; Clare Griffiths stated that she did not want to "limit people in what they can do" and cited working with organisations like AiE as being important to ensure that The Roundhouse is up-to-date with language, engagement, communication and provision of facilities. Christine Swain stated the AiE Charter of Best Practice for Festivals and Events "is a great base for any venue to use to improve its services".

Christine Swain explained that Colston Hall found the mystery shops valuable. Clare Griffiths confirmed mystery shoppers' value in providing The Roundhouse with a different point of view; "working with people who have access needs and knowing what works for them is really key." However, Carole Humphrys from The Green Gathering Festival cautioned that after implementing access for people who are Deaf in response to feedback; access can "slide" if no customers who are Deaf attend one year, because the facility becomes harder to justify.

The Access Starts Online framework was very well received by some respondents. Christine Swain from Colston Hall confirmed that "information is a key for anyone attending a venue/concert" and Carole Humphrys from Green Gathering Festival emphasised that "with Access Starts Online barriers are reduced from the very start." Using Access Starts Online made Emily Malen realise that although The Royal Concert Hall had some info online, coverage be improved by, for example placing information online about provision of a private place for medication to be administered; "it helped us to better communicate to customers".

However, not all respondents were aware of support provision. Ben Carrington from ILOW HQ admitted he was not particularly familiar with the AiE Charter of Best Practice for Festivals and Events. Ben believed that for green field music festivals, where underlying geography is not conducive to accessibility, "these are areas that can and must be better addressed, and often little effort is made to improve accessibility." Where

respondents were not aware of the AiE Charter of Best Practice for Festivals and Events, they occasionally knew experts within their organisation; for example, Jane Walsh stated that "my boss at the Hackney Empire is very passionate about accessibility so spreads her knowledge".

Overall, knowledge of support organisations and initiatives was uneven, despite overwhelmingly positive feedback from respondents who had engaged. This may indicate a training need for existing practitioners and new entrants to the UK live music industry.

Intersectional identities

Some promoters consider accessibility in isolation and concerns around inclusivity in music festival line-ups extended beyond accessibility. Paul Hawkins of AiE identified inclusivity as "a huge part of improving access" and emphasising "you can't resolve inequality in part, the only way to make the world more accessible is to think not just about disability but about gender, sexuality, race, etc". Rob Da Bank contextualised Bestival 2018 booking 25% female artists amidst controversy surrounding the percentages of female performers at other UK music festivals. He explained the significant impact of artist availability which makes consistentently booking inclusive line-ups challenging and that "you don't want it to turn into a box ticking cynical exercise where you are just booking females or males for the sake of it". Jane Beese from the Roundhouse identified a large element of unconscious bias around programming decisions; "if you are responsible for deciding what's going on a stage, you are ultimately responsible for providing role models and you need to be very conscious of it ... But it's also about encouraging a greater inclusivity across gender and accessibility issues in the industry as well."

Increasing inclusivity for contributors who are Deaf or disabled to UK music festivals is a priority for AiE, who work with grass roots artists and DIY promoters to increase the number of people who are Deaf or disabled promoting, producing and performing at music festivals. Paul Hawkins explained the intention to help avoid a situation where music festivals struggle to "speak to you as an audience member when people like you are being excluded from being on stage". He also re-iterated the importance of booking by merit to mitigate risks of promoters programming an artist who is Deaf or disabled "because they want to put on a disabled artist (which) isn't necessarily a great thing to do unless the artist is great; it's got to be about quality and opportunity".

According to Suzanne Bull, AiE works with Pride Events around the UK to research the impact of being LGBTQ+ and Deaf or disabled. This has "given us a sense that we need to look more into ourselves and the diversities that come into that". Suzanne also identified an issue around age for young people who are Deaf or disabled with complex and /or high support needs. Individuals in this situation do not qualify for a social care budget, but may seek independence from their parents. Suzanne stated that this reduces the number of people who are Deaf or disabled attending music festivals "in the 16-18 age bracket". She

cited the Gig Buddies scheme as good practice for matching individuals with a learning disability with volunteers, so they can stay out after their support worker's shift ends at 9PM.

