



Beethoven



Chopin



Mozart

Musical talent:
conceptualisation,
identification and
development

Musical ability

2

The concept of musical ability has a long history.

Tests were developed to assess it. These focused on aural skills.

Performance improved with musical experience.

It has recently been recognised that musicians require a wide range of skills and that acquiring them takes time and commitment



Recent conceptions of musical ability



Hallam and Prince (2003)
asked:

129 musicians;

80 non-music educators;

112 adults in other occupations;

60 students involved in extra-
curricular music;

30 not involved in extra-
curricular music

to complete the statement
'Music ability is:'

Findings



Musical ability was conceptualised in relation to:

- aural skills (pitch, rhythm);
- receptive activities (listening, understanding, actively responding, appreciating, evaluating, knowing about music);
- generative activities (playing, singing, reading notation, technical skills, emotional sensitivity, communicating and interpreting, ensemble skills, composing, improvising, being creative);
- metacognition (self- criticism, solving problems, organisation, self-discipline, knowledge of strengths and weaknesses);
- motivation (personal expression, immersion in music, total commitment).

Study 2

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Hallam (2010) devised a questionnaire based on the previous study. It was distributed to:

102 musicians

95 educators who were not musicians

132 adults - active amateur music makers

60 adults not actively engaged in making music

193 children actively engaged in making music

71 children with no engagement with music outside of the school curriculum.

Factor analysis revealed 6 groups of responses

1. Playing an instrument or singing

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Reading music – sight reading

Playing or singing

Having technical skills, good physical co-ordination

Understanding musical concepts and form

Able to analyse and critically evaluate music

Valuing music

Having a complex range of skills



Playing an instrument or singing



	Means
Musicians	-.17
Educators	-.25
Adults who have actively engaged with music	-.02
Adults not actively engaged with music	.02
Children actively engaged with music	.22
Children with little active engagement with music	.46
Total	.01

2. Musical communication

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Being able to communicate moods and emotions

Interpreting, expressing feelings, expressing through sounds, communicating meaning of composer

Uniting a group, being sensitive to others within an ensemble



Using music as inspiration, music as part of life, using music to express personality, making sense of the world through music

Being able to make decisions about performance and compositions, taking risks

Musical communication

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	Means
Musicians	.48.
Educators	-.01
Adults who have actively engaged with music	-.1
Adults not actively engaged with music	-.45
Children actively engaged with music	.1
Children with little active engagement with music	-.66
Total	.001

3. Valuing, appreciating and responding to music

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Valuing music through listening,
enjoying and appreciating music

Responding to music, its mood,
creatively, rhythmically

Judging what is musically good or
bad, evaluating, able to perceive
what is musically beautiful

Being able to describe music in
words or gestures



Valuing, appreciating and responding to music



	Means
Musicians	.03
Educators	-.17
Adults who have actively engaged with music	-.18
Adults not actively engaged with music	.005
Children actively engaged with music	.13
Children with little active engagement with music	.45
Total	.009

4. Composition, improvisation and related skills

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Being able to compose (in new styles, organise sound)

Being able to improvise

Being able to integrate listening, performing and composing (play an instrument, sing, read music)

Being able to make decisions about performance and composition, analysis of music, reading music, taking risks

Being able to describe music in words or gestures

Being able to play by ear



Composition, improvisation, related skills



	Means
Musicians	-.16
Educators	.29
Adults who have actively engaged with music	-.06
Adults not actively engaged with music	.15
Children actively engaged with music	-.16
Children with little active engagement with music	.38
Total	.003

5. Commitment, motivation, personal discipline and organisation

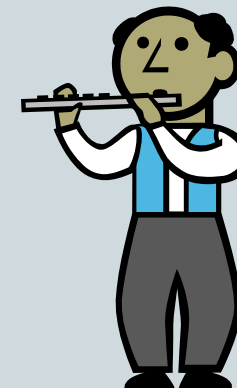
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Commitment to practise, personal discipline, organisation

