

# Audience perceptions of experiencing a haptic dancefloor during performances at three UK music festivals

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# Presentation overview

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- Discuss accessibility for people who are d/Deaf, disabled or neurodiverse to music festivals
- Introduce haptic ICT
- Consider the LAAA2BB Project
- Share on-going research directions

# Disability in the UK

**‘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.’** (Equality Act, 2010)

In 2020/21, **24 percent of the UK population** (16 million people) had a “physical or mental health condition or illness that has lasted or is expected to last 12 months or more.”

(House of Commons Library 2023:1)

“More than a quarter of UK residents will be aged 65 years or over within the next 50 years.”

(Office for National Statistics, 2018)

# Some music contexts...

**Music festivals** can be conceived of as “**social field configuring events**”  
...capable of advancing the global accessibility movement. Duignan 2023:3

The music industry is exclusive, it **discriminates** against pretty much all the protected characteristics of the Equality Act **and** poverty

**“73% of disabled respondents felt they had to compromise their health or wellbeing to do their job (vs 52%)”**

UK Music Diversity report (2024)

Accessibility refers to “**measures put in place to address participation by those with impairments**”

Finkel, Sharp & Sweeney (2019:2)

# Accessible digital futures

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Existing ICT  
augmentations  
can increase  
access

**Hearing loops**  
which deliver  
a wireless  
signal for  
hearing aids  
(Hearing Link Services,  
2023)

Time  
synchronised  
text in the  
form of **closed  
captioning**  
(Mahoney 2023)

**Sign language  
interpretation**  
on a big video  
screen

**and...Haptic  
technologies?**

Touch one of the “**big  
five**” senses.  
(Sensory Trust 2020:3)

# BEAT BLOCKS

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- Multi-sensory interactive haptic flooring system
- <https://www.beatblocks.co.uk/>
- Pilot research published in Virtual Events Management
- <http://dx.doi.org/10.23912/978-1-915097-03-3-4967>

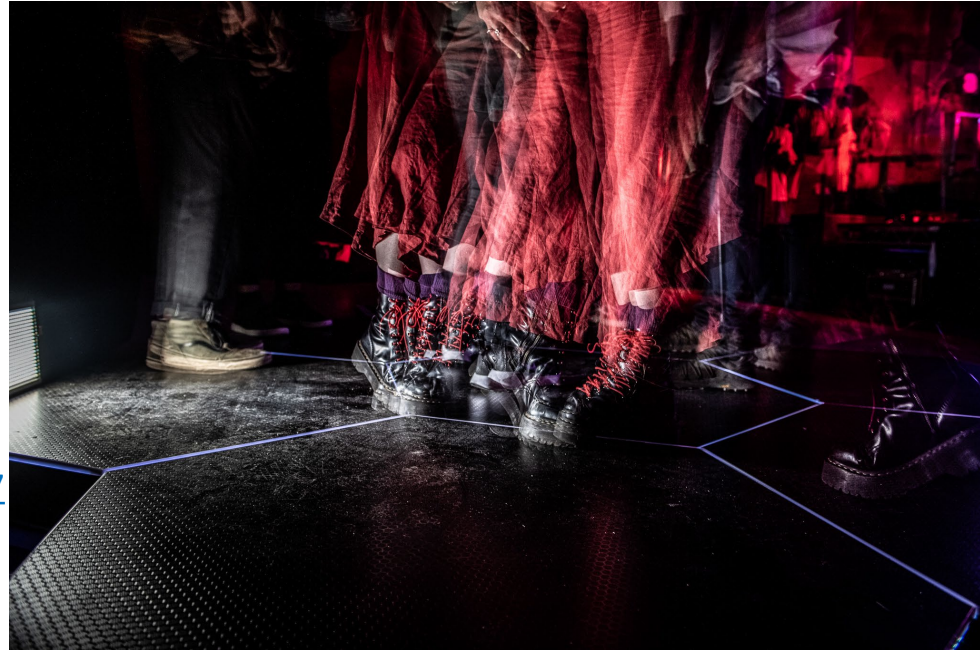


Image: Beat Blocks Flooring at Roundhouse, London - October 2022  
Credit: Rah Petherbridge