The impact of intersectional identities in compounding barriers to access at music festivals was acknowledged by some respondents; partially supporting claims that discrimination can be amplified (Steinfeld et al 2012). Potentially this affects audience members, performers and individuals seeking careers in the live music industry. Addressing this issue 'backstage' and 'front of house' at festival sites and venues tests the notion that the normality of users of person-made environments is becoming less exclusive (Froyen 2008).

Audience co-creation

Several respondents perceived access as a dialogue with their entire audience, with associated risks to overall audience experience and attendance figures where organisations are not listening to their audiences. Acknowledging that feedback from existing audience members at music festivals who are Deaf or disabled is vital, Paul Hawkins suggested it is harder to reach "the invisible audience of people who aren't going at the moment, but would be if they felt it was accessible for them." The audience that might attend is of primary importance at The Hackney Empire for Jane Walsh who identified the starting point for each new project as "who is going to come and see this work?" Clare Griffiths cited the example of attending a music festival where the customer journey is disjointed and counter intuitive. Conversely, when an organisation is listening, "things become seamless; the moment you think of something it's already there for you, so I wouldn't be doing my job if I wasn't listening to the audience." Considering access at the start of the creative process, helps ensure audience members with additional requirements are sold the right seats, have all the information they need in advance and know what to do on arrival.

The importance of other stakeholders in co-creation was emphasized by Jane Walsh, using the example of The Hackney Empire's work with the BBC Concert Orchestra to manage accessibility issues for attendees who are older in admission ques. Emily Malen from The Royal Concert Hall is also a proponent of establishing a diverse workforce and consulting them to inform "inside out" co-creation to drive better models of delivery. Here, 'inside out' co-creation refers to the process of creating an inclusive customer experience by working with employees and volunteers within an organization for the benefit of attendees to a music festival.

Respondents provided examples of improvements to physical facilities which had resulted from audience co-creation. The Green Gathering Festival launched an off grid accessible yurt shower, which was co-designed with a regular customer who has paraplegia. Carole Humphrys explained that "we are very keen to follow the 'not about us without us' principle and encourage feedback." Emily Malen used feedback at The Royal Concert Hall

to provide evidence to support funding applications; "through customer consultation, we implemented RADAR key on some of our accessible toilets to help with invisible disabilities." A RADAR key is 'a large, conspicuous, silver-coloured key that opens more than 9,000 accessible toilets in the UK like magic' BBC (2013. 1)

ICT has impacted upon the nature of audience-based co-creation at UK music festivals. Rob Da Bank employed "two or three" staff monitoring social media "all weekend" at Bestival. He emphasised the shift in feedback channels "15 years ago there was no social media and very little internet, so the only way of communicating was a letter two weeks afterwards ... and now it's happening in real time during the festival".

All respondents were broadly enthusiastic about the potential to utilise audience cocreation to enhance accessibility. The claim that audiences can co-create in real time using ICT (Robertson and Brown 2014) was supported. ICT can facilitate enhanced dialogue with existing and potential audience members who are Deaf or disabled to both; reduce existing social exclusion (Duffy et al 2019) and improve the visitor experience for all attendees.

Making non-digital improvements

All promoters cited examples of improvements in accessibility to physical facilities. Carole Humphrys listed 24 successful accessibility initiatives at The Green Gathering Festival, including an accessible fire pit and programming performers who are Deaf or disabled. The importance of physical access including the presence of raised viewing platforms and accessible toilets was emphasised. Paul Hawkins of AiE identified that "it's what people often think about", but emphasised that policies, processes and attitude to customer service are also crucially important. Implementing these can be less expensive than improving physical access and can have comparable impact.

AiE mystery shoppers have identified that events with limited physical access but good customer service, generally recieve positive reports from customers who want to return. Conversely, Paul Hawkins confirmed that if a venue has great facilities but poor customer care then "people will be much angrier than if physical access wasn't there and much less likely to re-visit." The need for good communications with audiences within a music festival was stressed by several respondents and included references to the provision of signing for shows. Clare Griffiths suggested that The Roundhouse have been particularly active in this regard, having trialled incorporating signing into productions, so it's "not just an add-on; someone stuck on the side of the stage, but that they are really part of the event which makes it a much more interesting experience." Clare confirmed that, whilst signers are in high demand, some artists do tour with signers or bring captioning, and "that's great because it shows that they have really thought about it."

