What is music health and wellbeing and why is it important

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Why Music?

• Music is ubiquitous
• Music is emotional
• Music is engaging
• Music is distracting
• Music is physical
• Music is ambiguous
• Music is social
• Music is communicative
• Music affects behaviour
• Plays a key role in identity
Music & Health

• Relevant to tackling major health concerns
  – Depression affects 8-12% of population\(^1\); music therapy may be an effective treatment\(^2\)
  – Dementia affects 86,000 people in Scotland\(^3\); music is an important psychosocial means to maintain their quality of life\(^4\)

• Preventive: helps maintain good health, may mediate impact of other conditions

\(^1\)ONS 2001; \(^2\)Maratos 2009; \(^3\)Alzheimer Scotland 2013; \(^4\)McDermott 2014
Music & health research

• Carnegie Trust’s SMHN award recognises the importance of research in this field to:
  – Find new links between music and health
  – Confirm or qualify beliefs about its effects
  – Apply music more widely through interventions

• Collaboration is vital
How is the relationship between music and health assessed?

Quantitatively:
physiological and neurological measures, observation of behaviour, assessment of task performance, self report questionnaires and the use of rating scales.

Qualitatively:
Focus groups, interviews, real life interactions, newspaper articles web based resources.

The relationships between outcome measures assessed by these various techniques and “music“ are complex and developing causal links is a key challenge for this area of study.

Evidence based practice
Conceptualising music health and wellbeing as a field of study
Theme 1 - Other people’s expectations

I remember I used to go up in the ambulance up to the hospital years ago (. ) and there was this old woman she was always complaining about her illness (. ) we used to call her 57 varieties! (both laugh) She used to always say about me, ‘you know, he’s in a wee world of his own there’ (. ) and you’re sitting listening! (both laugh) and you’re sitting listening ‘oh aye, I’m in a wee world of my own here!’ (laughs) (. ) but there again, (. ) that same old woman, I started a sing-song in the ambulance one time and she started to talk (. ) she started to talk to me normally! (laughs) you know what I mean? (both laugh) so there you go […] she forgot about the ‘wee world of my own’ when I started the sing-song! […] The attitude changed.
Music Listening in hospital

MacDonald et al 2004

Mean Score on SSAI

Time 1 | Time 2 | Time 3

Experimental

Control

MacDonald et al 2004
Music and pain perception (Mitchell and MacDonald 2006)

- 54 participants
- 3 trials:
  - White noise
  - Anxiolytic music
  - Preferred music
- Dependent variables:
  - Tolerance time
  - Intensity rating of pain
  - Perceived control rating

(Mitchell and MacDonald 2006)
Music Listening in Hospital

• 60 patients undergoing hemodialysis treatment
• Experimental group listened to self selected music during hemodialysis.
• Control group no music music listening.

The Effectiveness of Music Listening in Reducing Stress and Perceived Pain in Patients undergoing Hemodialysis (Pothoulaki, MacDonald and Flowers (2008))
Listening to preferred music significantly reduced pain and anxiety perceptions.

- **Listening to Preferred Music**
  - **Pain measure**
    - **Control group**:
      - Mean: 2.6
      - Mean: 2.4
    - **Experimental group**:
      - Mean: 2.2
      - Mean: 2.0
      - Mean: 1.8
      - Mean: 1.6
      - Mean: 1.4
      - Mean: 1.2
      - Mean: 1.0
  - **Pain measure**
    - **Control group**:
      - Mean: 50
    - **Experimental group**:
      - Mean: 40
      - Mean: 30

- **State A and State B**
  - **State A score**
    - **Control group**:
      - Mean: 20
    - **Experimental group**:
      - Mean: 30
      - Mean: 40
      - Mean: 50
Possible theoretical mechanisms

- Distraction effect
  - When listening to the music distracted from pain.
  - When listening we are emotionally engaged.

- Control
  - Music can have intense subjective meanings.
  - not related to structural aspects
  - “functionally equivalent”.
  - Replications
Therapeutic song writing

Sitting here, in my room
And thinking about what I have done
All the people I’ve hurt, everyone I’ve let down
And what I have become
Creativity’s shot, and humour is gone

Looking at myself through stranger’s eyes
The person looking back at me I barely recognise
A fog has descended over my mind
Personality dull, words hard to find

And I’m dreaming of the day
That I’m back in my own bed
Years spent in the gym have disappeared
Only memories remain
Body is weak, but intentions are strong

Chorus
No need to remind myself what I’m doing this for
The reason’s so obvious it’s the person I adore
She makes all this, a lot less scary
She’s the love of my life, my world, my Elly

Chorus
Improvisation and Health

- In-depth investigation of the musical identity processes involved in a music therapy program with cancer patients.
- 9 Participants took part in semi-structured interviews before and after the intervention.

A qualitative study of the psychological processes involved in music therapy sessions with cancer patients
(Pothoulaki, Flowers and MacDonald, 2012)
Free expression-communicating through music

• A: ...it’s not like I was speaking to the person. (1) It’s just that you are getting involved, you know, through the music. It’s not like sitting and trying to make a conversation.

• J: Yes. Well, we can all communicate (.) at the same time (.) by playing an instrument whereas if you are verbally communicating you can not all talk at the same time, whereas we can all play a tune and all be heard at the same time. And then if you hear someone, you can pick up their rhythm and you can join in as well or maybe pick up someone else and join in with them. So, everybody is playing a tune and everybody is communicating and you can pick, (.) you know, certain tunes or sounds (.) or rhythms if you like and join in with the other person.
Summary: what is music health and wellbeing and why is it important?

• Why music?
• Overarching conceptual framework
• Identities communication and improvisation
• Health, Qualitative / Quantitative examples: SoP, music listening Cancer Patients
Summary and Conclusions

• Music is not a “magic bullet”
• But when utilised in a knowledgeable way it can have significant positive effects
• Why music and conceptual model
• The nature of evidence
• Examples
  – Limelight community music / music education
  – Music and pain
  – Music therapy
    • cancer care (improvisation)
    • therapeutic song writing (community music therapy)