# LAAA and LAAA2

- **Live Audience Accessibility & Augmentation ('LAAA') Project:** 5 performances plus workshops
- **LAAA2F:** Field tested vests at DEAF RAVE performances
- AEME SIG Research Fund
- Initially just Adrian, then Mandy & Adam
- **LAAA2BB:** Installed BEAT BLOCKS floor into 3 music festivals



Image: LAAA 80 Raves Poster



# LAAA Project images



Image: Attendees at LAAA Project using BEAT BLOCKS' haptic floor

Credit: Matt Jessop



Image: Attendees at Boomtown Fair Deaf Rave takeover in 2023

Credit: Adrian Bossey



# Liveness Scale Output

- Measures audience perceptions of performances at music festivals which have been augmented to increase accessibility for AMDDN
- 282 responses collected across four iterations of primary research from six music festivals
- Development process identified importance of adopting 'plain' English, moderating items and incorporating visual prompts
- <https://doi.org/10.3727/152599525X17483017436931>



Image: Icons for liveness scale

# Case study

- Teaching case study published
- **Bossey, A** (2023) Do you think ICT enhanced performances are really 'live' music. In, *International Case Studies in Event Management*. Routledge  
<https://repository.falmouth.ac.uk/id/eprint/4954>
- Please feel free to check it out ...

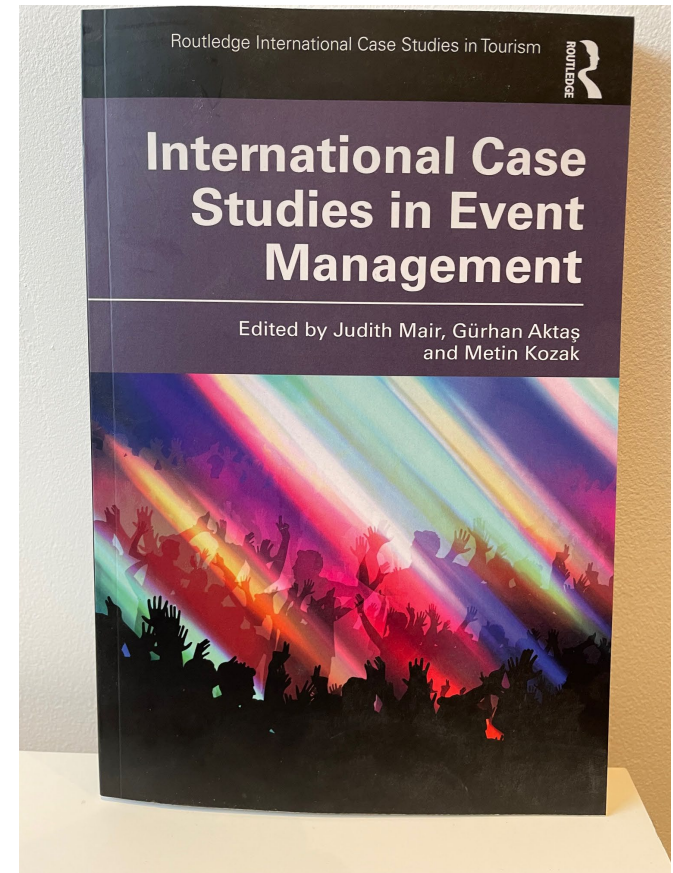


Image: cover of International Case Studies in Event Management  
Credit: Adrian Bossey

# LAAA2BB

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- At Cheltenham Jazz Festival and Tropical Pressure
- Worked with community groups to measure perceptions on-site of the BEAT BLOCKS floor
- Used Participatory Action Research (PAR)
- An effective method for qualitative social research



Image: National Star attendees on Beat Blocks' floor at the Cheltenham Jazz Festival (May 2024)

Credit: Sara Bowrey

# PAR 'Photo Elicitation' Methodology

- Participants and/or PAs involved in processes of self-reflection, data collection, and people-centred action
- Consultation undertaken participants/researchers for successful process
- Photo-elicitation method



Image: National Star attendees on Beat Blocks' floor at Cheltenham Jazz Festival (May 2024)

Credit: Sara Bowrey



# PAR 'Photo Elicitation' Methodology

Photography was selected to provide personal contexts to the research:

- to give voice to the image (as selected by the participant) and therefore give voice to the moment.
- whilst the reflexive nature of the photo elicitation process further promoted participant thought and contribution.