Differences in scale, affordability and locational challenges were evident. Ben Carrington implemented special vehicle access, parking for people who are Deaf or disabled adjacent

to entrances, guide dog and carer passes at The Masked Ball. Despite this, he identified maximising accessibility on muddy, sloping farmland as "a very difficult challenge to overcome for small green field festivals with limited budgets". Carole Humphrys suggested live captioning at Green Gathering Speakers forum may be possible, but "volunteers for this are hard to find" and the paid for service is expensive. Conversely, Jane Beese felt that The Roundhouse is, from audience and artist perspectives "pretty ahead of the curve in terms of our facilities for accessibility". Investment is occurring, particularly in venues and Christine Swain confirmed that Colston Hall is currently undergoing a major transformation project "which will make our building fully accessible".

All respondents agreed that physical enhancements are important and some mentioned communications and customer care. Despite the UK Live Music Census (2017) recommendation to venues and promoters to incorporate no-cost and low-cost initiatives; smaller scale music festivals find funding for improvements to accessibility challenging. This may suggest the need for additional funding streams.

Deploying existing ICT

Several respondents cited pre-event communication and on-line ticketing systems when discussing recent ICT advances. Suzanne Bull from AiE identified issues around ticketing, affecting potential attendees before they arrive on site at a music festival as being of particular concern and Emily Malen specifically highlighted "implementing a better personal assistant ticket system via our Access Requirement Register" as the most significant recent improvement to accessibility at The Royal Concert Hall. Ben Carrington from ILOW HQ identified being able to find relevant information online and discuss special requirements with music festival organizers as being very important in informing "the ways in which we can make a difference". Christine Swain estimated that 70% of Colston Hall's audience book tickets online and emphasised the need to make this mode available to all customers "regardless of any additional requirements/facilities they may need."

Marketing text which encourages attendance by addressing accessibility in positive terms, like the use of person first language, is an important starting point for Suzanne Bull: The provision of detailed information and a named contact, or other bespoke communication channels also "build up a sense of community ... even making a little video of disabled audience members at the event, is very encouraging". Digitised information was seen by other respondents as facilitating independence and convenience for carers and audience members by enabling access outside of box office opening hours. Emily Malen cited other advance information such as visual stories and the Picture Exchange Communication System ('PECS'), which allow users to become familiar with environments prior to their visit, as reducing their anxiety and stress levels. Emily Malen also reported The Royal Concert Hall has a large customer base who email us to book tickets. "This can be a preferred method of communication for some of our Deaf customers".

However, Paul Hawkins identifies that some people who are Deaf or disabled find e-mails difficult to use for various reasons relating to access and for whom "an on-line world can provide a challenge in some ways." According to Paul, there are also some areas where ICT developments have "left disability behind slightly" and these include ticketing, which was an important theme in AiE's recent State of Access Report. This identified that venues have systems in place for a general ticket buyer to buy a ticket online easily but customers who are Deaf or disabled often need to ring an access line and spend some time waiting to acquire a ticket, "so there are ways in which technology isn't quite working for a disabled customer in the ways that it is for general fans."

On-site audio and visual aids were identified as being of significance by the majority of respondents with for example screens at the sides of the stage and a hearing loop at Hackney Empire according to Jane Walsh. A specific ICT product identified by Christine Swain is Sennheiser MobileConnect which streams audio content via WiFi live "and in great quality directly to a person's smartphone"; users can adjust the sound characteristics intuitively with the free MobileConnect App. The Green Gathering Festival has introduced; a dedicated system for Access customers; iPad charging facilities for customers with learning disabilities; and an induction loop system available at check in for hearing aid users. Introducing ICT solutions may not be complicated and Carole explained that installing a hearing loop in a marquee "is surprisingly easy!"

