Module PS4083
Psychology of Music

2014/2015
1st Semester

Lecturer: Dr Ines Jentzsch (ij7)
Aims and Objectives

This module will be based on seminars in which students will be expected to play an active part, contributing as much on the basis of their own reading as they receive from the course leader. This type of interactive teaching is designed to encourage acquisition of "deep" as opposed to "surface" knowledge. Emphasis will be placed on development of skills in the critical evaluation of research reports, and of understanding how current research will develop in the future.

The aim of this module is to introduce students to psychological processes underlying music perception, cognition, and performance. The relationship between musical phenomena and mental functions will be illustrated. The module will cover different aspects of music perception including psychoacoustics and sound perception, music cognition including music memory and emotion, skilled performance as well as abnormalities in music perception and performance. The module will be taught in the form of seminars including student presentations. Emphasis will be placed on the development of critical thinking and the ability to relate conceptual debates in psychology to issues in the real world.

Objectives:
On successful completion of this module students will be able to:
(1) Demonstrate an understanding of psychological processes underlying music perception, cognition and performance
(2) Communicate their acquired knowledge effectively, both orally and in writing
(3) Demonstrate a critical appreciation of the published research on music psychology

Assessment:

75% exam, 25% continuous assessment by one module essay

Continuous Assessment Essay

Short Module Essay on the group presentation

Topic: Design an experiment that can address one issue that you have identified in the research discussed in one of the presentations. Clearly discuss the motivation for your experiment, discuss the hypotheses, the experimental design, and possible analysis strategies.

The essay should be presented as follows: a title page stating the title of the work, student's matriculation number, the module number, and the date; no more than 4 A4 size pages of text – there must be at least a 1" margin all round (top, bottom, right and left); the text must be in Arial font at 12 point, single spaced. References within the text should be in APA format. The reference list does not count towards the page limit. Note that these guidelines are different from the ones given in the honours handbook.

Deadline for continuous assessment submission via MMS: Mon, 24th Nov 2014, 9am
## Timetable

Location: Seminar Room, 1.00 (Psychology Building)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>References for Group Presentations</th>
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<tbody>
<tr>
<td>15.09.14</td>
<td>Introduction Lecture</td>
<td></td>
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<tr>
<td>22.09.14</td>
<td><strong>Lecture</strong> Introduction to the Perception of Music</td>
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<tr>
<td>29.09.14</td>
<td><strong>Lecture + Group Pres.</strong> Absolute Pitch, Congenital Amusia</td>
<td>(G1) Absolute Pitch (G2) Congenital Amusia</td>
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<td>06.10.14</td>
<td><strong>Lecture + Group Pres.</strong> Music and intelligence: The Mozart Effect</td>
<td>(G3) Mozart Effect - Pros (G4) Mozart Effect - Cons</td>
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<tr>
<td>13.10.14</td>
<td><strong>Lecture + Group Pres.</strong> Music-Colour Synesthesia</td>
<td>(G5) Synesthesia – General Intro (G6) Sound-Colour Synesthesia</td>
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<tr>
<td>20.10.14</td>
<td><strong>Lecture + Group Pres.</strong> Music Cognition: Emotion and Memory</td>
<td>(G7) Music &amp; Memory</td>
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<tr>
<td>27.10.14</td>
<td><strong>Lecture + Group Pres.</strong> Music Cognition: Emotion and Memory</td>
<td>(G8) Music &amp; Emotion</td>
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<td>03.11.14</td>
<td><strong>Lecture</strong> Attentional and Motor Control in Music Performance</td>
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<td>10.11.14</td>
<td><strong>Lecture + Group Pres.</strong> Dysfunctions in Music Performance</td>
<td>(G9) Performance Anxiety (G10) Focal Dystonia</td>
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<td>17.11.14</td>
<td><strong>No Lecture, Extra Time for CA Essay Writing</strong></td>
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<tr>
<td>24.11.14</td>
<td><strong>Lecture</strong> Music Therapy Revision</td>
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Course Outline and Readings

Introduction Lecture (15th Sept 2014)
Students will be introduced to the general course structure and topic ranges within this lecture series. Also, the origins of music and potential functions of music from an evolutionary perspective will be discussed.


