

VISUOSPATIAL MAPPING IN SINGING, AND ITS USE IN VOICE PEDAGOGY FOR FORMALLY UNTRAINED SINGERS

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PRESENTATION OVERVIEW, PART 1

- Context
- Key research objectives
- Considerations: ethics, insider research issues
- Methodology
- Data collection
- Literature review
- Findings

CONTEXT OF RESEARCH

- *What is singing?*
- Complex motor feat of a few human systems collaborating in synch (Titze, 1994)
- “Not innate to the human condition... something the mind can and readily acquires” (Marcus, 2012)

CONTEXT OF RESEARCH

- *What is voice pedagogy?*
- “Singers bring their own subjectivity and experience to the process” (Scott, 2022)
- Relevance of visuospatial (mapping) in singing? And for teaching singing?

CONTEXT OF RESEARCH

- *“Visuospatial” mapping ?*
- One’s ability to observe and reconstruct a [sound] replica of the original source from perceived components (Mervis et al., 1999)
- With what aspect of music can it reasonably link?
- (Numerous studies): space manifests as a compounded, shared outcome arising from various sensory perceptions combined (Bryant, 1992; Giudice et al., 2011; Lacey et al., 2007)

Key research objectives

Considerations

- Ethics: transparency, consent, protection
- Insider research issues
- Reflexivity
- Triangulation: multiple methods

Methodology

- **Outlook:** *Constructivist* **AND** *interpretivist* paradigms
- Context-specificity (Hoepfl, 1997)
- Understand the world as others experience it (Kawulich and Chilisa, 2012)
- ‘multiple realities’ co-exist (Creswell, 2013)
- Reality NOT apart from the subject (Valle and Halling, 1989)

Data collection (methods):

1. Literature review
2. Individual semi structured interview sessions
3. Additional individual open-ended interview
4. En masse 24 hour social media surveys (on IG)

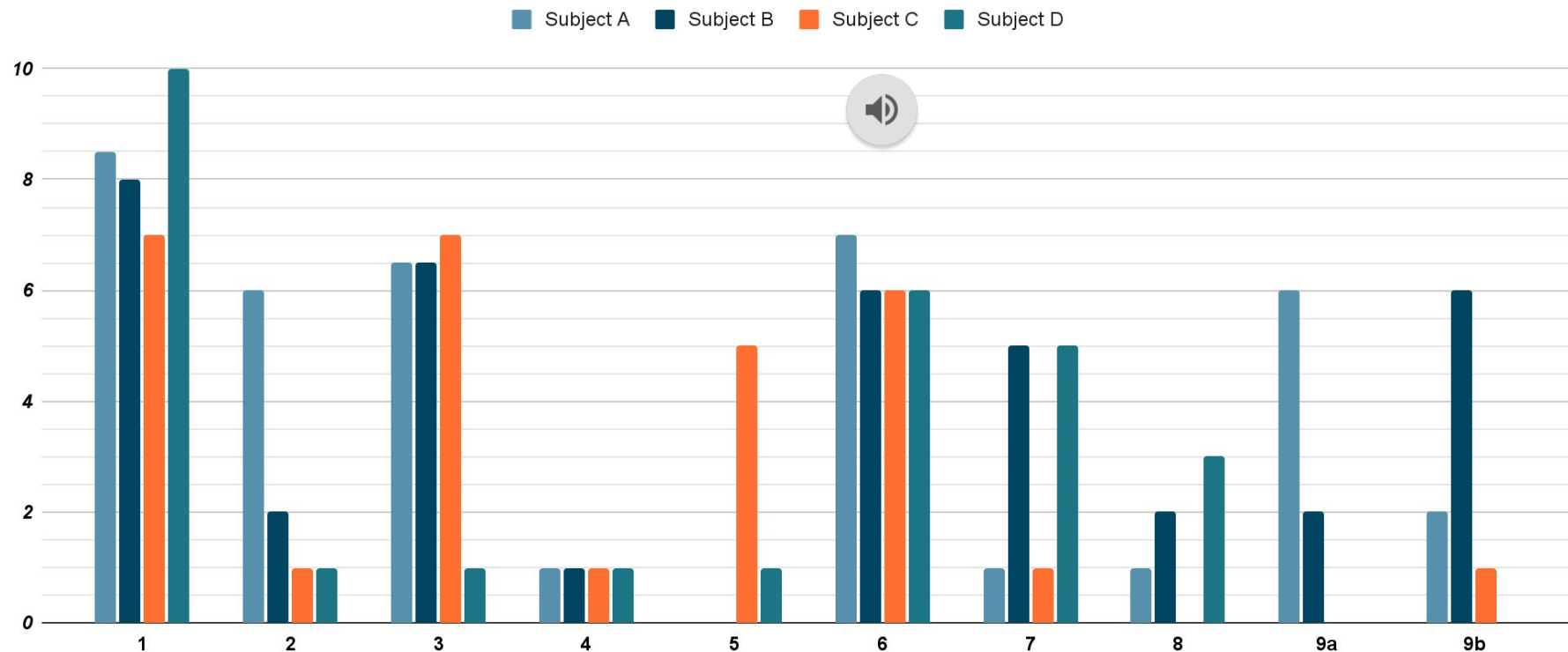
Literature review: on visuospatial mapping

- Most focus re ***pitch-spatial dynamic***
 - Visuospatial movement biases pitch discrimination (Connell et al, 2013)
 - Pitch stimulus primes associated spatial location (Rusconi et al, 2005)
 - Pitch-spatial mapping instincts: nature or nurture? (Walker et al, 2010)