Virtual reality maps and the ability to access images of the site were identified as being helpful in regards to route-finding by Paul Hawkins who identified that this can make attendees who are Deaf or disabled feel more confident. Paul also described the presence of TVs on site as being hugely useful for British Sign Language (BSL), captioning, and even in providing people with visual impairments a better view of the stage, which can be some distance away; "those quite simple straightforward things do make a huge difference and I think that technology definitely is a positive." Suzanne Bull described advocacy activities to support promoters and encourage first time attendees to music festivals. AiE 'Club Attitude' events were livestreamed and featured films in breaks between live sets, to explain the sign language interpretation or captioning in use and say "look at one of our shows and see how it could be done".

In some instances, the geographical location and/or guiding principles of a music festival may represent a challenge to introducing ICT solutions to improve accessibility. Suzanne Bull referred to a number of useful navigational apps, but cautioned that "you've got to be a little bit wary of patchy Wi-Fi reception, so there always needs to be a bit of a balance around that". According to Carole Humphrys the off-grid nature of Greener Gathering Festival means that "electricity is precious!" however off-grid technologies are improving for small audiences and "we have been able to introduce large home-based Induction Loop systems that do not use too much electricity."

Evidence of increasing ICT enhancements at music festivals was provided, though enthusiasm exhibited by respondents varied; potentially mirroring audiences themselves, which Jane Beese attributed as "a generational thing". The Roundhouse have programmed performances which use ICT throughout a show. In one example audience members came into the space and had a mobile phone with headphones, which provided the ability to caption, so the show happened in front of them with a lot of content on their phone. Clare Griffiths noted that evolutions in ICT are starting to impact audiences and "can be put to amazing use to help with accessibility." Clare cited an example of the National Theatre trialling personal captioning with Google Glasses, which potentially "suddenly removes a lot of barriers to venues ... you can do something that is personal, and it's not just one show where you can you see the captioning performance."

Respondents reported increasingly ambitious usages of ICT at music festivals, which may support suggestions of a virtual experience trend (Robertson et al 2015). On-line ticketing systems have potential to grant equal functionality to people who are Deaf or disabled, as recommended by the Department for Culture, Media & Sport (2015). On-line wayfinding solutions and on-site audio and visual aids appear increasingly common. Music festival geography and ethos are impactful on effective introduction of some ICT solutions.

Potential digital futures

Enhanced versions of traditional streaming were described positively. Emily Malen shared that The Royal Concert Hall "have dabbled and piloted the idea of live streaming into care homes, so if it enabled access to the arts – then great." This approach "might also serve as a great introduction to the arts", helping build confidence to enable visits to the venue itself, perhaps for relaxed performances or other accessible content. Whilst The Greener Gathering Festival have live streamed via Good Is Planet Earth in the Speakers Forum; Carole Humphrys "can't see this replacing the experience of actually being there". 'Livecasts', as described by Barker (2013), were discussed. Jane Walsh from the Hackney Empire argued that 'real time' streaming live to a cinema is an immersive live experience, however "you are not feeling the smell, the tastes, there is an element that you are not as immersed in the experience!"

Potential developments in VR were contentious. Ben Carrington stated VR could drive innovation at larger music festivals like Boardmasters. It is "entirely feasible" that a convincing re-creation of a live music festival could be created and enjoyed from a home environment using a combination of readily available ICT solutions: "This could be fairly revolutionary in allowing individuals with severe physical impairments to enjoy events which are not suitable for a wheel chair or similar mobility aids". Suzanne Bull considered that 'as live' content may help where people who are Deaf or disabled can't attend on the night. Paul Hawkins identified "great merit" in people experiencing a performance they did not attend in person, but perceived the idea of VR for music festival performances as a "doubled edged sword". One risk being promoters reducing physical access because an

alternative off-site experience is available: "It's a great experience if you can't be there, but there's no reason why Deaf and disabled people can't be there in person."

AR glasses were of interest. Suzanne Bull identified a potential market where people who are Deaf or disabled "can put their captioned lyrics through the glasses as well, or some other kind of visual aid that will help navigate to that area of the music festival, so there's all kinds of possibilities." Paul Hawkins from AiE considered deploying AR glasses to watch 'as live' signing as interesting and acceptable, although he also identified that ideally the signer should be able to feel and sense the atmosphere of the performance. Paul stated the best signing occurs in the moment as "very much a performance in and of itself", so the signer being absent on stage would be similar to "someone singing in a room where the band weren't."