Motivation to succeed (goals, interest, desire)

Being self-critical

Immersion in music, relationship between music and life, music as inspiration, music as a means of expressing personality



Commitment, motivation, personal discipline and organisation

15

	Means
Musicians	-.27
Educators	-.09
Adults who have actively engaged with music	.21
Adults not actively engaged with music	.19
Children actively engaged with music	.06
Children with little active engagement with music	-.16
Total	.004

6. Rhythmic and pitch abilities and understanding

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Perceiving a rhythmical progression, singing in time, good sense of rhythm, moving in time

Recognising pitch, internalising sound

Being able to play by ear

Hearing and understanding music

Being able to analyse music

Rhythmic ability, pitch skills and understanding

	Means
Musicians	-.34
Educators	-.01
Adults who have actively engaged with music	.29
Adults not actively engaged with music	.05
Children actively engaged with music	.02
Children with little active engagement with music	-.1
Total	.001

Learning



Learning is a natural process for human beings

Learning may be deliberate and intentional or incidental occurring without conscious awareness

All forms of learning involve change in the learner



Learning and the brain

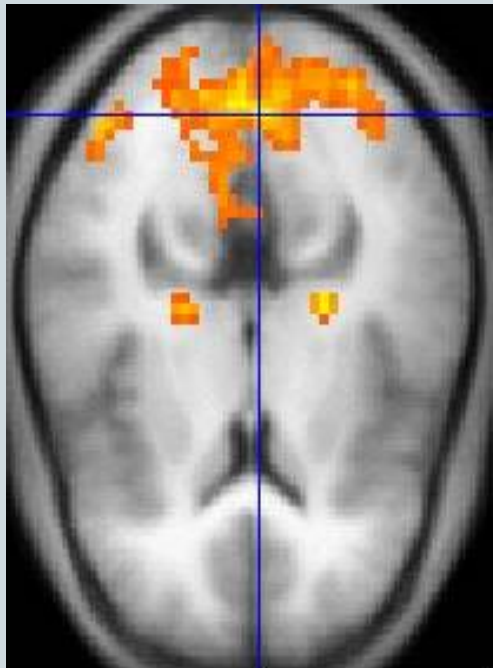


When we learn connections
are made or reinforced in
the brain

Pruning also occurs

Through these processes the
cerebral cortex self-
organises





Neural responses to the environment occur instantly

Only where responses recur over long periods of time does fundamental change occur

Change is specific to what is learned and how it is learned

The brain substrates of processing reflect the 'learning biography' of each individual

Learning as the development of expertise



This paradigm:

- challenges notions of ‘ability’;
- stresses the role of prior knowledge and skills in learning;
- emphasises the time taken to learn complex skills;
- explores the acquisition of specific skills and knowledge;
- explores how thinking and learning processes change as expertise develops.

Characteristics of expert functioning



Experts excel mainly in their own domains and in those domains:

- perceive large meaningful patterns;
- are fast;
- have superior short and long-term memory;
- see and represent problems at deeper levels than novices;
- spend longer analysing problems before attempting to solve them;
- have strong self-monitoring skills.

The stages of developing expertise

Procedural skills

- Cognitive-verbal-motor-stage
- Associative stage
- Autonomous stage



Knowledge acquisition

- Acclimation
- Competence
- Proficiency/expertise



Motivation and Learning



Motivation and personal commitment are required to sustain the time and effort to reach high levels of expertise in any domain

Interesting tasks may sustain interest in the short term

Interest needs to be internalised as part of identity for long term commitment to be made



Study 3



Questionnaire study exploring issues of motivation.

