

Investigating Musical Performance

Findings and Implications for Learning and Teaching

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& LEARNING
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Investigating Musical Performance
comparative studies in advanced musical learning

Glasgow • Leeds • London • York

The basis of musical development

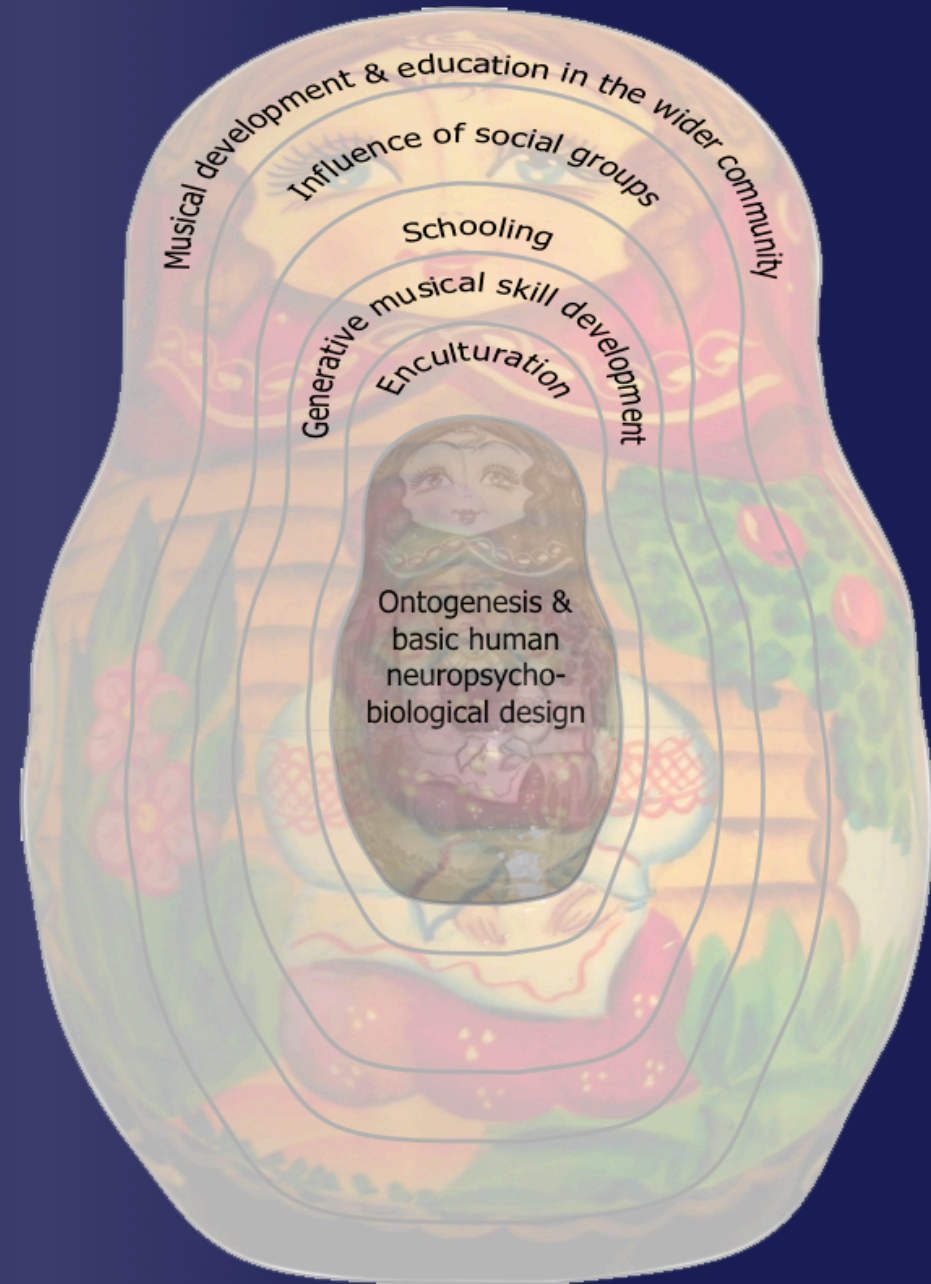
Theory (1): 'Russian Dolls' model

(Welch, 2006)

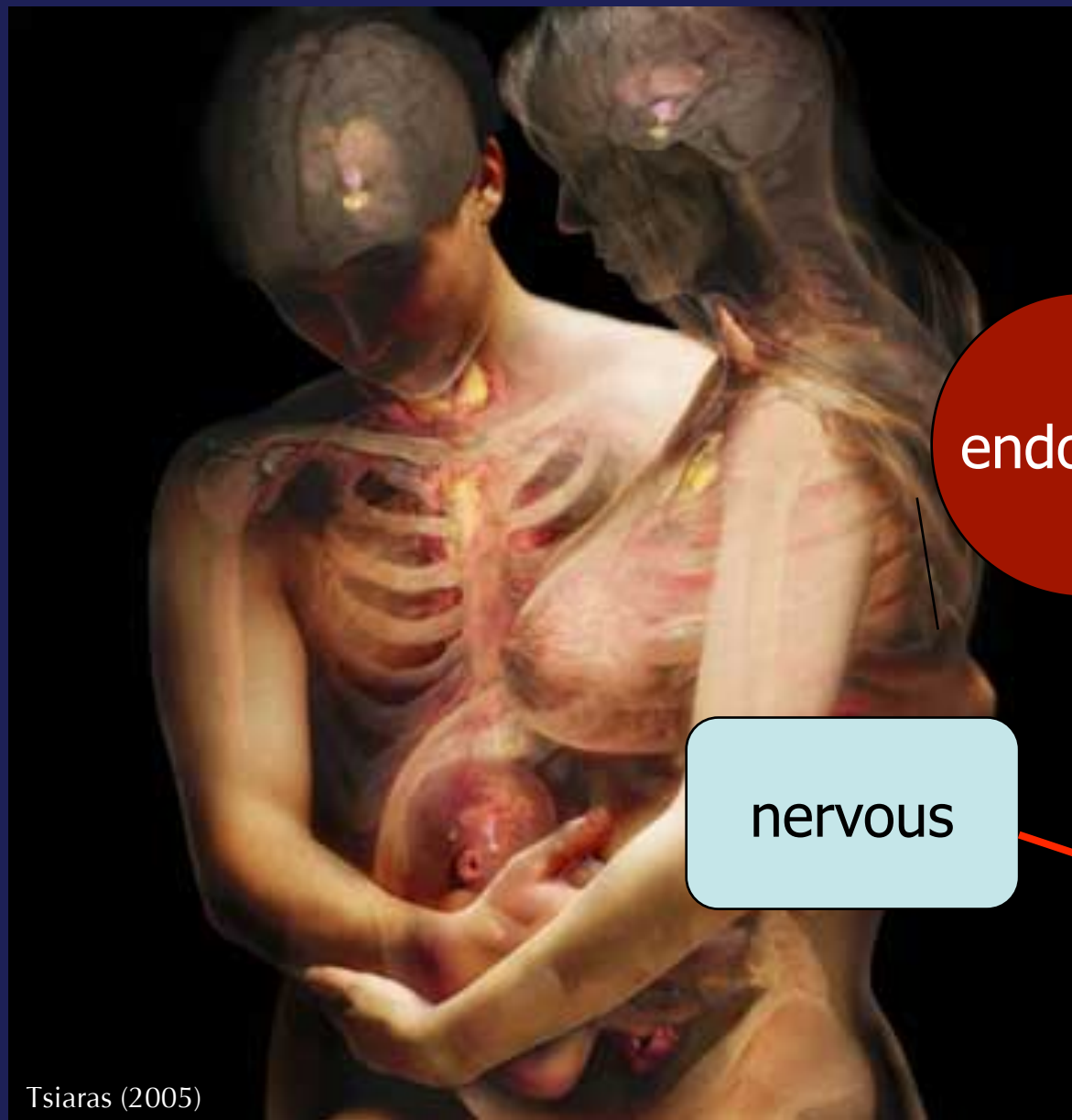
Musical development =

- Basic human design for learning in a variety of socio-cultural contexts
- 'Proximal processes for the realisation of genetic potential'

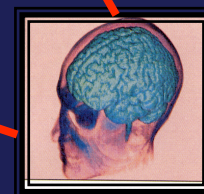
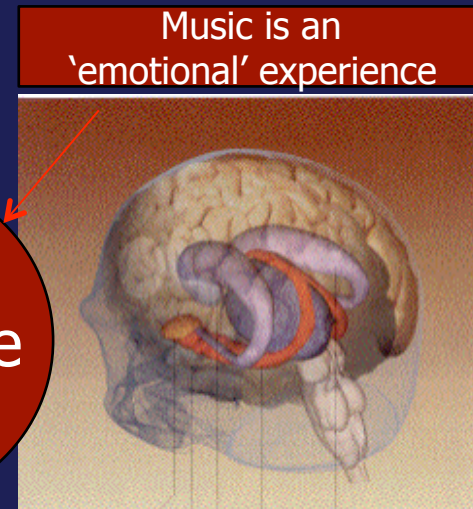
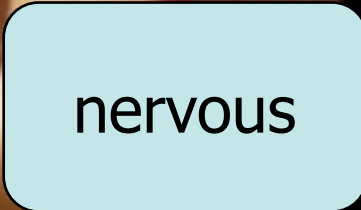
(*cf* social ecology/bioecology theory –
e.g. Bronfenbrenner & Ceci, 1994)



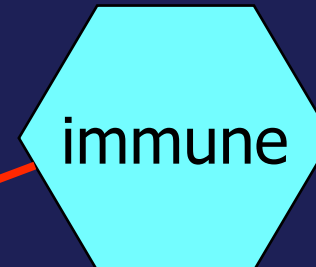
Theory 2: Basic integration of neuropsychobiological design and music through our 'bodymind' (Pert, 1986; Thurman & Welch, 2000; Welch, 2005)



Tsiaras (2005)



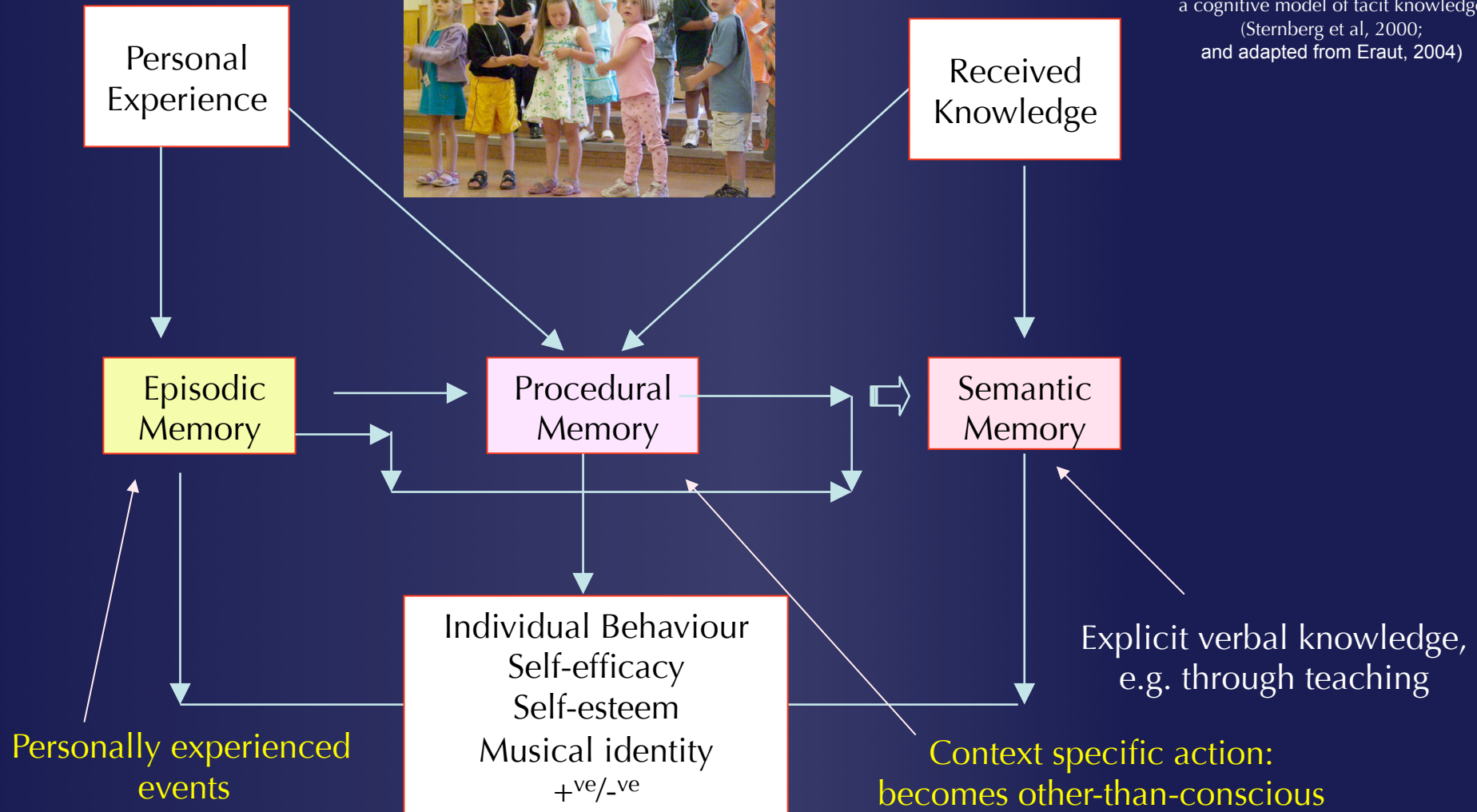
bodymind



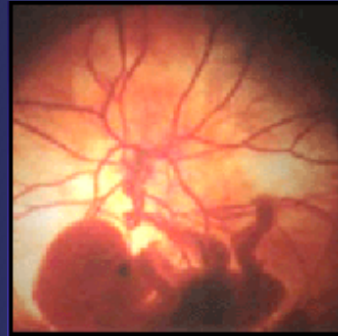
Theory (3): Prior experience - child's musical biography - can be positive and/or negative (linked to bodymind and tacit learning)