In some cases, persons who are Deaf or disabled can feel overwhelmed by being in the dark with people that they don't know, whilst other sensory triggers are being repeatedly stimulating. Suzanne Bull believes this response to a live environment "detracts from the music and the live experience rather than enhancing it" requiring other alternatives. She identified value in festivals with large sites providing 'as live' for attendees who are tired, overwhelmed or anxious and don't want to miss out on a band "then you could effectively sit in your tent and watch that show".

Overall, ICT was seen as driving changes in the ways that audiences experience UK music festivals; Paul Hawkins perceived that "technology is changing gigs anyway for everyone and not just deaf and disabled customers" by presenting different possibilities to audiences rather than intentionally challenging perceptions of 'liveness'. The importance of sensitively developing ICT provision to retain an authentic, group experience for people who are Deaf or disabled was emphasised. Clare Griffiths considered "the tricky bit" about implementing ICT into shows at The Roundhouse as the risk of negatively impacting upon the collective audience experience to (inadvertently) change their live experience: "I'm interested to ensure that we're not in effect segregating people by not allowing them to have that collective experience." Rob da Bank reflected on his first Glastonbury, when "for me the whole experience was just a live one, but if the technology had existed it might have been me there on a screen, so I would never be prudish about it because I think it's just technology".

Respondents broadly welcomed the potential for positive impacts of ICT on increasingly accessible live experiences at music festivals which retained a sense of authenticity and 'liveness'. Comments regarding streaming to secondary venues supported Swarbrick et al (2019) regarding the power of communal musical experiences. Respondents concurred with Jones (2018) regarding recent developments in VR, however substituting on-site solutions with remote VR based alternatives was identified as problematic. Respondents were interested in the potential for AR though the 'new reality' ascribed by Katz (2017) was not fully endorsed. The usage of 'as live' content to enhance an individual's welfare is

interesting in the context of a specific festival and it's relation to ICT experiences (van Winkle et al. 2016).

DISCUSSION AND CONCLUSION

Accessibility and inclusivity are increasingly prominent and contentious issues at music festivals, where exclusion can affect a wide range of demographic groups. Despite notable examples of improvements in provision which aim to mitigate some accessibility issues for audience members who are Deaf or disabled, a range of significant challenges remain. The 'snapshot' of ICT solutions for identified accessibility challenges at music festivals provided within this research is of particular value due to its source; narrative from varied UK live music industry professionals. There is a paucity of other research into this topic. This research has implications for practice, theory and teaching. Recommendations are included to; contribute towards improvements in accessibility at music festivals, and provide context for future comparative studies, teaching and policymaking.

The research identified varied levels of promoter cognisance around accessibility issues and 'The Social Model' of disability. Greater levels of staff understanding about this model could potentially help improve customer care at music festivals. A wide range of best practice was considered; including factors which might once have been perceived as being beyond 'standard' levels of provision. There was some evidence within the narratives that greater levels of awareness can lead to better provision and hence audience experience. Whilst most respondents recognised the value of the variety of advocacy organisations and programmes available, there is clearly a need for greater engagement across the sector. **Recommendation 1:** Promoters who have not already done so should take steps to engage with specialist support providers and provide accessibility training to staff at music festivals. **Recommendation 2:** Event management educators should consider reviewing provision to ensure best practice is embedded around accessibility for audience members who are Deaf or disabled.

The need for promoters to co-create solutions with their audiences was a common theme, with respondents emphasising the importance of communicating with and listening to their audience. There was an acknowledgement that whilst ICT provides solutions to enhance communications, it also increases the scale of the communications task. All respondents identified significant activity to improve accessibility for audience members who are Deaf or disabled, including in some cases co-created ICT based solutions. A wide range of initiatives and practices were evident; some of which represent exemplars of best practice for the sector. Respondents broadly concurred that improving accessibility impacts positively on audience experience for all attendees.