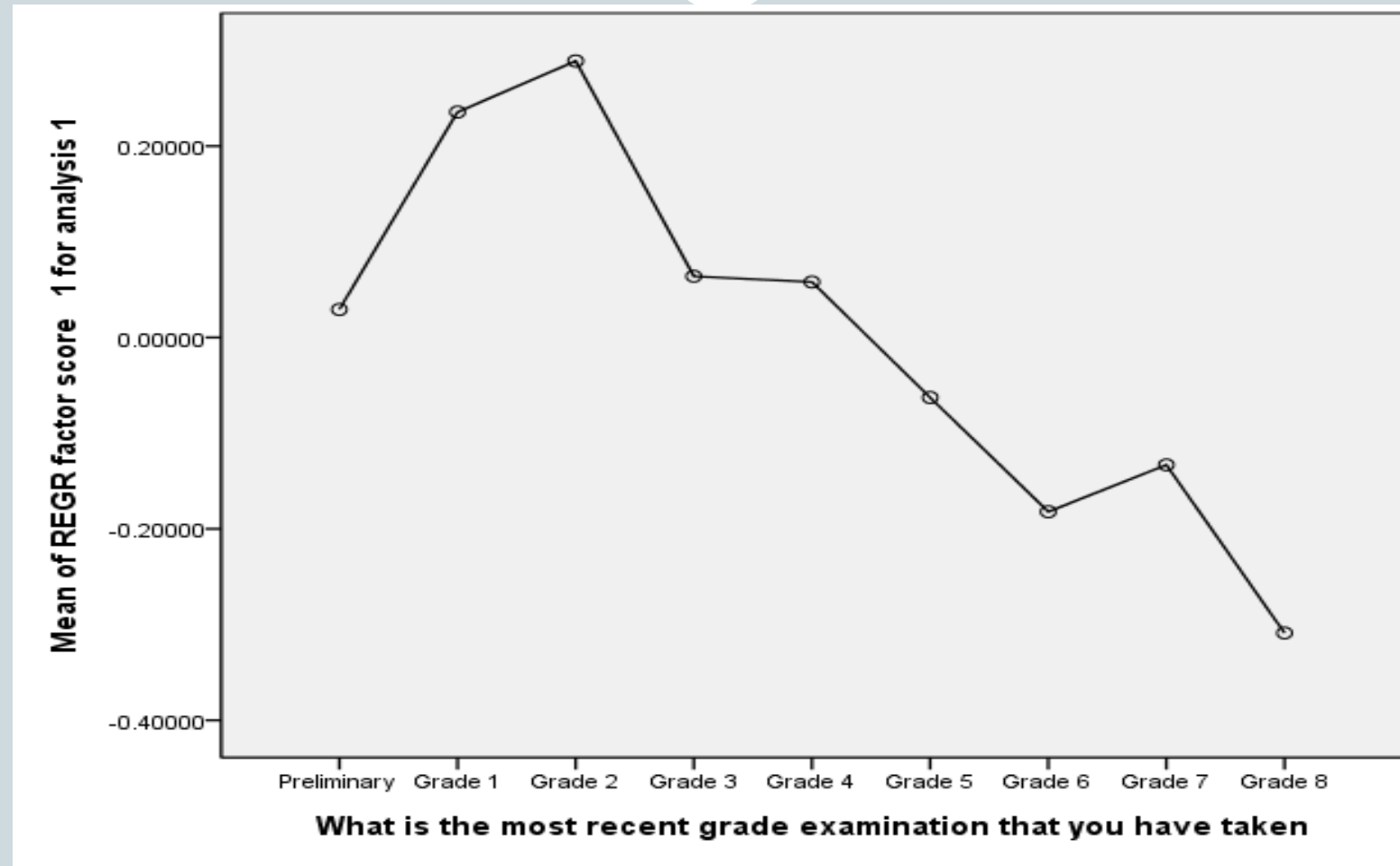
3352 musicians across a wide range of levels of expertise (from beginner level to conservatoire entry standard) playing a wide range of instruments or singing.