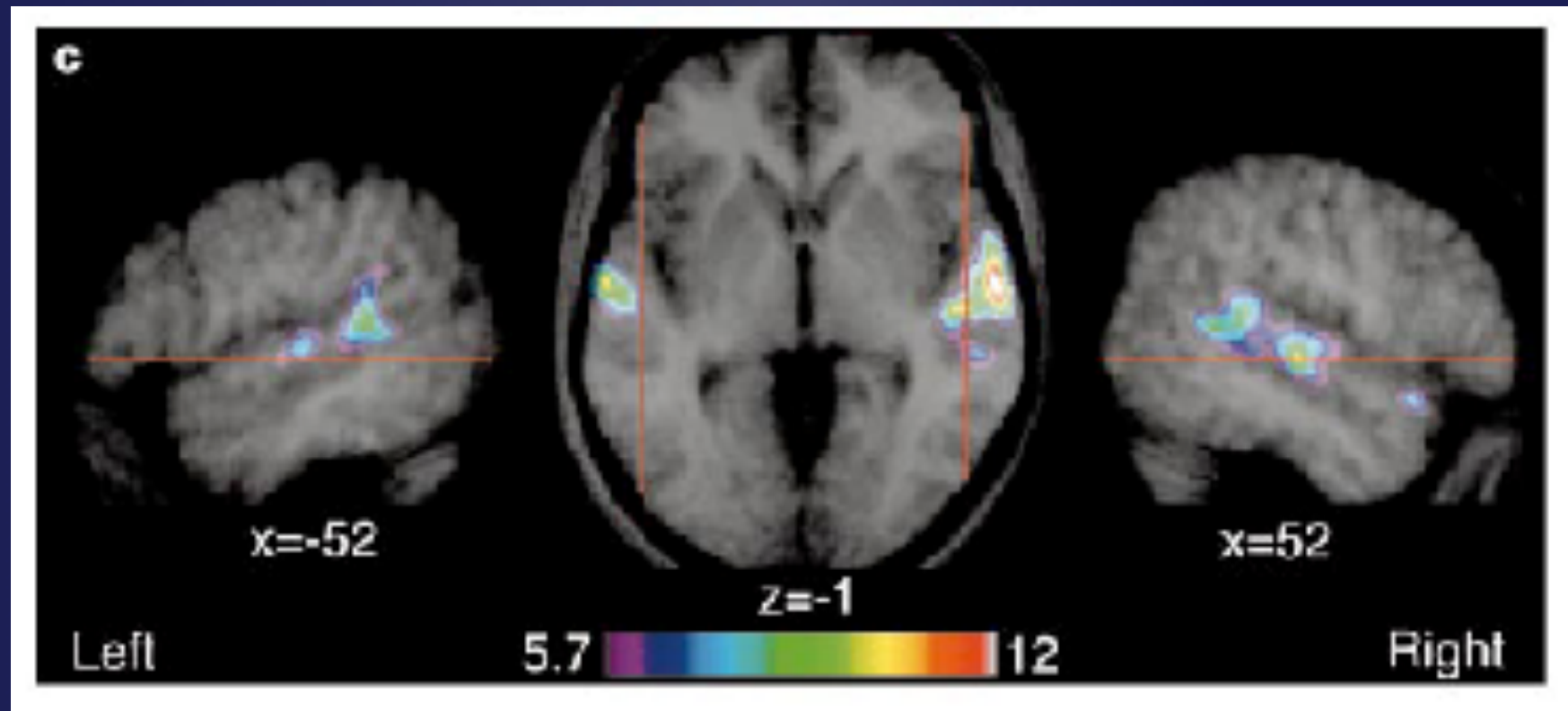
Memory structures and knowledge acquisition pathways a cognitive model of tacit knowledge (Sternberg et al, 2000; and adapted from Eraut, 2004)



Theory 4: Basic human design + socio-cultural contexts = musics (plural)



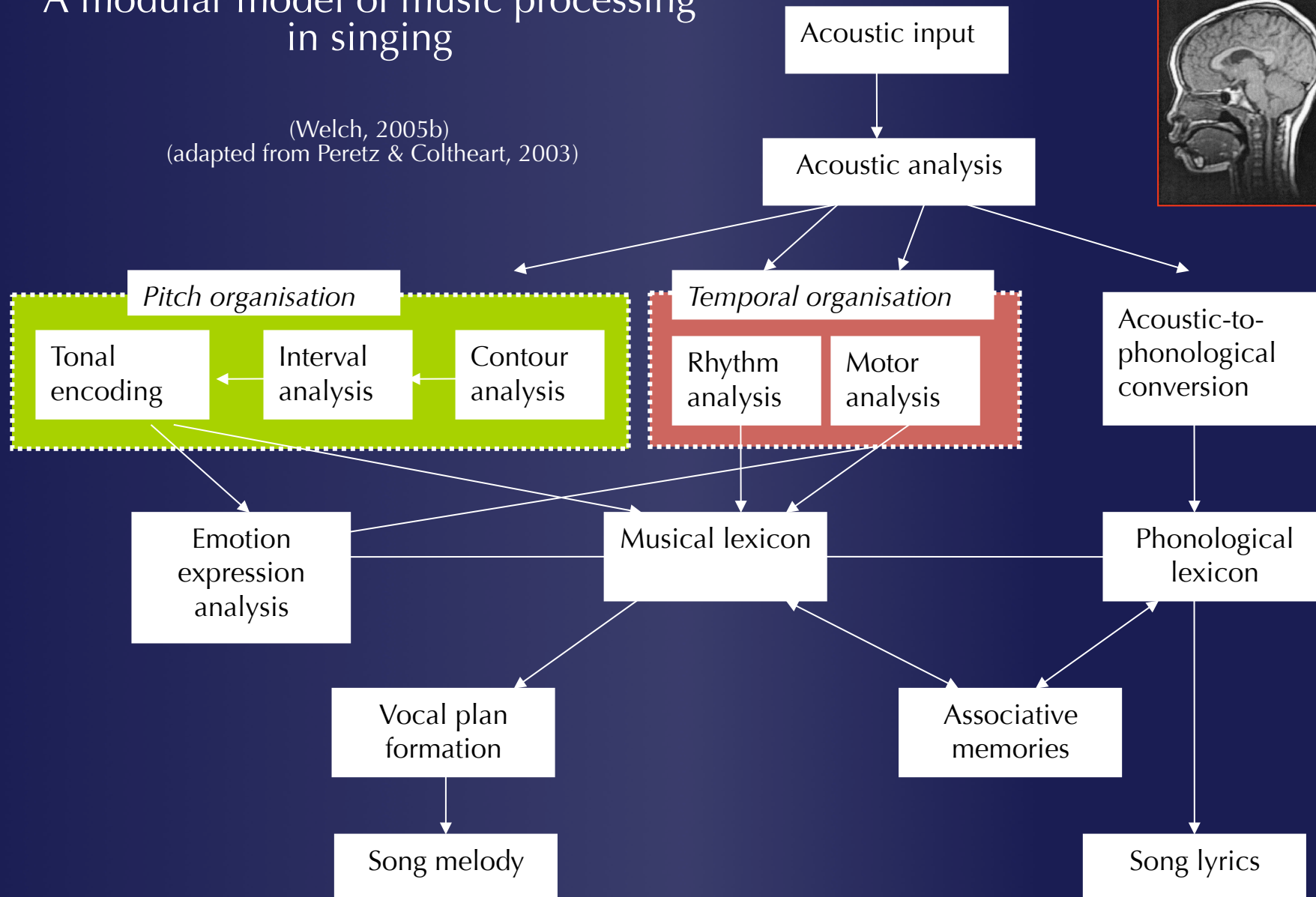
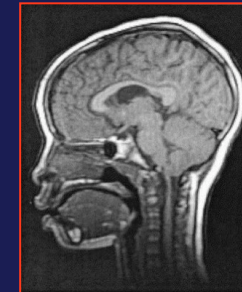
Theory 5: The brain has an integrated neurological modularity



For example: parts of the brain involved in the analyses of human voices

A modular model of music processing in singing

(Welch, 2005b)
(adapted from Peretz & Coltheart, 2003)

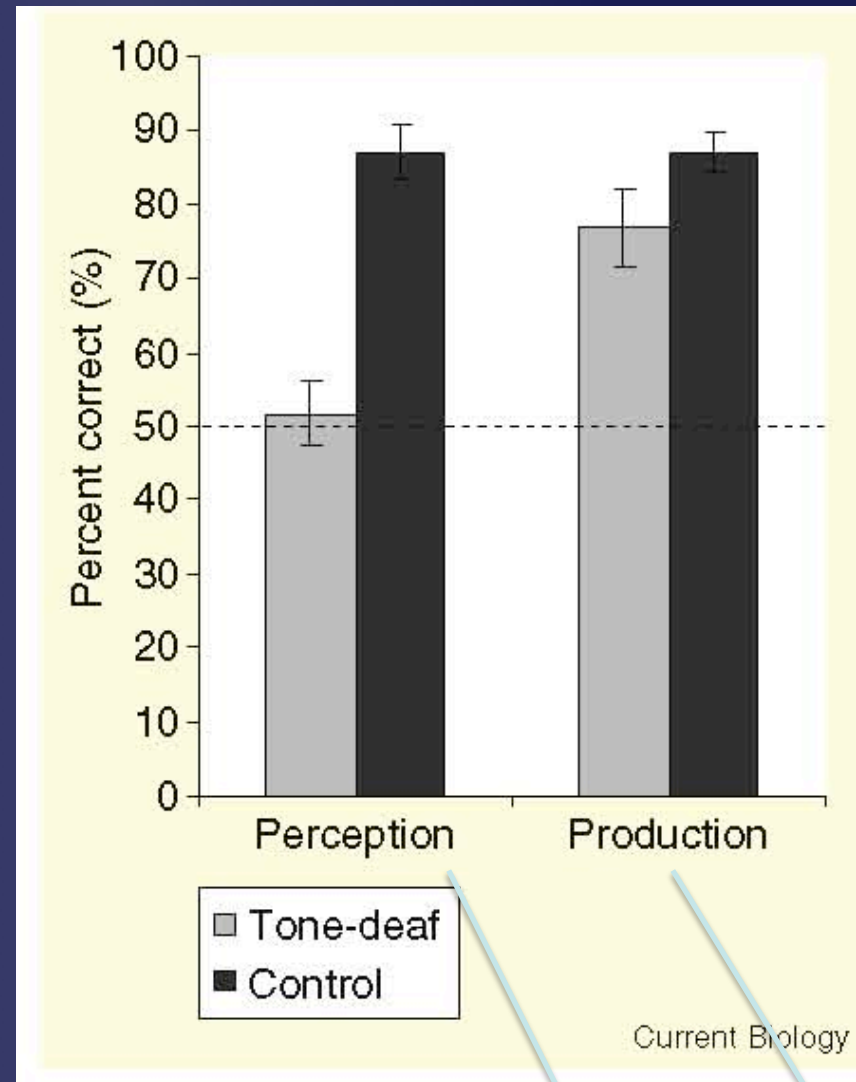


An example of modularity

“Tone-deaf’ individuals, who cannot consciously **perceive** pitch differences, can paradoxically **reproduce** pitch intervals in correct directions.

‘Our results suggest that multiple neural pathways have evolved for sound perception and production, so that pitch information sufficient for intact speech can be obtained separately from pathways necessary for conscious perception.’