FINDINGS– semi structured interviews

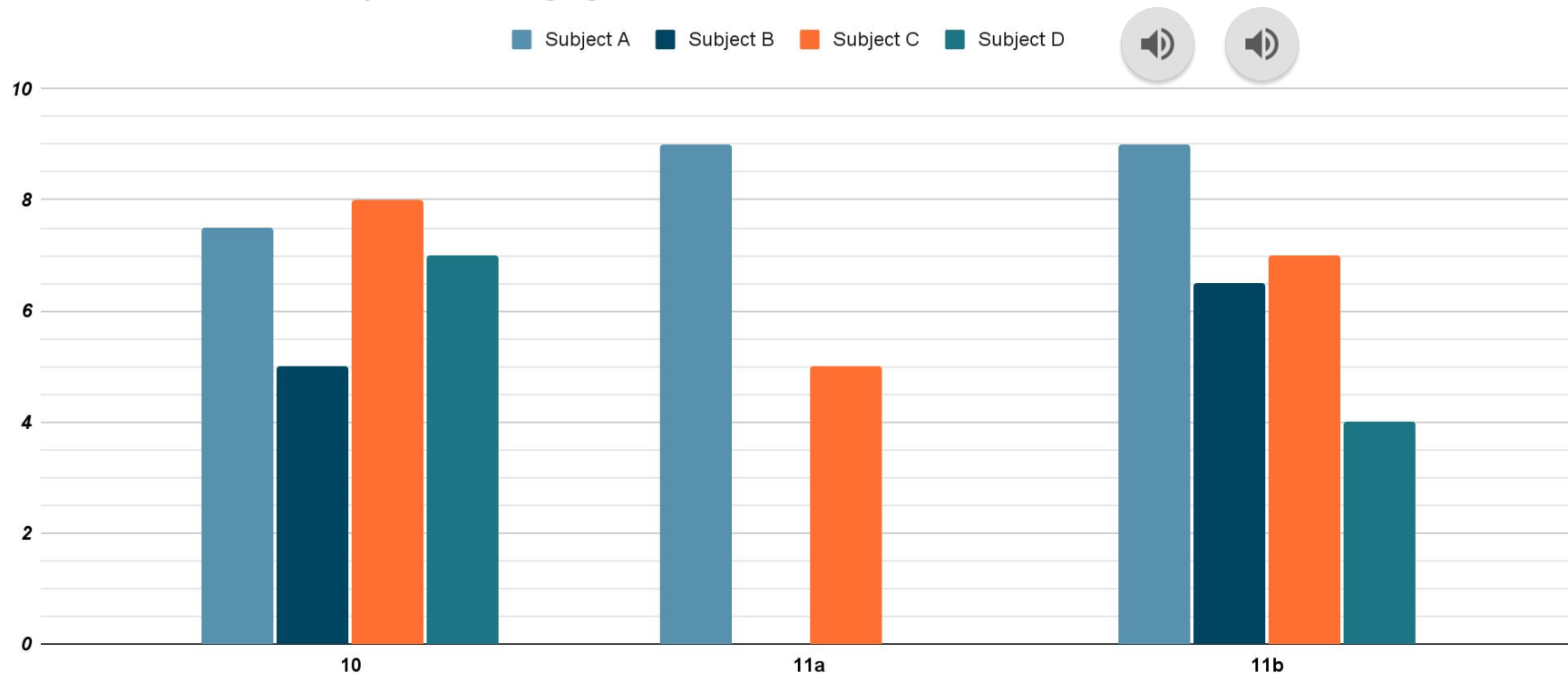
FINDINGS—semi structured interviews. session 1

2.4.1.1 Benefits of Visuospatial for Singing Interview 1



FINDINGS—semi structured interviews, session 2

2.4.1.2 Benefits of Visuospatial for Singing Interview 2



FINDINGS: semi-structured interviews takeaway?

- How much does individual's learning profile make visuospatial mapping a compatible tool?

FINDINGS—open-ended interviews

- ***Advocating visuospatial mapping***: whether “ ‘in my face’ reference”  or “when some part of [singer’s] arm is moving to guide [their] **sound**” and inform their intended voice production

PRESENTATION OVERVIEW, PART 2

- Analysis: treatment & applications
- Conclusions
- References

Analysis: Coding & content themes

- Systematic basis for outlining research
- Key for thematic content analysis (Burnard et. al, 2008)
- Emergent categories (Cliff & Hancox, 2001) from data—deductive

ANALYSIS: Themes—visuospatial mapping helpful in:

- ‘Pitch guidance’
- ‘Voice production’
- ‘voice projection/focus’
- ‘Singing confidence’
- ‘rhythm/timing’
- ‘pitch memory’

ANALYSIS: Applications—issues & questions

- ‘Fuzzy generalisation’ (Bassey, 1999)
- Can visuospatial mapping *always* help one sing more accurately and intentionally? In what ways?
- How does singing *without its use* compare?
- When/ how does visuospatial mapping detract from singing aid and progress, if it does?

CONCLUSIONS: Summary

- Visuospatial mapping *can* be employed as a singing ***tool***
- Type and level of benefit differs across singers
- Not without conditionalities i.e. learning preference and learner profile

CONCLUSIONS: Limitations

- Time, common availability: non-linear research process
- Number of subjects
- Modified research framework
- Preliminary findings
- Conditionalities of visuospatial mapping benefit
 - Individual learning preferences
 - Learner profile/ proficiency
 - Assumption of health

CONCLUSIONS: Recommended research/ discussion

- What effect does voice coach per say have on success of visuospatial mapping for singing student?
- Example outline of sample lesson incorporating visuospatial mapping?
- Potential for designing a sliding scale to customise visuospatial mapping's use according to each learner?

THANK YOU FOR LISTENING :)

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