They responded to a series of statements on a seven point scale

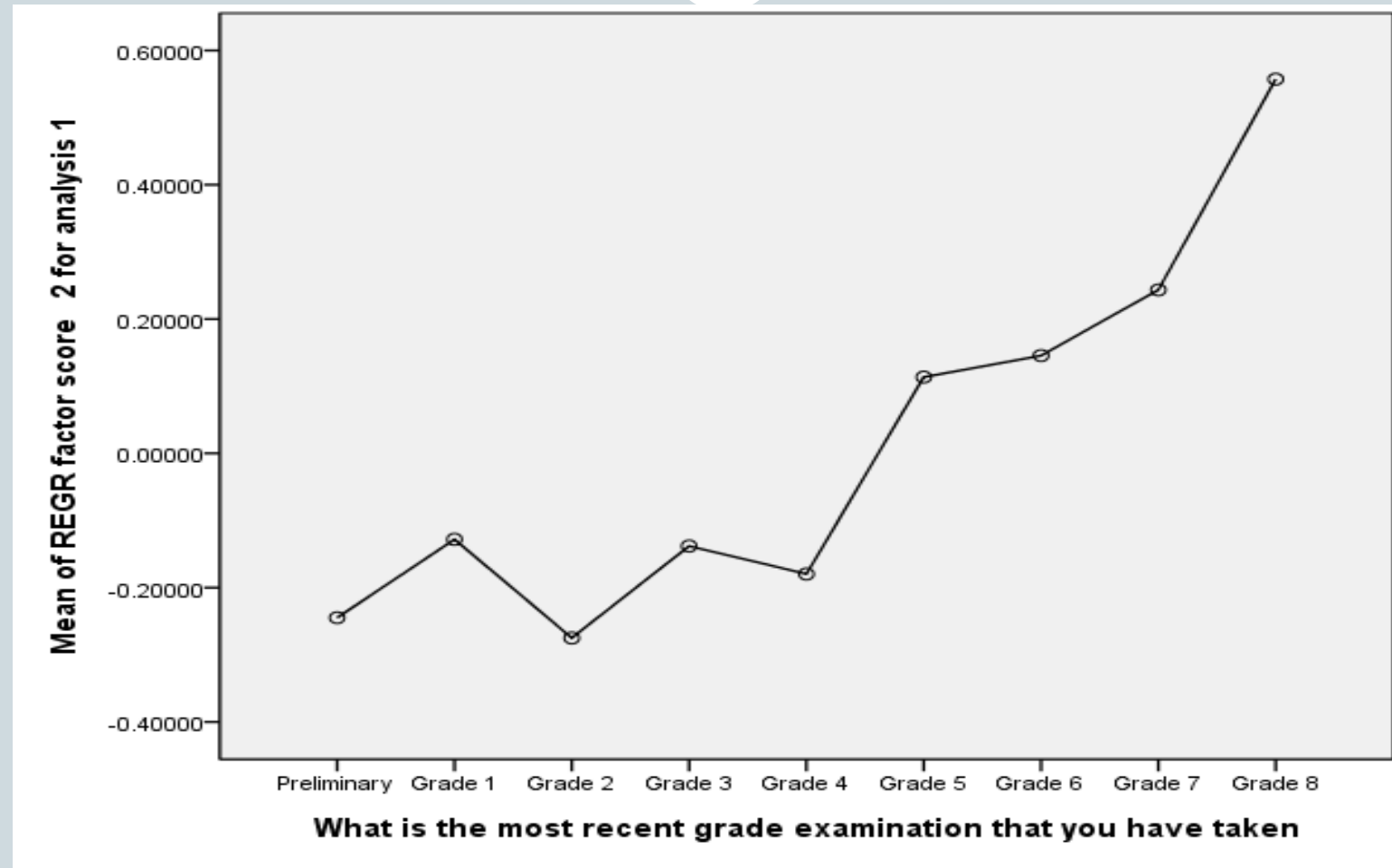
Factor analysis revealed 6 factors

All of these elements were important predictors of wanting to be a musician.