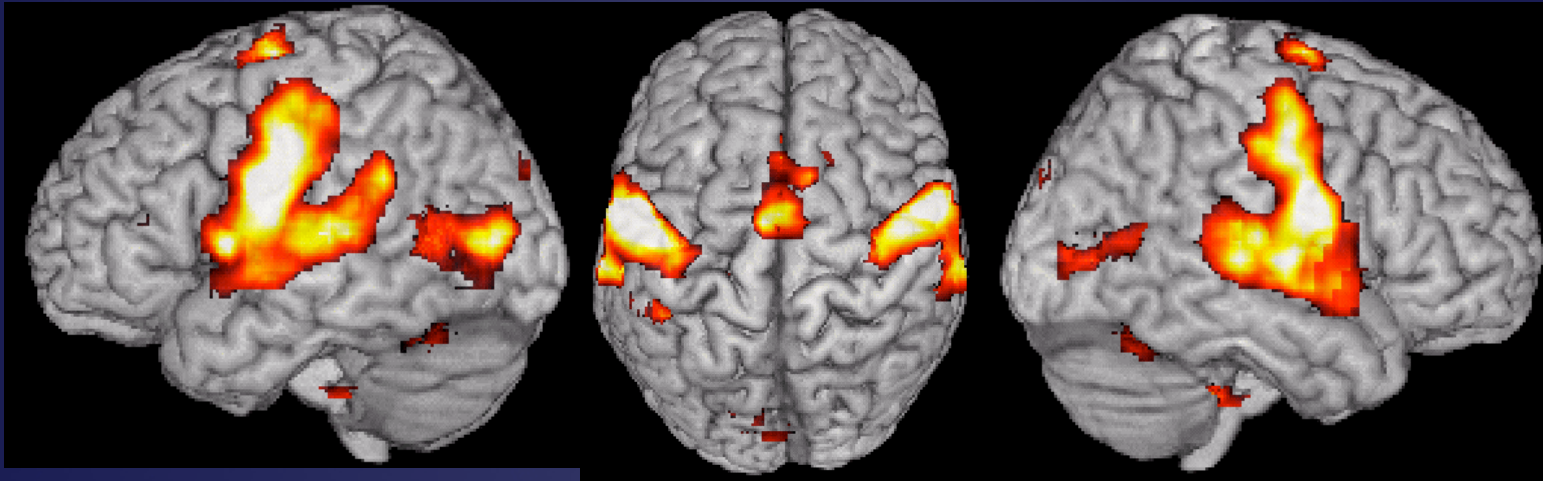
(Loui et al, 2008)



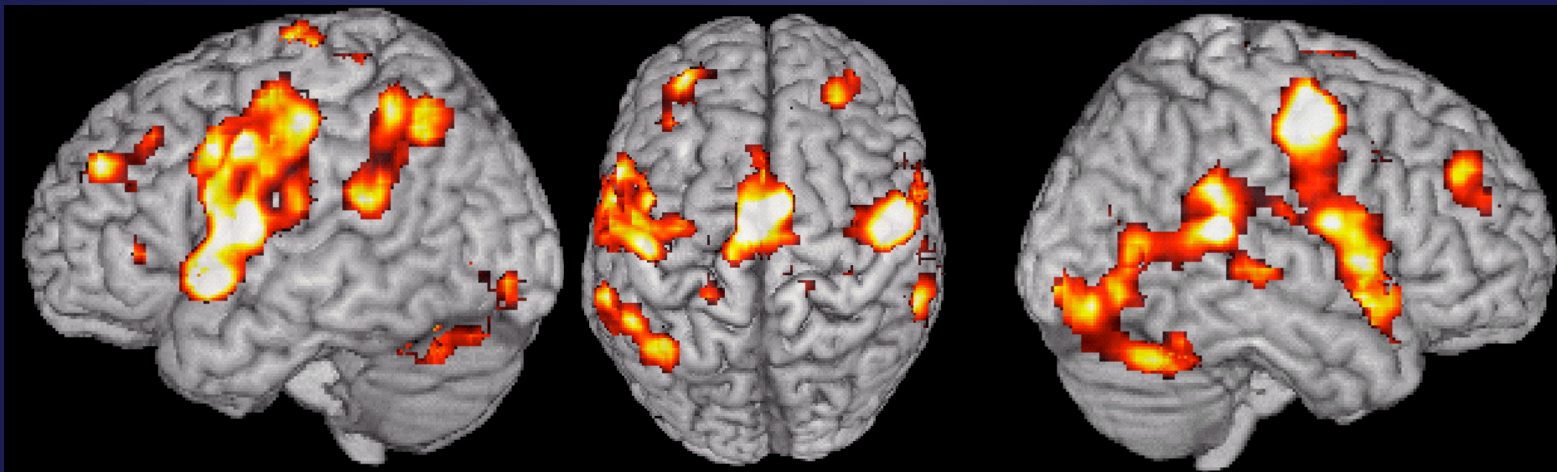
Task: Pairs of pure tone small intervals – (i) listen; (ii) reproduce by humming; (iii) answer question: Is 2nd tone higher than the first?

Neurological basis for real and imagined singing

actual singing



imagined singing



(Kleber et al, 2006)

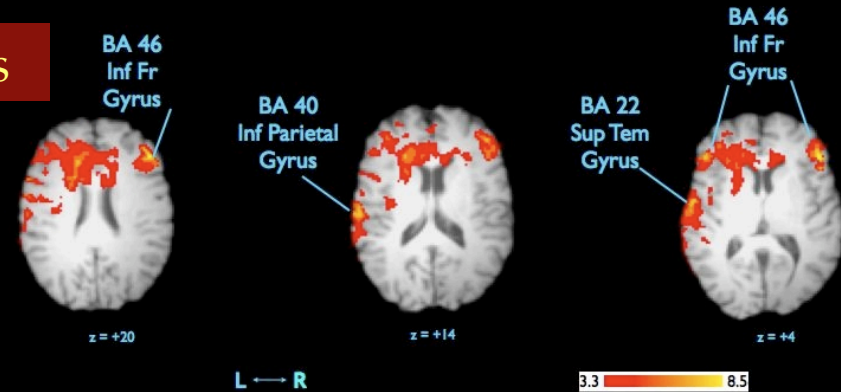
Theory 6: Neuroplasticity

= Activity changes brain function

Prior to singing lessons

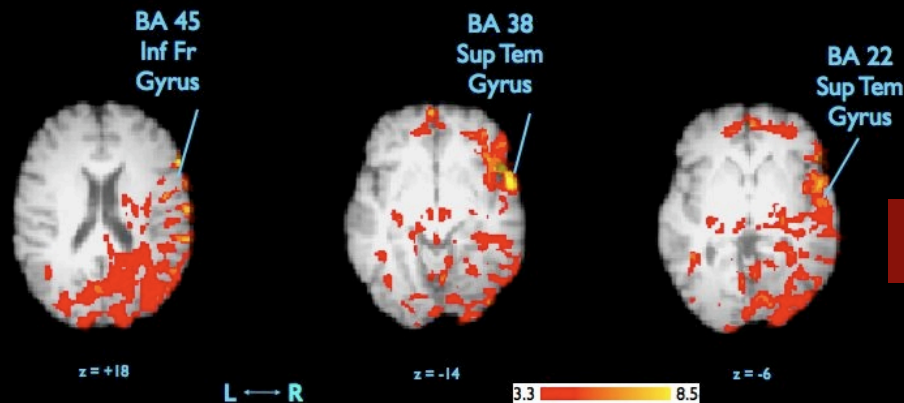
Functional Activity Decreases in non-Musical Adult
After 1 Year Singing Lessons/Practice
(Initial Singing Minus After Lessons/Practice)

Overall Combination of 12 Singing/Sightreading Tasks
(Involving Song, Pitch, Tone, Timbre, Dynamics, Rhythm)
fMRI (3 Tesla) ($p < 0.005$)



Functional Activity Increases in non-Musical Adult
After 1 Year Singing Lessons/Practice
(After Lessons Minus Initial Singing)

Overall Combination of 12 Singing/Sightreading Tasks
(Involving Song, Pitch, Tone, Timbre, Dynamics, Rhythm)
fMRI (3 Tesla) ($p < 0.005$)



After one year of singing lessons

Wider benefits of music?

Physical and psychological health and well-being
(Clift et al, 2007)

Social skill development and
Social inclusion
(Odena, 2007; Portowitz et al , 2008;
Welch et al 2009a,b)

Neurological & psychological research evidence



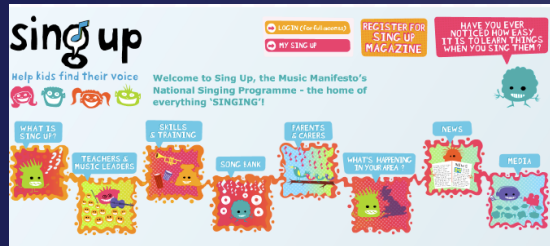
Use of singing to recover speech after stroke
(Schlaug et al, 2008)

Cognitive development
(Schlaug et al, 2005)

Enhanced verbal ability and
non-verbal reasoning
(Forgeard et al, 2008)