Three stages of narrative analysis

1. That which is communicated overall within the story
2. A more detailed understanding of sequence or units
3. Observation of generalisations and distinctive features within the story.

Curtis, 2015 (after Kaźmierska, 2004)



Image: Gloucestershire Deaf Association participant at Cheltenham Jazz Festival (May 2024)

Credit: Sara Bowrey

# Conceptual Framework

- Emotional connection
- Implicit liveness
- Musical appreciation

Evaluating proposition that: Experiencing a haptic dancefloor may improve accessibility for Audience Members who are Deaf, Disabled or Neurodiverse at music festivals. AND explored intentions to attend future haptic events.



Image: Mother and child on haptic floor during DJ Countryman set at Tropical Pressure Festival (September 2024)

Credit: Tropical Pressure

# Preliminary Findings

“...before I wasn't deaf I was hearing. I lost my hearing; before that I was able to hear music. Now, without formally accessing the sounds I can't pick up the beats. So, when I first stepped on it [*the dance floor*] straight away you were feeling the beat and was straight away going in with the music. **So, for me it is like going back into being able to hear again.** So yeah. Really connecting...It is just the full immersive package, rather than just half the package you get when you go to a festival, you have got the lights, you have got beats, but you can't feel the beats”.



Image: Haptic dancefloor at Tropical Pressure Festival (Sept 2024)

Credit: Steve Tanner



# Research-based learning

- ‘Designed around inquiry-based activities’ Griffiths 2004:722
- Students collected data and facilitated research activities
- ‘It definitely helped me plan my dissertation research’ Falmouth student
- ‘This event has changed something [and] within me it’s changed my insight ...’ Falmouth student



Image: Student research assistants at Cheltenham Jazz Festival (May 20204)

Credit: Adrian Bossey

# On-going research

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- **Policy paper**
- **Music You Can Touch Project**
- **Potential Exhibition**



Image: National Star attendees on Beat Blocks floor at Cheltenham Jazz Festival (May 2024)  
Credit: Sara Bowrey

# References

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# Thank You

- **Any questions?**

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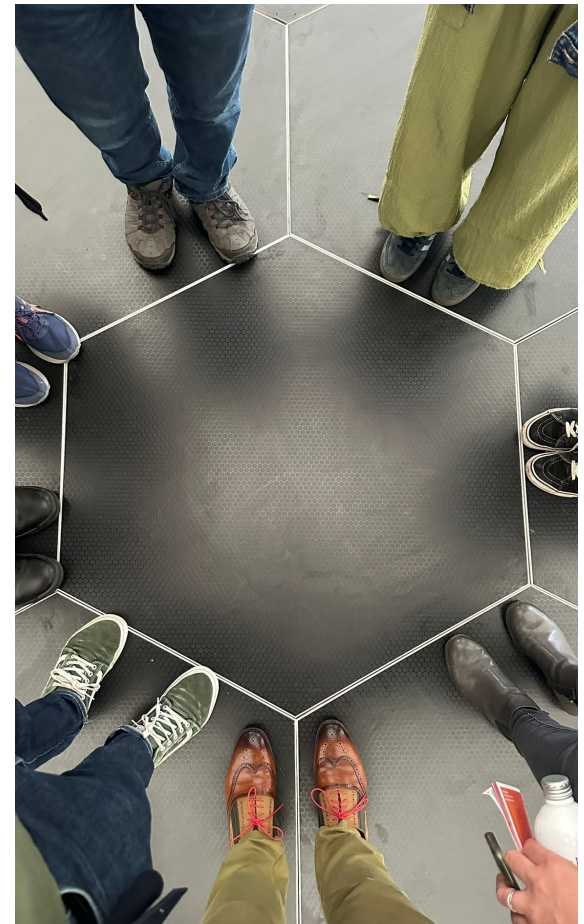


Image: We kept our feet on the floor  
Credit Andrew Lansley