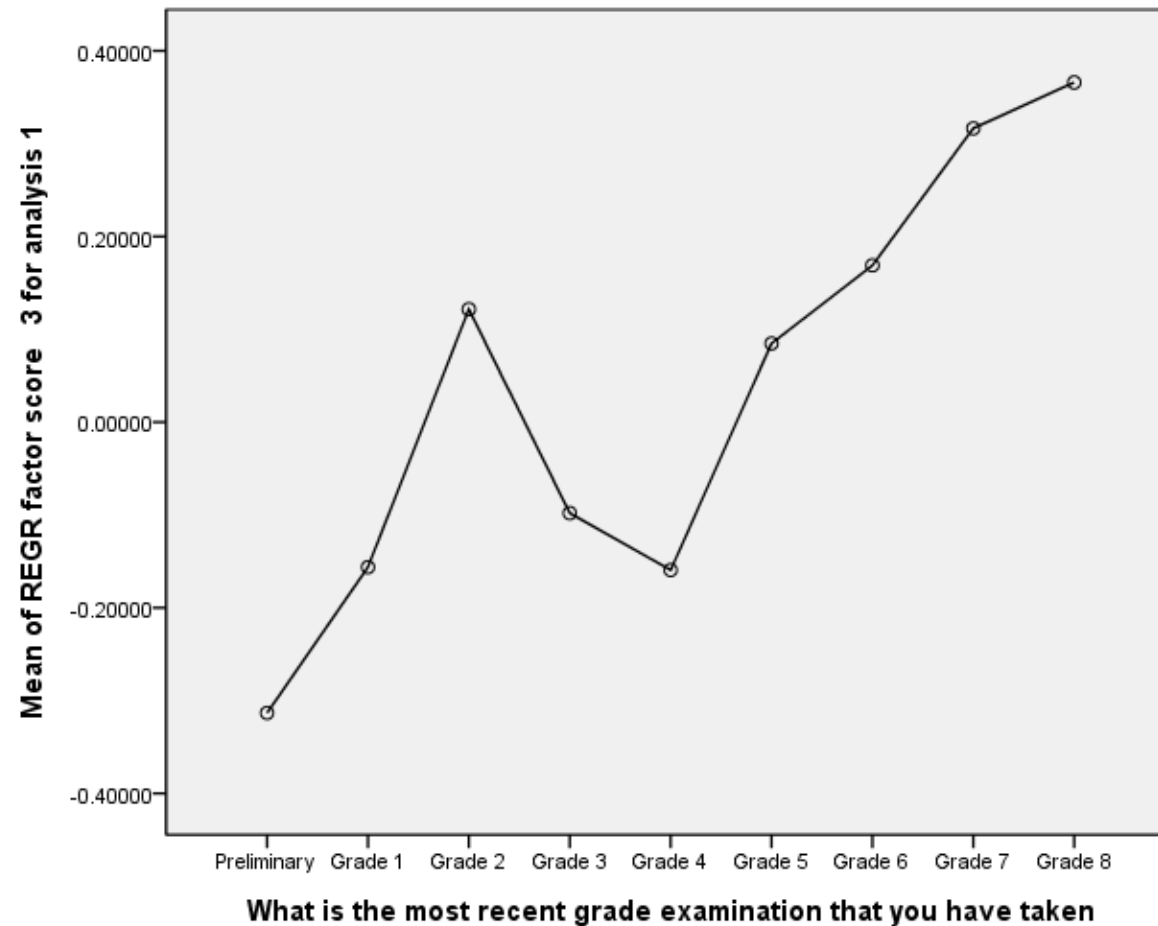
Support and social affirmation by level of expertise