National Singing Programme

<http://www.singup.org/>

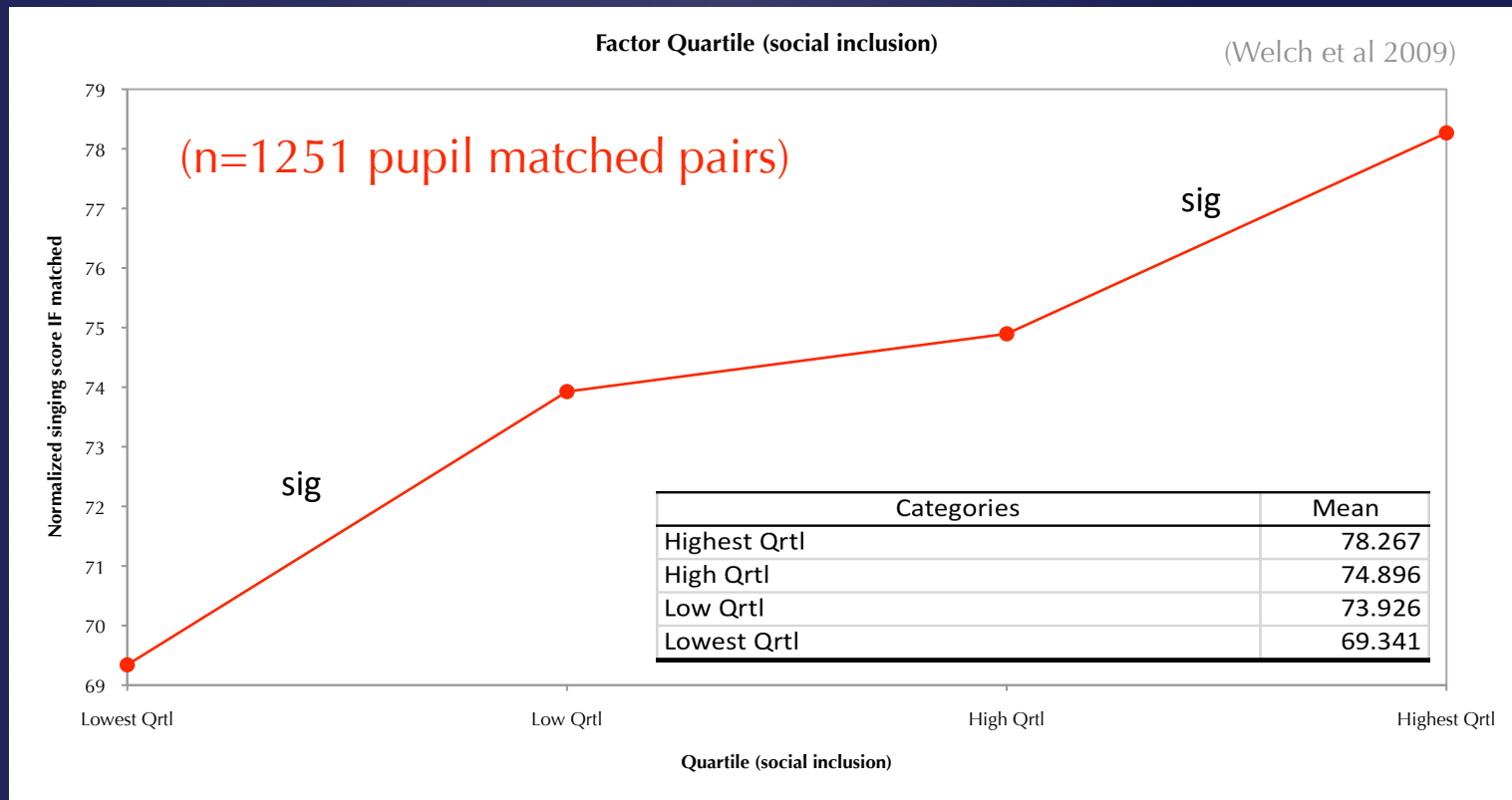


£40m (€60m) 2007-2011

4.1 million children aged 5 to 10 years

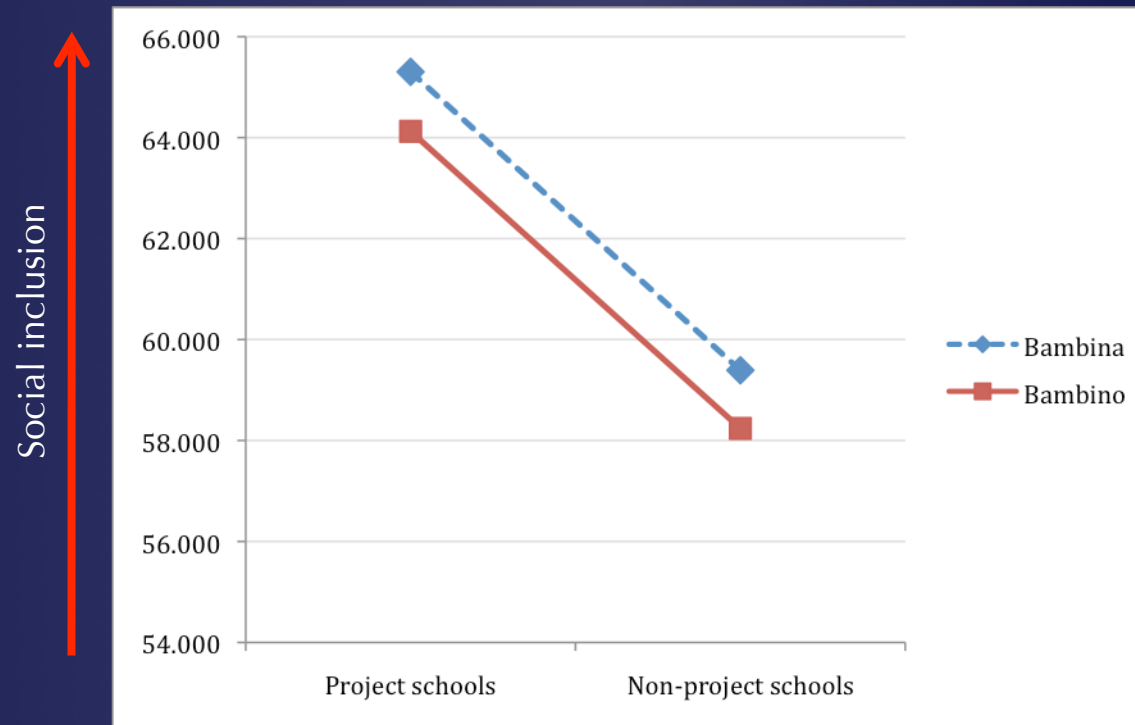
17,361 Primary schools in England (2007)

normalized singing scores



social inclusion - mean questionnaire response ratings by quartile

Progetto Musica Regione Emilia-Romagna: a research-based evaluation



Mean ratings for social inclusion question responses
by gender (n=190)

(Welch, Preti & Himonides, 2009)

Other TLRP HE Projects

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Teaching and learning in higher education

The influence of settings and subjects

Findings from a four-year ESRC/TLRP project

**Dai Hounsell, Noel Entwistle,
and the ETL research team**

Universities of Edinburgh, Durham and Coventry



CAPTURING HIGH-QUALITY UNDERGRADUATE LEARNING

Approaches to learning and ways of studying

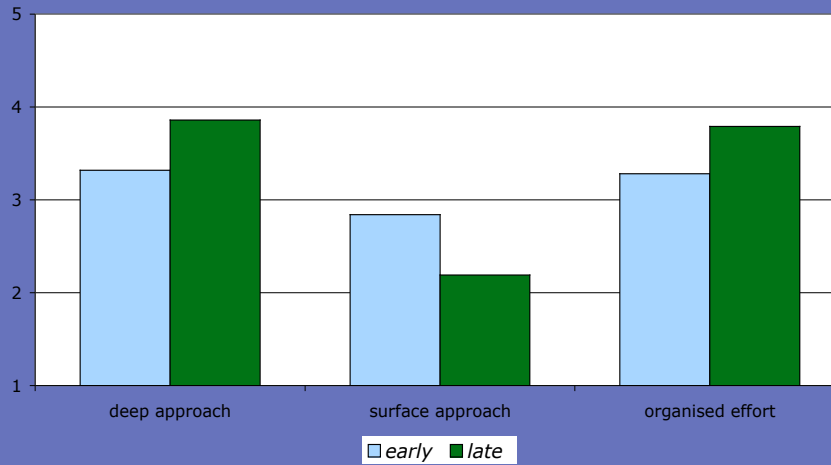
- **Deep approach** - intending to understand for yourself
- **Surface approach** - just completing the required work
- **Organised effort put into studying**
including time-management and concentration

(Hounsell & Entwistle, 2009)

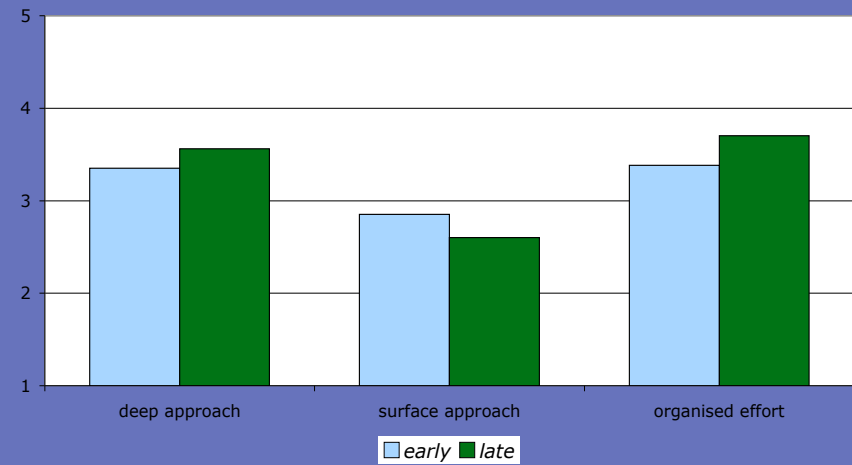
CAPTURING HIGH-QUALITY UNDERGRADUATE LEARNING

Approaches to studying (early- and late-years)

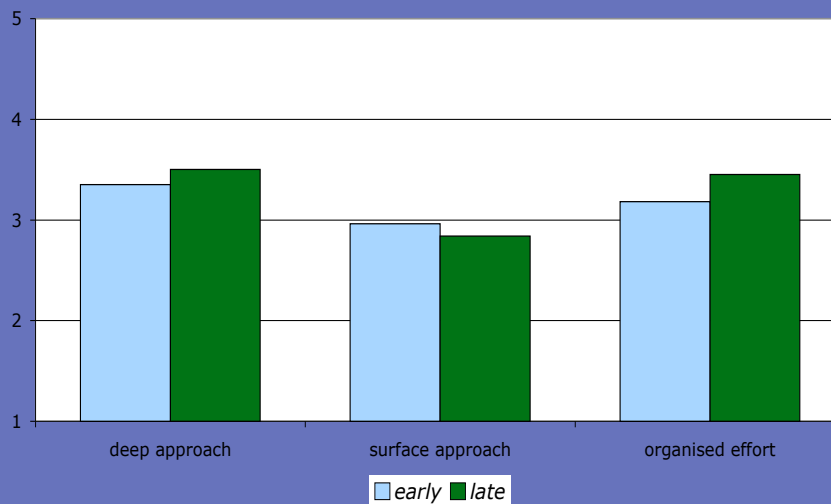
Biosciences



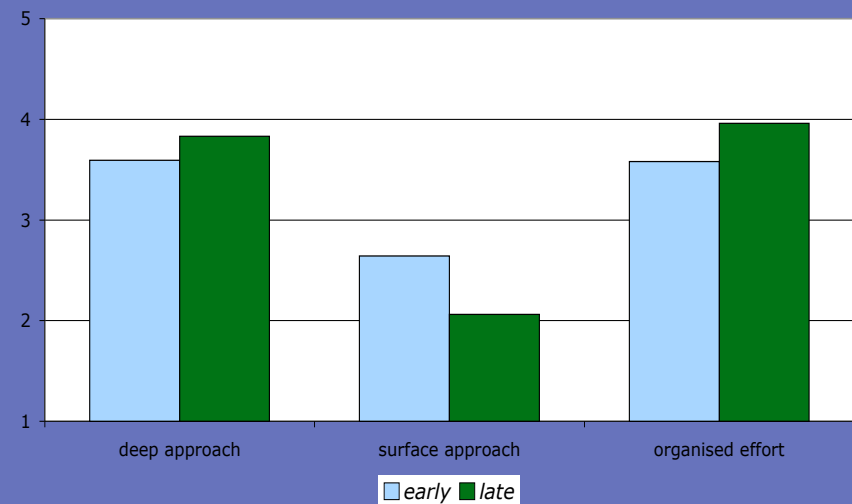
Economics



Electronic Engineering



History



CAPTURING HIGH-QUALITY UNDERGRADUATE LEARNING

Ways of thinking and practising in the subject

“...The students learnt *ways of thinking and practising* characteristic of, and particular to, each of these subject areas. These ways of thinking and practising were not confined to knowledge and understanding, but could also take in subject-specific skills and know-how, an evolving familiarity with the values and conventions governing scholarly communication within the relevant disciplinary and professional community, and even a nascent meta-understanding of how new knowledge within the field was generated.”

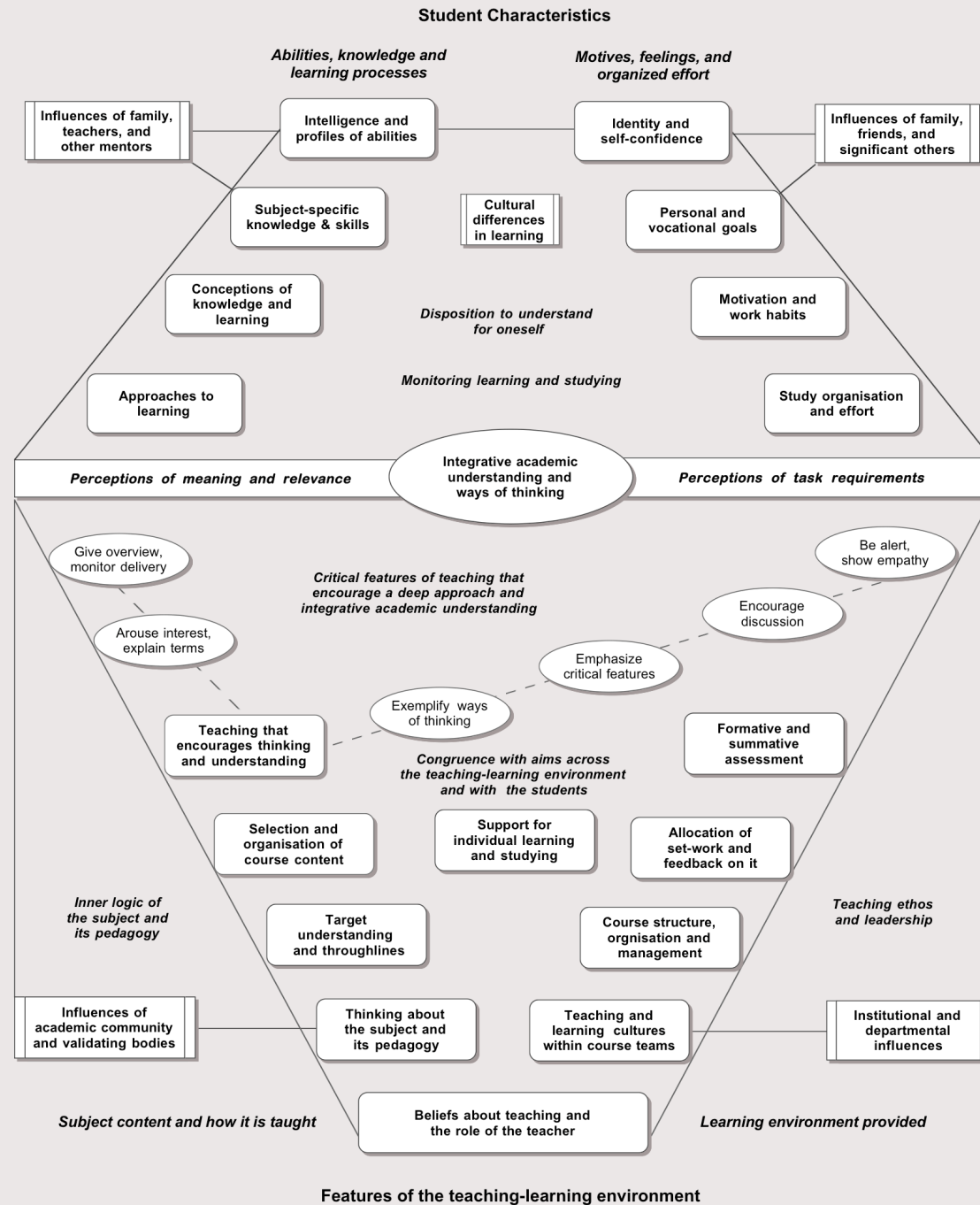
(Hounsell and Anderson, 2009, p72)

Entwistle (2009)

Heuristic model
identifying important
influences on student
learning

...including...