Lecture 1 (22nd Sept 2014): Introduction to the Perception of Music
This lecture will review the basic anatomy of the auditory system, introduce basic concepts of psychoacoustics and discuss several auditory illusions


Lecture 2 (29th Sept 2014): Absolute Pitch and Congenital Amusia
This lecture (+ student presentation, Group 1) will introduce the concept of absolute pitch and contrast the learning versus the hereditary theory to explain why this ability is so rare. The lecture (+ student presentation, Group 2) will also use the example of Congenital Amusia to discuss whether music processing uses a specialized brain network.

(G1) Deutsch (2002). Current Directions in Psychological Science, 11(6), 200-204.
Sarkamo et al. (2013). Wiley Interdisciplinary Reviews – Cognitive Science, 4, 441-451. (pp. 443-444 only)

Lecture 3 (6th October 2014): The Mozart effect
This lecture (+ student presentations) will discuss the Pros (Group 3) and Cons (Group 4) of research suggesting a positive relationship between passive listening to specific types of music and intelligence, the Mozart effect.

(G3) Rauscher, Shaw, & Ky (1995). Neuroscience Letters, 185, 44-47.
(G4) Pietschnig et al. (2010). Intelligence, 38,314-323.

Lecture 4 (13th October 2014): Synesthesia
This lecture (+ student presentations) will introduce the phenomenon of synaesthesia (Group 5) with a specific focus on colour-tone synaesthesia (Group 6) and use this example to demonstrate how psychologists can identify the genuineness of the effect using experimental and neuroimaging methods.

Lecture 5 (20th October 2014): Music Cognition: Emotion and Memory I
This lecture will discuss how musical information is stored in our memory system, what strategies expert musicians use to memorize music, and how psychologists can measure memory for music using free recall procedures. Again, the modularity of music processing will be evaluated using the example of music agnosia (student presentation, Group 7).

(G7) Peretz & Coltheart (2003). Nature Neuroscience, 6(7), 688-691

Lecture 6 (27th October 2014): Music Cognition: Emotion and Memory II
This lecture (+ student presentation, Group 8) will discuss the link between music and emotion. The focus will be on distinguishing between the Emotivist and the Cognitivist Approach to emotion processing. Also, the difficulty of studying emotional responses to music and measuring them will be discussed.


Lecture 7 (3rd November 2014): Attentional and Motor Control in Music Performance
This lecture will provide a short general introduction to basic concepts in motor control and motor learning, including a discussion of effects of attentional focus (internal versus external) on the efficiency of motor learning.


Lecture 8 (10th November 2014): Focal Dystonia and Performance Anxiety in Musicians
This lecture (+ student presentations) will discuss two common dysfunctions that can strongly impair musical performance, Performance Anxiety (Group 9) and Focal Dystonia (Group 10) and.

(G10) Ioannou & Altenmueller (2014). Neuropsychologia, 61, 80-88.

Lecture 9 (24th November 2014): Music Therapy
This lecture will discuss potential therapeutic effects of both passive and active engagement with music. Focus will be placed on evaluating the functions of music for affect regulation.

Chan et al. (2011). Complementary Therapies in Medicine, 19, 332-348.
# Preparing and Delivering a Talk

(Evaluation Sheet)

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
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<tbody>
<tr>
<td><strong>Content:</strong></td>
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<tr>
<td>- Was sufficient breadth and depth of information presented?</td>
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<td>- Was all of the information relevant?</td>
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<td>- Was there an appropriate balance of information</td>
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<td><strong>Coherence:</strong></td>
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<td>- Was the content clear and comprehensible?</td>
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<td>- Were the key messages of the talk apparent?</td>
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<td>- Was the information presented in a coherent order?</td>
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<td><strong>Delivery:</strong></td>
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<td>- Was the speaker audible and articulate clearly?</td>
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<td>- Did the speaker show confidence?</td>
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<td>- Did the speaker keep the audience’s attention?</td>
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<td><strong>Use of Media:</strong></td>
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<td>- Were the contents of the slides relevant to the talk?</td>
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<td>- Were the slides clear and uncluttered?</td>
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<td><strong>Timing:</strong></td>
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<td>- Was the talk well-paced?</td>
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