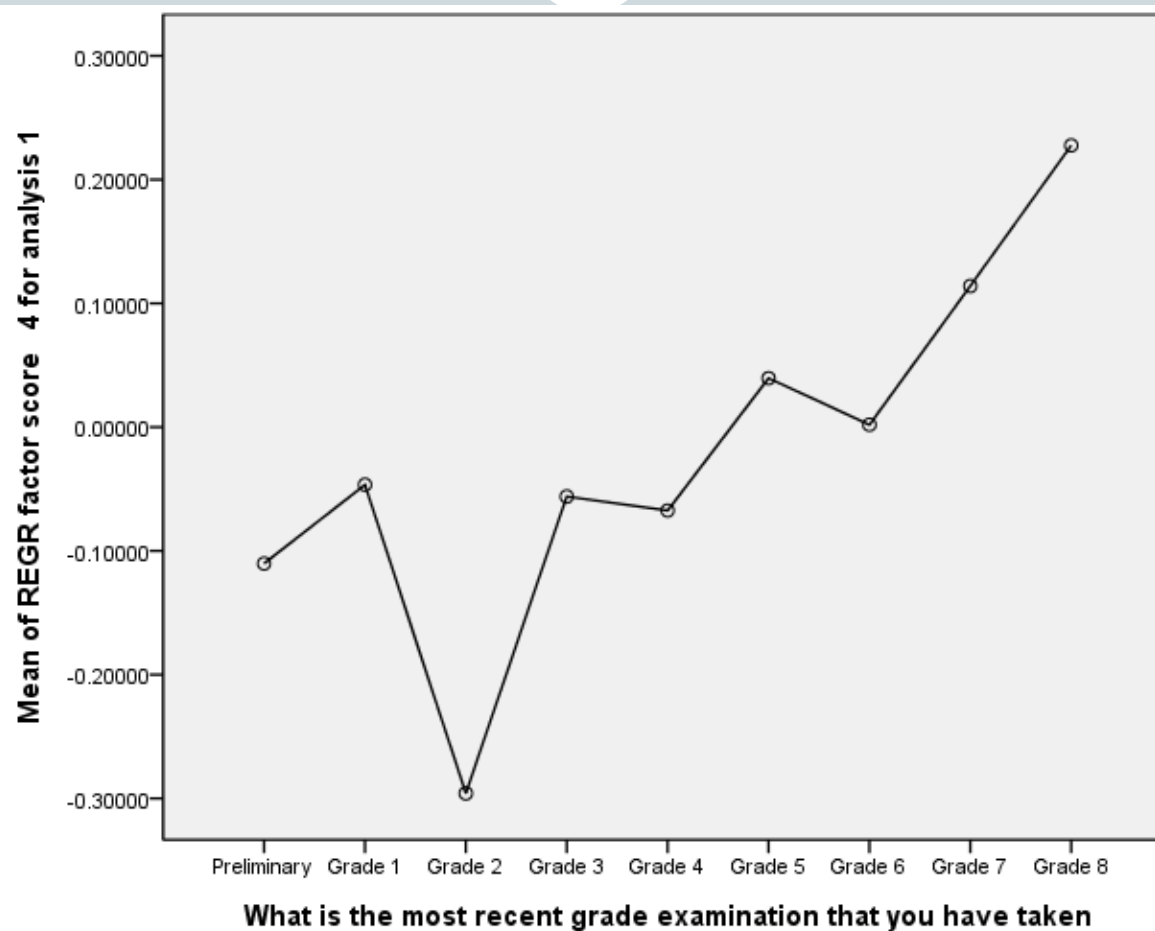
Social life and enjoyment of musical activities by level of expertise