*'inner logic of the
subject and its
pedagogy'*



Investigating Musical Performance (IMP)

Design and outcomes

Matrix of research sites and focus genres

	York UG	Leeds UG	Glasgow UG	London PG
Western classical	•		•	•
Popular		•		•
Scottish Traditional			•	•
Jazz	•	•		•

- 4 higher education sites
- 4 musical genres
- Undergraduates
- Portfolio career musicians (postgraduate)



IMP Participants and methods

Survey (n = 244)

- Sex:
 - Males: 55%
 - Females: 45 %
- Age range: 18-62
 - Mean age: 25.75
- Genres:
 - Western Classical: 48%
 - Popular: 27%
 - Jazz: 18%
 - Scottish Traditional: 7%

Case studies (n=27)

- Classical (n=13)
- Other-than-classical (n=14)

Focus Groups (n=8)

Lesson observation (n=9)



Survey Concepts

- Demographic background information and biographic information concerning participants' engagement with music
- Key influences on performance development (*Hargreaves, Welch, Purves and Marshall, 2003 (TIME project); Heath, 2001; Mark, 1998*)
- Self-efficacy in general; & with regard to musical skills and performance-specific self-efficacy (*Bandura, 1997; Hargreaves, Welch, Purves and Marshall, 2003; Sherer et al., 1982*)
- Attitudes to practice & other musical and non-musical activities (*Ericsson et al., 1993 and Advisory Group discussions*)
- Practice history on their first study instrument (*Ericsson et al., 1993*)
- Group membership (*Marson, 2001; Ashmore, Deaux and McLaughlin-Volpe, 2004*)
- Self-esteem (*Rosenberg, 1989*)
- Performance and general life anxiety (*Spielberger, 1983; Comparable to Nagel, Himle and Papsdorf, 1989*)
- Views on factors influencing performance success (*Williamon et al., 2002 (Zoning-In project); Williamon 2004; Hargreaves, Welch, Purves and Marshall, 2003 (TIME)*)
- Views on successful teaching of performance (*Hallam, 2005*)
- Attitudes towards the nature of musical expertise (*Hallam, 2005*)
- Musical learning and self-regulation (*Bandura, 1997; Hargreaves, Welch, Purves and Marshall, 2003; Hargreaves, Purves, Welch and Marshall, in press; Zimmerman and Martinez-Pons, 1986*)

Research team & data timeframe

Directors (4)

London (IoE)
York (U York)
Glasgow (RSAMD)
Leeds (LCM)

Research Officers (5)

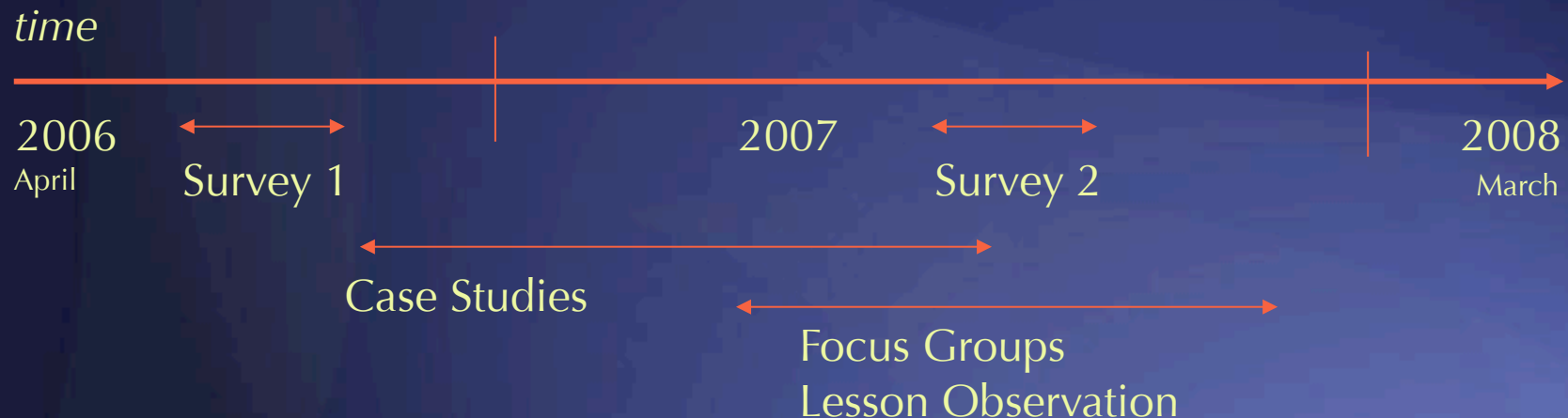
London (IoE) (2)
York (U York) (1)
Glasgow (RSAMD) (1)
Leeds (LCM) (1)

Advisory Group (8)

Expertise in: HE, Teaching & Learning, Research,
Jazz & Classical Performance, Music Education

Networked Research Links

Institute of Music Research; Irish World Academy
of Music and Dance; U Sydney; U Tasmania; RCM
Plus Doctoral Studies in cognate areas (such as
performance anxiety, dyslexia, singing pedagogy)



Example findings

See also Research Briefings

[http://www.tlrp.org/pub/
research.html](http://www.tlrp.org/pub/research.html)

[numbers 57 & 61]

IMP & TLRP Principle 8: Effective pedagogy recognises the importance of prior experience and learning

Other-than-classical musician...

- Began to engage with music at a later age than Classical (8-9y)
- Choice of instrument influenced by well-known performers and personal desire
- Non-notation based musical skills are important
- Making music for fun and extra-curricular musical activities are relevant for improving performance



- 'Other-than-classical' musicians (jazz, popular, traditional) have common developmental biographies

IMP & TLRP Principle 8: Effective pedagogy recognises the importance of prior experience and learning

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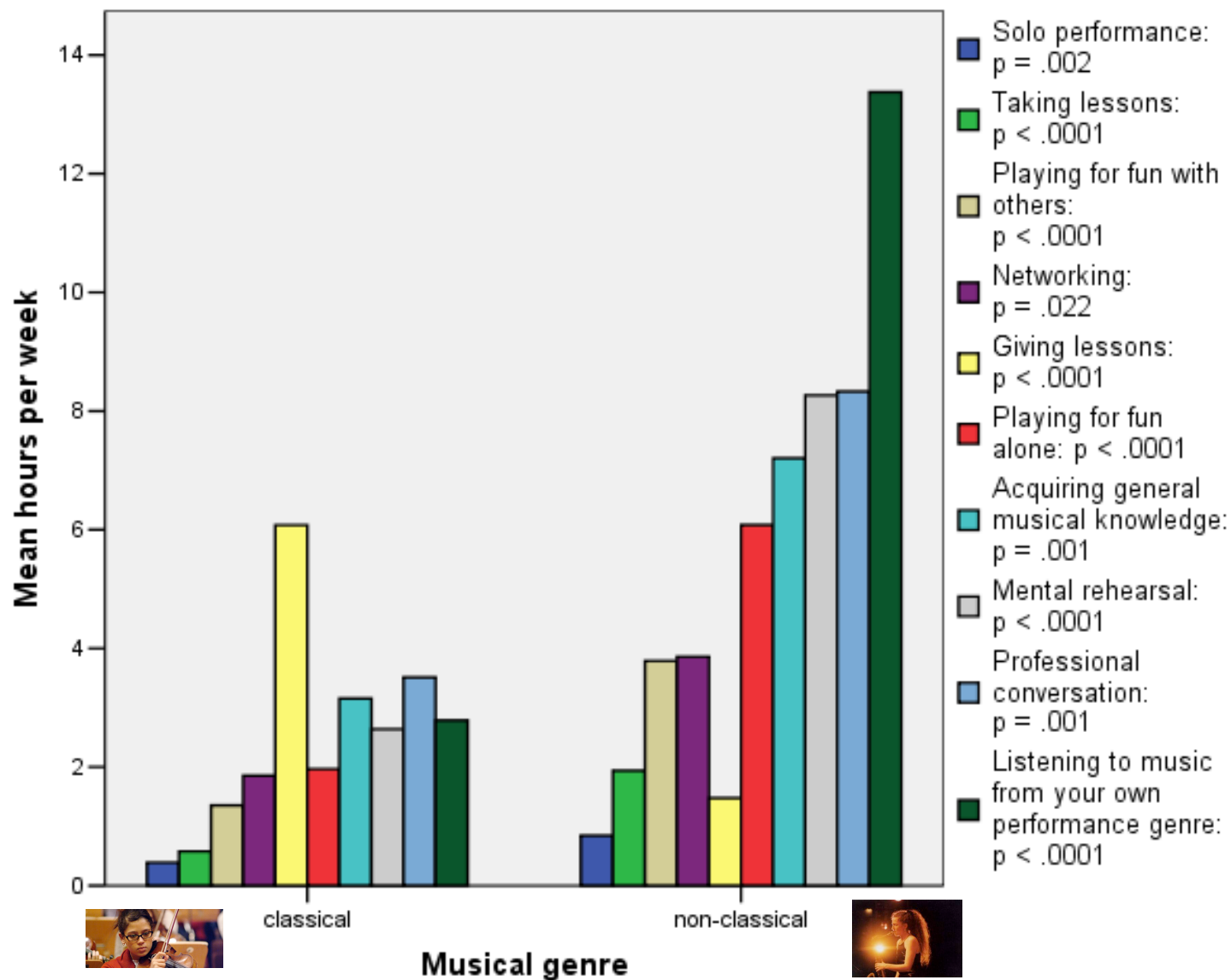
Classical musician...

- Began to engage with music at an earlier age (6-7y)
- Choice of instrument influenced by availability and parents
- Notation-based musical skills considered important
- Skills associated with the drive to excel musically and technically are important
- Solo musical activities are relevant for improving performance

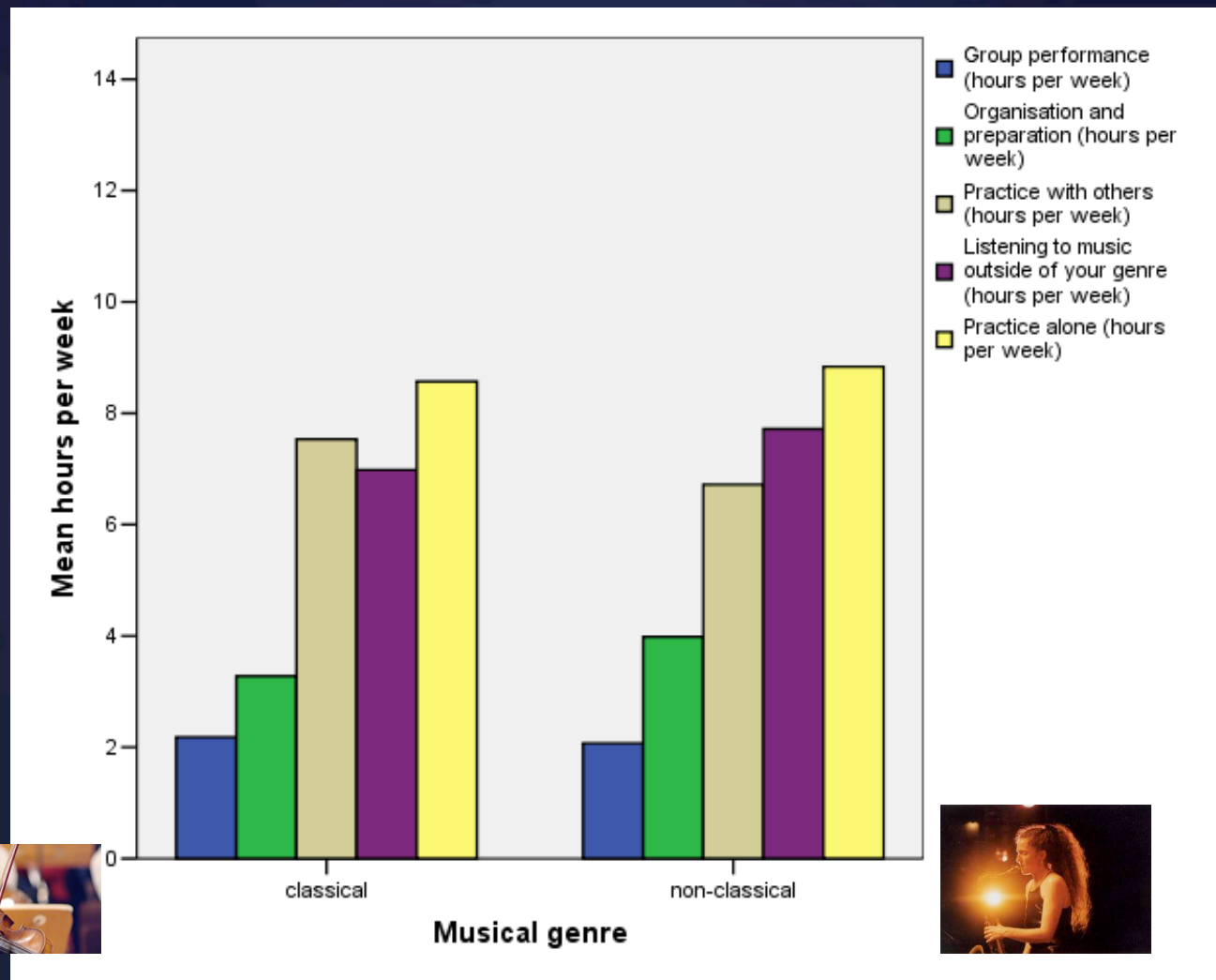


- 'Other-than-classical' musicians (jazz, popular, traditional) have common developmental biographies
- Western classical musicians tend to have a different profile
- These differences can be both a strength and weakness