Given that accessibility applies to entire audiences; considering it in isolation risks omitting sections of an audience when considering an entire customer journey. There was

very little specific consideration of audience members who are older, despite demographic trends. At times some respondents appeared to focus on individual segments of their audience in a somewhat siloed approach. On-going issues of exclusion were identified around some groups with intersectional identities, including for instance young people who are Deaf or disabled. Challenges were identified for promoters wishing to consult with these currently excluded 'invisible' potential audience segment(s).

Recommendation 3 Promoters should consider further developing the co-creation of accessibility initiatives, utilising ICT to both deliver improvements and engage with potential audience members who are Deaf or disabled. Particularly those with intersectional identities who are not currently attending their music festivals.

A growth in advocacy and policy initiatives around inclusivity 'back-stage' and 'front of house' at music festivals has been observed. Demands for greater employment opportunities within the UK live music industry for people who are Deaf or disabled were evident in responses to this research. The value of live performances from high quality artists who for audience members who are Deaf or disabled for audience members who are Deaf or disabled was underlined. **Recommendation 4** Promoters should seek to proactively recruit staff members who are Deaf or disabled and significantly increase their programming of performers who are Deaf or disabled at music festivals.

The majority of identified improvements to accessibility challenges at music festivals were non-digital in nature. There was evidence of growing use and awareness of ICT based solutions for enhancing design, marketing and operations across all phases of music festival delivery. Developments in bespoke ICT solutions for these functions were evident and respondents advocated for further innovation in this regard. Some respondents also described ways in which they had attempted to use these existent ICT solutions and ease with which this had been achieved. There was a sense that further developments to bespoke solutions in the operational domain could prove very powerful. Ticketing strategies and systems were particularly identified as representing on-going barriers to accessibility, including for instance around personal assistant ticketing. **Recommendation**5: Promoters should consider reviewing their ticketing processes for music festivals, to identify accessibility challenges for audience members who are Deaf or disabled and implement appropriate ICT based solutions.

ICT led enhancements to the overarching audience experience of musical performances, both on-site and via livecasts into non-traditional venues, were identified. Respondents felt that implementing simple adaptions to existing ICT facilities can increase accessibility including for example; screens beside the stage enabling BSL captioning. Exemplars of positively impactful practices identified included captioning via mobile devices and streaming into care homes. Specific products cited included Sennheiser Mobile Connect to stream content direct to mobile devices, though issues with connectivity due to poor signal at festival sites were a concern. Overall, ICT enhancements were perceived as being broadly valuable to all attendees, including people who are Deaf or disabled, although

these were viewed as cost prohibitive by some respondents. There may be an argument for greater funding to increase accessibility initiatives at smaller festivals to drive positive social outcomes. **Recommendation 6:** Promoters should consider maximising accessibility benefits for audience members who are Deaf or disabled from existing ICT provision on site and explore additional bespoke ICT solutions at music festivals. **Recommendation 7:** Additional public funding should be provided to drive ICT derived improvements to accessibility for audience members who are Deaf or disabled at smaller scale music festivals.

Respondents perceived that ICT is facilitating change across the sector for all music festival audiences. Changes to the nature of 'liveness' in terms of audience perception of 'live' and 'as live' experiences were discussed. Some aspects of digitising performances were contentious, particularly if promoters provide digital experiences as an alternative to improving physical access. This could risk creating second class experiences for attendees who are Deaf or disabled, for whom ICT might become an additional barrier to attending festivals in-person. Conversely; areas of enhanced need and sensitivity were identified where alternative 'as live' experiences could contribute to accessibility. As live content might also work positively for people who are Deaf or disabled in scenarios where they have been forced to give up their tickets at late notice. **Recommendation 8:** Promoters should consider sensitively deploying ICT to implement supplementary 'as live' content for audience members who are Deaf or disabled, whilst avoiding any risk of creating new instances of exclusion at music festivals.

The benefits of ICT enhancements to accessibility for festival audiences are currently under researched. **Recommendation 9:** Further research should be considered around inclusive approaches to digital experiences within a music festival environment for audience members who are Deaf or disabled and tensions between accessibility and notions of 'liveness'.

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