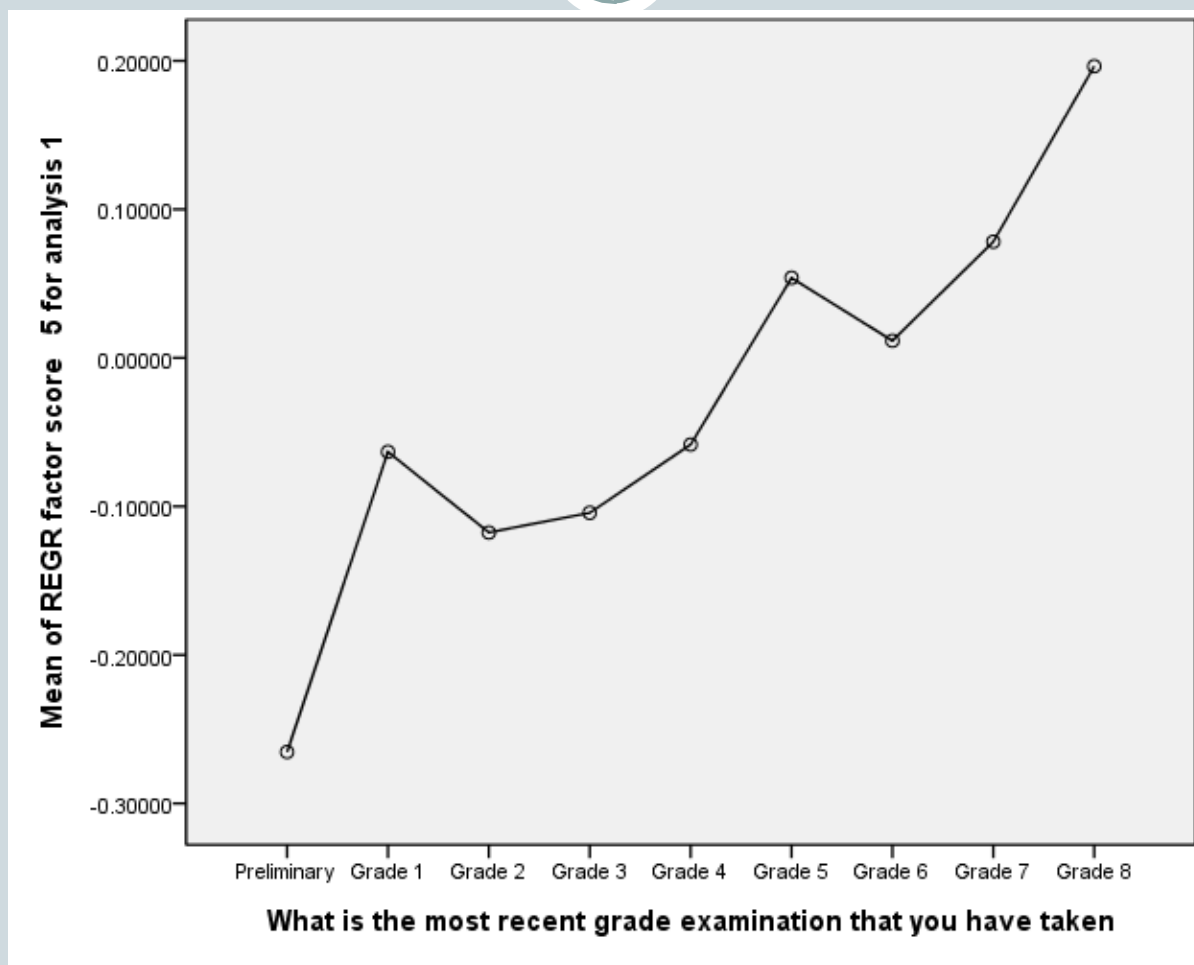
Enjoyment of performing by level of expertise