Time per week spent engaged in musical activities (differences between genres)

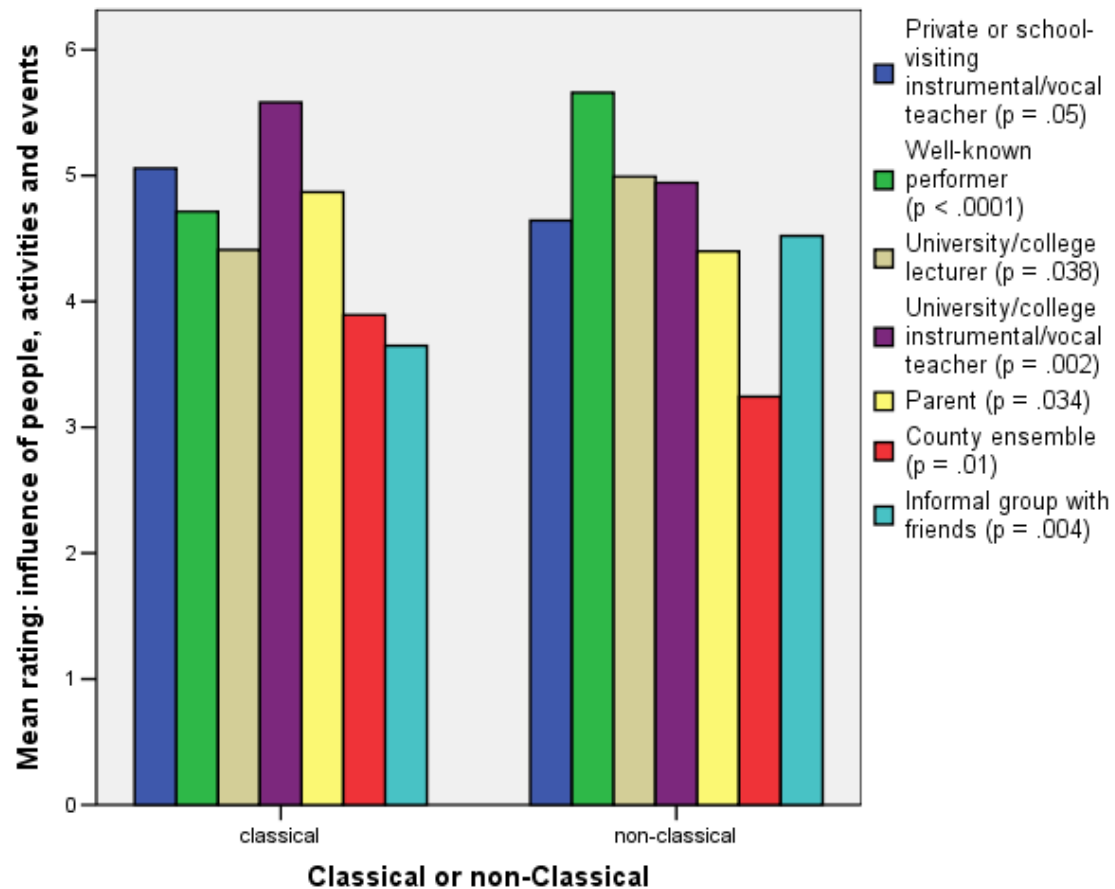


Time per week in musical activities (no differences)



Significant formative musical influences

Significant differences ($p < .05$) in formative musical influences



Case study 1: A pop/jazz musician...

- Alan is a professional bass guitarist. He took up the bass guitar at age 15. His grandmother was a classical pianist, and his father a jazz enthusiast. Alan admires 'multi-genre' musicians.

“When I took up the bass guitar, that became, quite quickly, the sole purpose of my existence, to be a bass guitarist and be a musician.”

Case study 2: A classical musician...

- Rick is a professional flautist. At age 7 he started to play the piano and then the recorder, learning informally with his mother. When he was 13 he began to have formal lessons on his principal study instrument.
- He regards his parents as the most important early musical influence.

“I loved just going and enjoying the piano and dreaming with it and, you know, going off into a musical fantasy world with it. But I didn’t practise as I should have done to acquire the skills that really you need. So, that’s what I very much wish”

“When I got a recorder I really loved it ..., but I didn’t take lessons funnily enough. I just played and played”

Case study 3: A Scottish Traditional musician...

- Angus is a Scottish piper, who comes from a “musical household”, with parents who were amateur classical musicians. After dabbling with clarinet and piano, he ‘found’ the pipes when he was 10.

“I was about 10 or 11 and I just realised at that point, even then, that it was something that felt completely right ... playing the pipes immediately felt absolutely fundamentally right. So basically spent my teenage years being completely obsessed, learning repertoire and technique...”

Case study 4: A classical musician...

- Emily is a classical mandolin player. Her father played Greek folk music on the mandolin, and she longed to play this instrument from the time that he died when she was a small child.

“I got hold of a record of the person who was to become my teacher ... and I used to play it in my bedroom, 700 times round and round ... my dad’s old mandolin by this time had no strings, and I used to sit there pretending to play ... I did that for 3 or 4 years before mom finally decided I was serious about the mandolin.”

Case Study 5: A singer

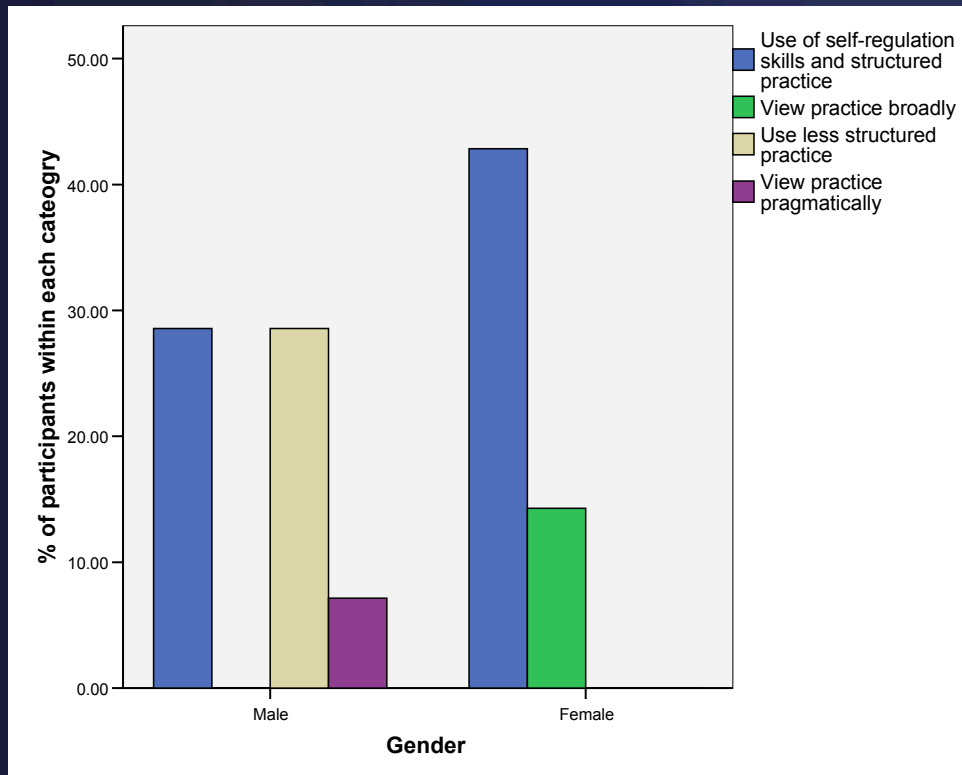
- Rachel is a classical singer and just completing her undergraduate studies. She began violin lessons at age 6 in a household with lots of informal music making. Originally intended to go to university to study English. Remembers being in the Chapel choir at her secondary school. First singing lesson age 16.

“Singing in front of the whole school, every day, even though I was in a group...I got fairly used to singing to people...”

Addressing the biographical bias?

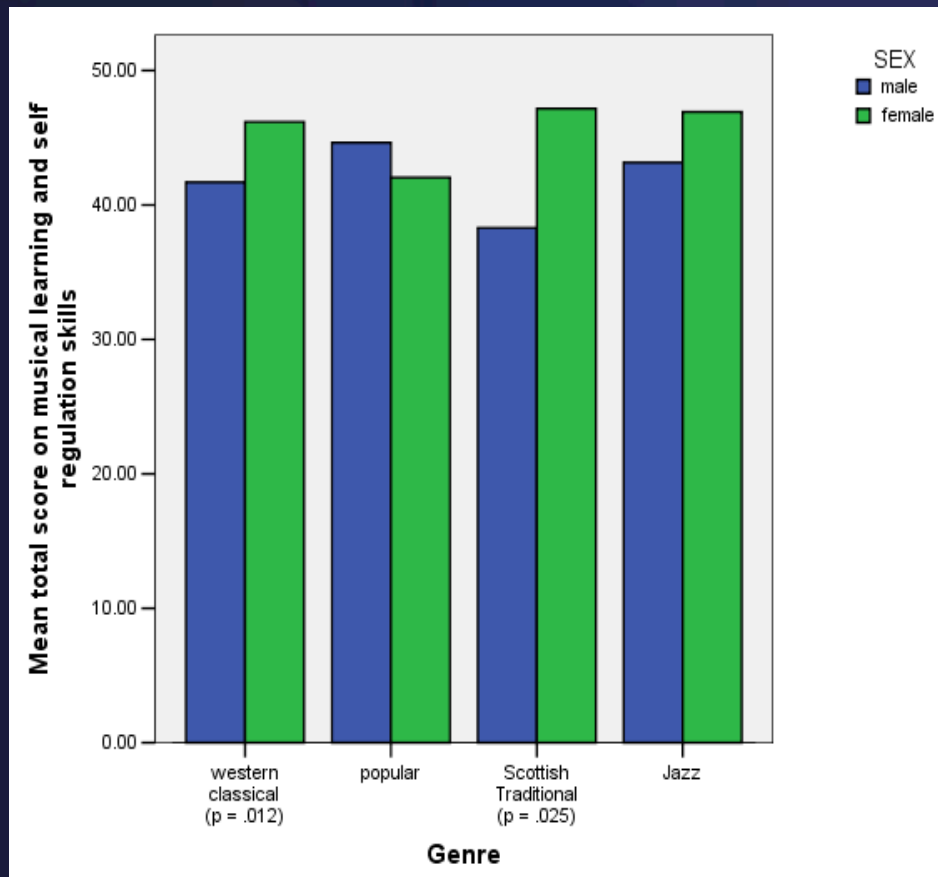
- 'Ways of thinking and practising' in music relate to biography, gender and depth of experience
- Each 'music' has its own inner logic and learning bias
- Therefore, musicians should be encouraged to foster cross-genre expertise
- HE and FE music departments should promote a more holistic view of what constitutes a musician and provide many and varied opportunities for cross-genre collaboration, learning, shared performance and rounded performance excellence

IMP & TLRP Principle 4: Effective pedagogy fosters both individual and social processes and outcomes



- Gender is important in learning approaches
- Male and female musicians exhibit group differences that cut across musical genres

Gender differences in attitudes to musical learning and self-regulation skills



- Significant differences were observed between sexes in assessment of their own music learning and self-regulation skills
 - Female Western classical and Scottish Traditional musicians rated their skills higher than males



Gender and genre

- Music curricula need to be more sensitive to the ways that gender and genre impact on musical learning, and to be differentiated to address biases that can have negative influences on musicians' learning trajectories



An other-than-classical perspective on listening to other performers: comparing self with 'the greats'

'I think too much of music education focuses upon the technical aspects of playing an instrument and you're in many ways trained to sort of lay yourself prostrate at the feet of the greats. Trained as a jazz musician, you know, where, kind of, it's almost engraved in your mind that, you know, Charlie Parker, Joe Cartwright, Louis Moholo, these people, are the greats and that in order to make a contribution you have to assimilate everything they did and play like them or be able to play like them and be able to do the things that they did. And once you've learned everything that they had to give, then you can move on and make your own contribution. I think that's a complete fallacy. It's actually impossible!'

[Other-than-classical musician, male]

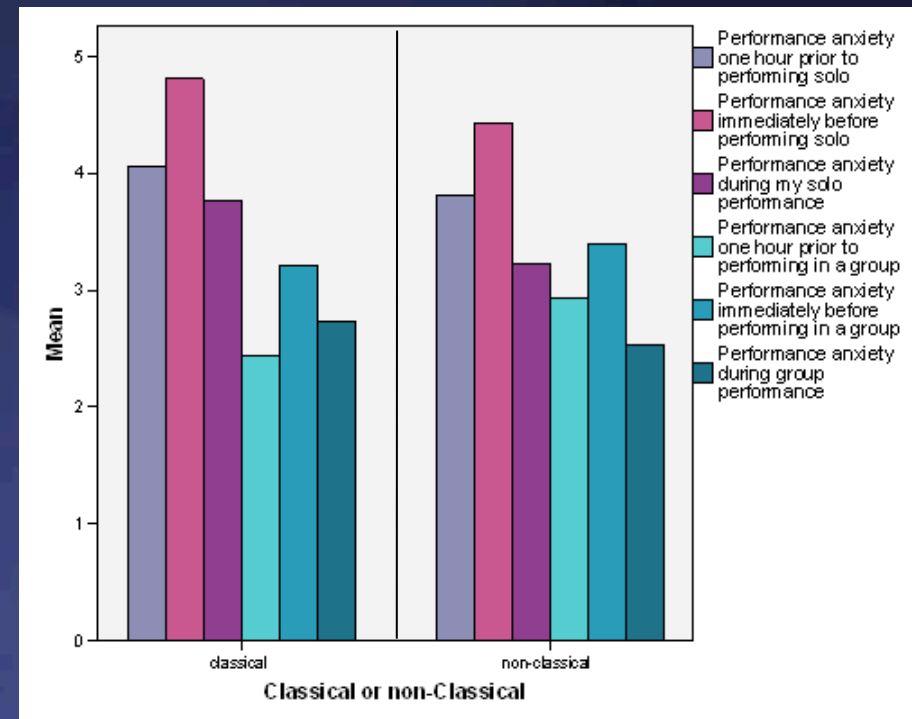
IMP & TLRP Principle 2: Effective pedagogy depends on the research and learning of all those educators who teach to support the learning of others



- Musical self-efficacy and perceptions of expertise increase with wide experience, particularly in a portfolio career of performing and teaching
- Helping others to learn improves personal performance

Performance anxiety in relation to context

- Solo performance produced higher levels of performance anxiety (both classical and other-than-classical musicians)
- Anxiety levels increased as the performance event approached, reaching a peak immediately before performing and decreasing during the actual solo or group performance



The presence of anxiety in solo & group performances

(Papageorgi, 2009)

% of participants feeling distressed 1 hour, immediately before and during performances (summary of 3 conditions)

	Solo performance	Group performance
Distress level		
LOW	39.8%	75.1%
MODERATE	14%	10.1%
HIGH	46.2%	9.8%

- Solo performances tended to evoke high levels of distress
- Group performances induced low levels of stress

The impact of performance anxiety on performance

- Anxiety usually *impaired* **solo** performance (reported by 39.3% of participants)
- Anxiety was reported to *improve* **group** performance (reported by 41.4% of participants)

‘During a solo performance, the anxiety turns to fear for me. In a group performance it turns into excitement.’

Classical musician

IMP & TLRP Principle 7: Effective pedagogy requires learning to be systematically developed

- ‘Many musicians develop their love of music and passion for an instrument before considering how equipped they are for dealing with public performance. Other musicians grow up in an environment where they have many opportunities to display their skills in public at an early age. Regardless of environment, those who suffer detrimental effects usually carry on suffering until they take a step.’
- Musical performance anxiety is common
- Especially for female and Western classical musicians
- Strategies for dealing with performance anxiety should be part of the formal preparation of all musicians, irrespective of genre

(Classical musician)

IMP & TLRP Principle 5: Effective pedagogy promotes the active engagement of the learner

- ‘... You’re seeing one of your teachers play, which is always great, you realise that they’re not just dry and dusty academics; they’re actually really hip, and then you’re seeing one of your friends playing with them and really upping their game because they’re playing with someone who is a considerable way on in their musical journey. So that sort of thing is really healthy.’
- ‘Many more of the plusses come from outside of the Academy [RSAMD]...the Academy gives an opportunity for all the things that happen outside.’
- ‘I think the university’s very open... You also have the option on this course to do an elective unit in another department...Music is my passion and that’s why I’m doing it, but I like to have a broader sense of being able to do other things as well.’
- An ideal institutional culture is inspirational, facilitates academic, professional and personal development and fosters a supportive community of learning, whilst allowing the development and pursuit of personal interests

The importance of pleasure

- Pleasure in music-making is an important contributor to musical self-efficacy = my view of me as a musician and my ability to accomplish musical tasks
- E.g., 'I am confident that I can give a successful performance'; 'I am capable of dealing with problems that might come up during the performance'

“The intrinsic reward from learning is the enjoyment one gets here and now, from the act of learning itself, and not from what follows later from having acquired the knowledge...An activity is intrinsically rewarding when the actor experiences it as worth doing for itself, not just as a means to future, external goals.”

(Csikszentmihalyi, 1997, p.73, 76)

Pleasure obtained from engaging with musical activities

	Pleasure obtained from engaging with musical activities component		
	Pleasure from formal and informal performance based activities	Pleasure from non-performance related activities	Pleasure from performance preparation based activities
Playing for fun with others	.818		
Group performance	.736		
Playing for fun alone	.708		.302
Listening to music outside of your genre	.614		
Solo performance	.533		
Organisation and preparation		.723	
Networking		.614	
Mental rehearsal		.609	.352
Professional conversation	.432	.587	
Giving lessons		.581	
Acquiring general musical knowledge	.428	.539	
Practice alone (pleasure)			.791
Practice with others	.336		.758
Listening to music from your own performance genre	.452		.541
Taking lessons			.484

- 3 factors related to how students associated musical activities in relation to the amount of pleasure they obtained (54.6% of variance)
 - 1) Pleasure from formal and informal performance based activities
 - 2) Pleasure from non-performance related activities
 - 3) Pleasure from performance preparation based activities
- Significant differences in
 - 'Pleasure from non-performance related activities' marginally reached statistical significance ($p = .049$)
 - 'Pleasure from performance preparation based activities' ($p = .001$)
- LCM students reported obtaining greater pleasure from these activities compared to RSAMD and York students

Preparation for the challenges of transition?

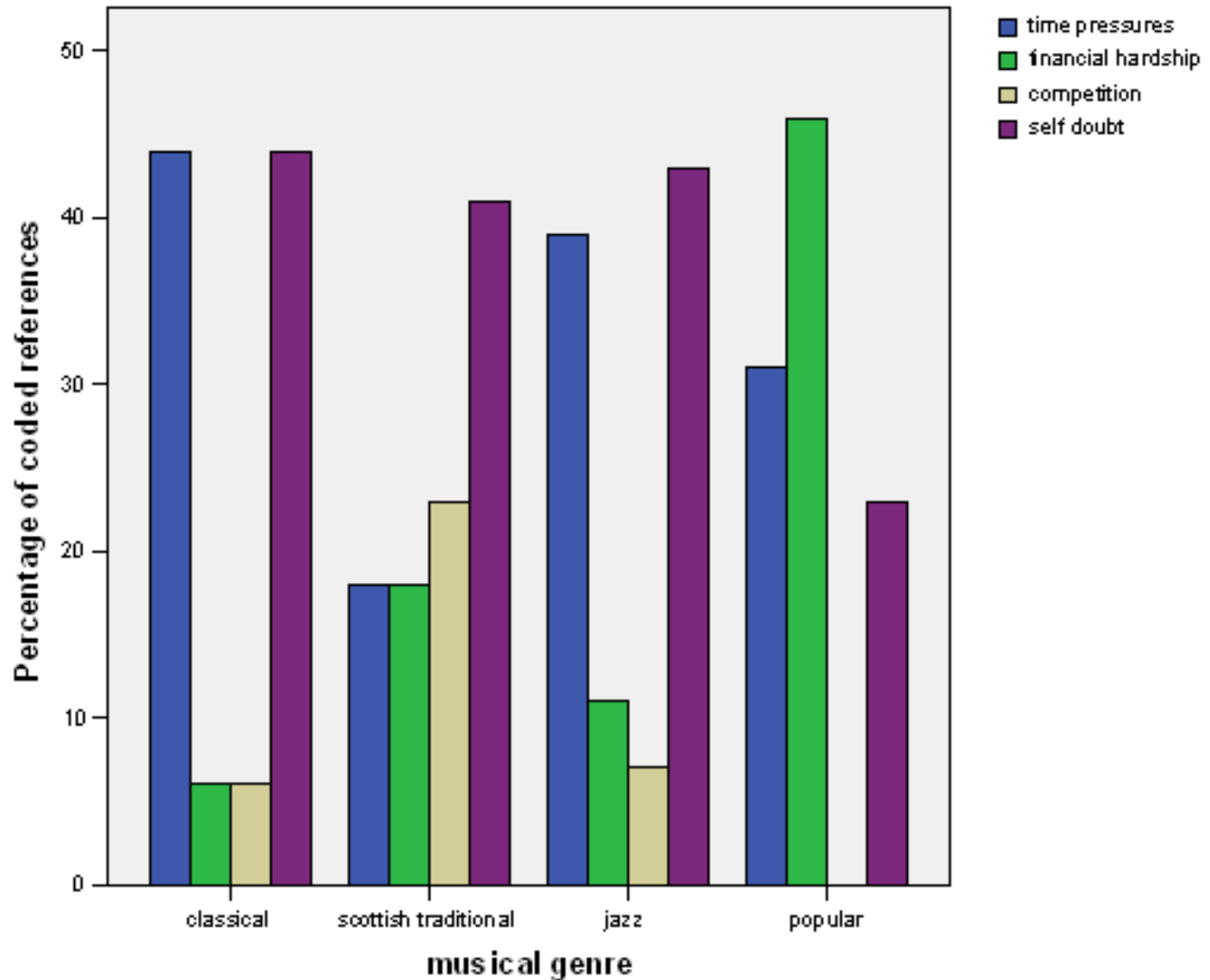
(Creech, 2008)

Semi-structured in-depth interviews

- 15 portfolio career musicians (7 F, 8 M), 12 undergraduate musicians (4 F, 8 M)
- 4 musical genres (classical, jazz, popular, Scottish traditional)

Thematic analysis undertaken

(Cooper & McIntyre, 1993)



Pressure on time

Classical	<i>"I was really struggling to get more than 4 hours in a day because of all my other commitments. And also energy, you know, I just didn't have the energy." (Portfolio musician)</i>
Scottish traditional	<i>"Time-wise, during the day, because you have to earn a living, I find it very difficult to fit in more than about an hour's playing in a day. And that's all I can manage. But I do it every day." (Portfolio musician)</i>
Jazz	<i>"In theory I'm doing an hour a day, but in practice it's not happening. I kick myself on sometimes, but I find just that my family demands..." (Portfolio musician)</i>
Popular	<i>"I'm very frustrated at the moment because I should be going out there and I'm good enough to be playing most of the festivals across the country and I should be doing that but it's also having children." (Portfolio musician)</i>

Financial hardship

Classical	<i>"I was doing concerts but not necessarily particularly well paid ones and not many of them. And I couldn't earn a living." (Portfolio musician)</i>
Scottish trad.	<i>"It's not a financial world, you can't really earn a lot of money from doing it." (Portfolio musician)</i>
Jazz	<i>"What they do is maybe spend 6 months a year touring, but living very frugally, staying with the musicians that they're performing with, and using the money that they earn from the gigs to just basically pay the transport to the next venue." (Portfolio musician)</i>
Popular	<i>"You could find any style of music, any of the ones discussed there, world, jazz, fusion, rock, hip hop. It was all happening in squats illegally but it was absolutely brilliant because you could tap into it. But I suppose I got really disillusioned with music because it didn't really do anything for me. I didn't have a home and so most of it was really just trying to stay sane." (Portfolio musician)</i>