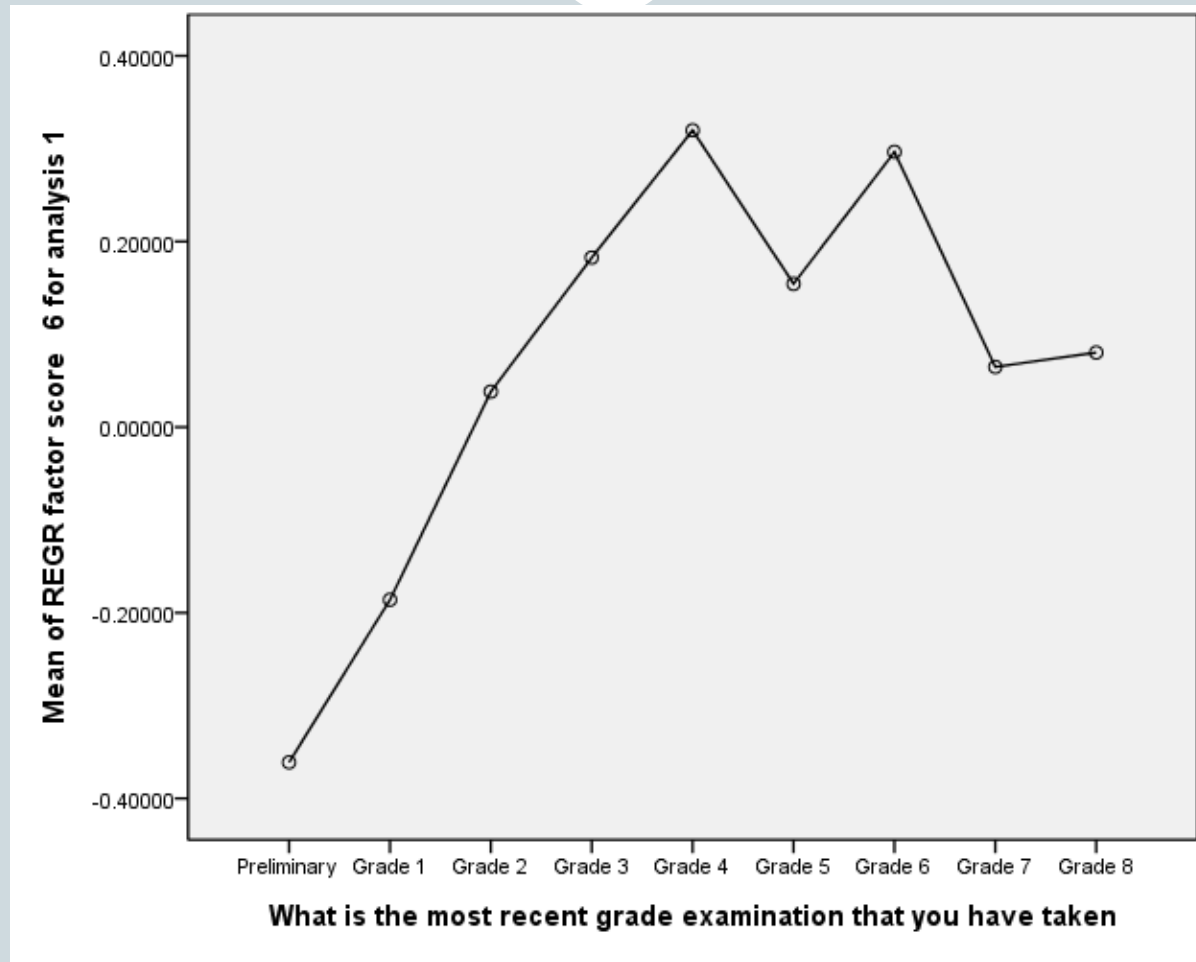
Self-belief in musical ability by level of expertise



Enjoyment of playing, lessons and practice by level of expertise



Disliking practice by level of expertise



Conceptualisation and identification



Musical ability is complex and has many facets.
Different skills are required for different professional outcomes.

Identification depends on providing opportunities.
Different criteria may apply at different levels of expertise.

Because of the time taken to develop musical expertise
total commitment is required on the part of the learner.

Developing talent



Individuals need opportunities to pursue their own goals.

Teachers and institutions need to recognise those goals and support their development.

As comparisons are made with others, goals and possible selves may change.

Opportunities for exploring a range of career paths need to be made available.



Any questions?

s.hallam@ioe.ac.uk