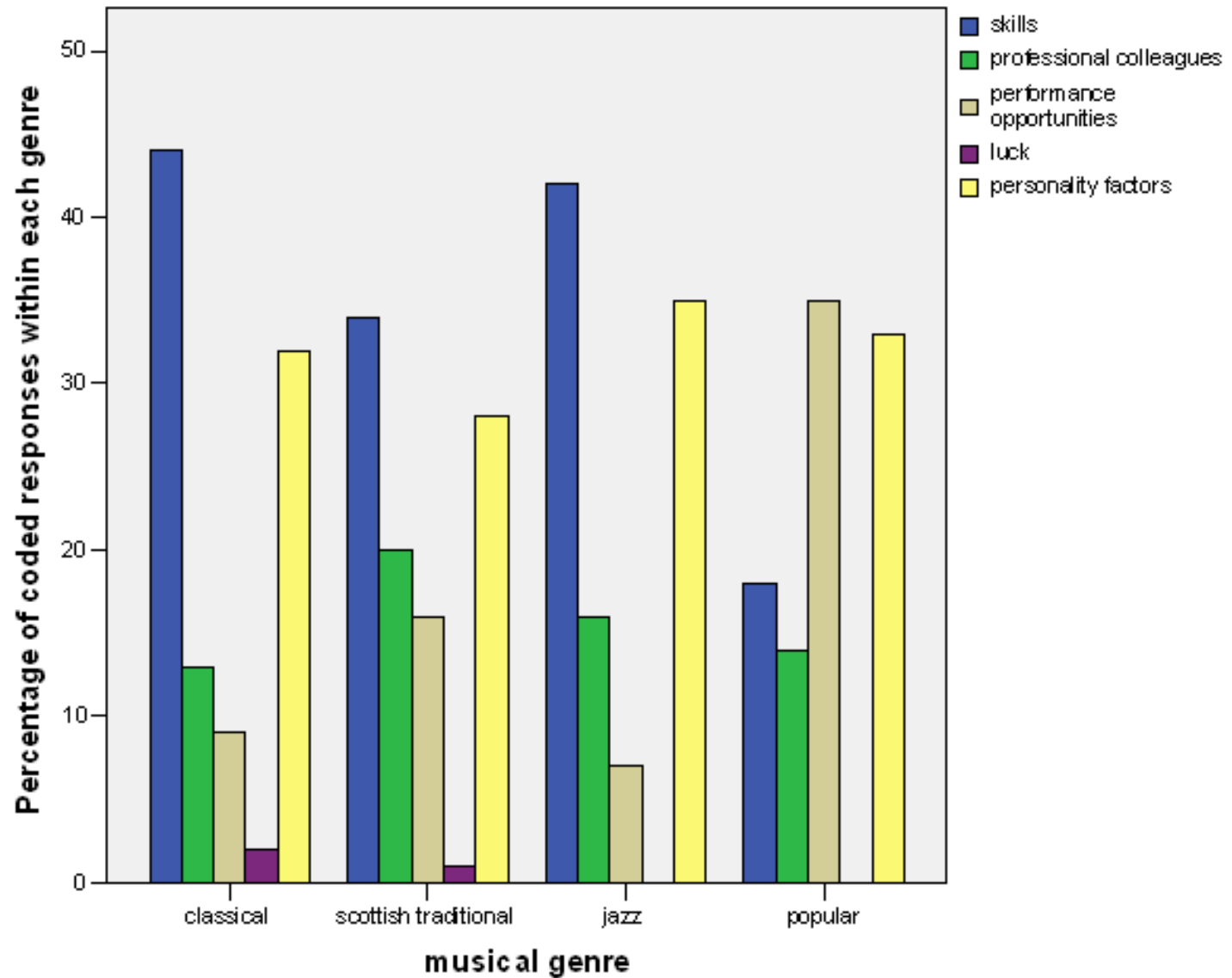
Competition

Classical	<i>“And of course the competition - so that goes hand in hand, trying to be successful in a very competitive world - that is what troubles me.” (Undergraduate)</i>
Scottish traditional	<i>“There’s so many people now going for the same jobs, it’s getting really competitive now. I think anyway, so that’s a huge worry.” (Undergraduate)</i>
Jazz	<i>“I’m very aware of all the people that are coming through the music colleges now and who have kind of started as jazz musicians and have got a head start, if you like. I used to be more conscious of it, but the older I get the more I’m aware of the fact that it’s not a competition.” (Portfolio musician)</i>
Popular	

Self-doubt

Classical	<i>"Anxiety aged 21-23; sort of on the cusp of realising your livelihood depends on what you are doing basically. That's quite a big issue for me. Realising that I will be doing this for the rest of my life, and how well will I be doing, I need to feed myself!" (Undergraduate)</i>
Scottish trad.	<i>"The more established you are, the more difficult it is to keep yourself playing at that level. As soon as you step on a stage, people are waiting to hear what you're gonna do... You have to maintain that, and that's a real pressure for anyone." (Portfolio musician)</i>
Jazz	<i>"There can be stresses that get in the way of the playing, you know, 'Oh, is the audience gonna come' or 'If somebody is in a bad mood, then how's that gonna affect...?'... and these things can sometimes get in the way." (Portfolio musician)</i>
Popular	<i>"The first gig we did with the trio was a little bit nerve-wracking- just the idea of 'Can we do it?'" (Portfolio musician)</i>

However...there are mitigating factors



How can HE contexts facilitate transition process?

- Foster multi-genre communities of practice
- Emphasise value of peer support
- Musical versatility should be embedded in curricula
- Invest in formalised support systems – mentoring, coaching
- Foster strong musical self-concept amongst students
- Teach ‘resilience’ skills...i.e., time management, positive self-talk, interpersonal skills, communication

(Creech, 2008)

Postscript

- ‘... you’re learning through experience – you’re not being told ‘this is what you should do with your time’, and I think it’s good preparation for the real world – what I’ve learnt is how to manage your own time, how to use it productively, how to basically manage yourself. It’s not just music – it’s about myself as well, socially and emotionally’

Example IMP outputs

<http://www.tlrp.org/proj/Welch.html>

<http://www.imerc.org/>

Options

[Printer Friendly List](#) | [Export Results into Endnote](#)

Project Publications for: Investigating Musical Performance (IMP): Comparative Studies in Advanced Musical Learning

Book - Other

No Resources of this type

Paper in Refereed Journal

Creech, A., Papageorgi, I., Duffy, C., Morton, F., Haddon, L., Potter, J., de Bezenac, C., Whyton, A., Himonides, E. & Welch, G. (2008) Investigating musical performance: commonality and diversity among classical and non-classical musicians, *Music Education Research*, 10(2), 215-234.



Creech, A., Papageorgi, I., Duffy, C., Morton, F., Haddon, E., Potter, J., de Bezenac, C., Whyton, T., Himonides, E. & Welch, G. (2009) From music student to professional: the process of transition, *British Journal of Music Education*, 25(3), in press.



Haddon, E. (2008) Instrumental and Vocal Teaching: How do music students learn to teach?, *British Journal of Music Education*, in press



Papageorgi, I., Creech, A., Haddon, E., Morton, F., de Bezenac, C., Himonides, E., Potter, J., Duffy, C., Whyton, T. & Welch, G. (2008) Perceptions and predictions of expertise in advanced musical learners, *Psychology of Music*, in press



Papageorgi, I., Haddon, E., Creech, A., Morton, F., de Bézenac, C., Himonides, E., Potter, J., Duffy, C., Whyton, T. & Welch, G. (2009) Culture, Context and Learning: Inter-relationships between Perceptions of the Learning Environment and Undergraduate Musicians, *Music Education Research*, xx-xx.



Welch, G., Papageorgi, I., Haddon, L., Creech, A., Morton, F., de Bezenac, C., Duffy, C., Potter, J., Whyton, A. & Himonides, E. (2008) Musical genre and gender as factors in Higher Education learning in music, *Research Papers in Education - Special Issue*, 23(2), 203-217.



Total: 6

Occasional Publication

Papageorgia, I., Creech, A., Haddon, E., Morton, F., de Bezenac, C., Himonides, E., Potter, J., Duffy, C., Whyton, T. & Welch, G. (2008) IMP Conference papers (n = 23) in chronological order, (London, TLRP).



Total: 1

Press Release

No Resources of this type

Conference Contribution

Haddon, E. (2007) What does mental imagery mean to university music students and their professors?imag, *International Symposium on Performance Science*, (Porto, Portugal, November).



Papageorgi, I. (2007) The influence of the wider context of learning, gender, age and individual differences on adolescent musiciansâ performance anxiety, *Symposium on Performance Science 2007*, (Utrecht, The Netherlands,).

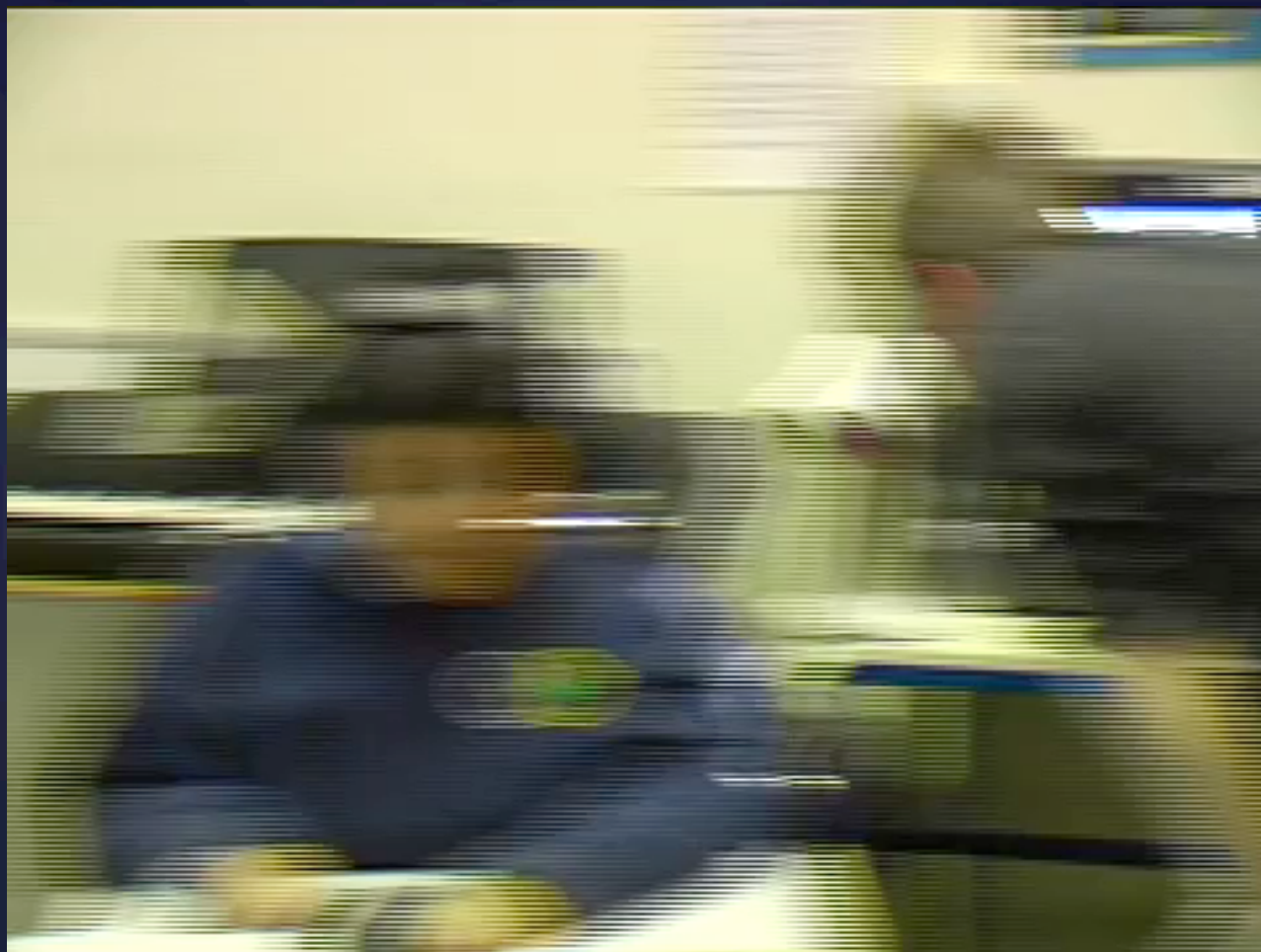


Total: 2

Research Briefing

Welch, G., Papageorgi, I., Creech, A., Himonides, E., Potter, J., Haddon, E., Whyton, T., de Bezenac, C., Duffy, C. & Morton, F. (2008) *Investigating musical performance: performance anxiety across musical genres - TLRP Research Briefing 57*, (London, TLRP).





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