

Book of abstracts and one page summaries

PHD COURSE IN MUSIC THERAPY RESEARCH

April 18–24, 2021

Doctoral Programme in Music Therapy

Department of Communication and Psychology

Aalborg University, Denmark

[version 210419. Refresh page (F5) for latest version]



Contents

PhD Pre-defence	3
Dana Jakobson: Music Therapy for preterm infants and their parents: A cluster-randomised controlled trial. Presentation of the PhD articles and their integration in the thesis.....	3
One page summaries	4
Hugo Jensen: Group music therapy and health musicking in interdisciplinary rehabilitation of early to middle stage dementia.....	4
Julie Ørnholt Bøtker: The experience of authenticity in language and action. Analysis results of preliminary semi-structured interviews	5
Kerry Devlin: Perspective Matters: Explicating Case Formulation Methods in Music Therapy Clinical Practice with Neurodivergent Children	6
Marie Falk: defining the subject: preliminary research on identification and description of possible characteristics in musical timing in live receptive music therapy for lowering of arousal and relief of painful symptoms in patients in palliative care	7
Sheila Pereiro Martínez: Implementation of the Research Study in Music Therapy in Patients during the Process of Disconnection from Mechanical Ventilation (Weaning) in the Intensive Care Unit (ICU)	8
Tim Honig: Preliminary Outcome Analysis for a Feasibility RCT on GIM for Depression.....	9
Kasper Ehlers: Implementing Music Therapy with an existential approach in a Danish hospital setting - a participatory study.....	10
Lars Rye Bertelsen: Music Medicine, creating expert curated playlists as adjunct to ECT treatment.....	10
Lectures and workshops at the course.....	11
Alfred Bordado Skjöld: Interview research for exploring relationality, finitude and bereavement. Methodology and analysis	11
Christian Gold: Reproducible science: Who is afraid of computer code?	11
Gustavo Gattino: Online music therapy delivery: from the practice to the research field.....	12
Niels Hannibal: Workshop: Bias in your research.....	13
Stefania Serafin & Ali Adjorlu: Sonic interactions in mixed reality: can they provide useful technologies in music therapy?	14
Simon Høffding: Musicking as Mental Exploration - A phenomenological analysis	14
Aase Marie Ottesen: Online manual: Use of song and music in dementia rehabilitation	15
Open web-seminar on AI, Arts & Health: Benefits & challenges in research and practice with Thomas Moeslund, Stine Jacobsen, Elizabeht Jochum, Brian Bemman, Sofia Dahl and Rasmus Birk.....	16
Reading list for the PhD course	17



PhD Pre-defence

Dana Yakobson: Music Therapy for preterm infants and their parents: A cluster-randomised controlled trial. Presentation of the PhD articles and their integration in the thesis

Discussant: Dr. Gustavo Gatino

Supervisors: Dr. Bolette Daniels-Beck & Dr. Christian Gold

(Special consultants Prof. Shmuel Arnon & Dr. Cochavit Elefant)

Title of the study: The effects of family-centred Music Therapy (MT) during Skin-to-Skin Care (SSC) on preterm infants and their parents in the Neonatal Intensive Care Unit (NICU). A cluster-randomised controlled trial

Research questions:

The aim of the current study was to evaluate whether combined MT and SSC, as compared to SSC alone will lead to:

- Primary outcome: Clinical improvement in preterm infants' Autonomic Nervous System (ANS) stability as measured by parameters of the autonomic system including high frequency (HF) power and low frequency (LF) power of the heart rate variability (HRV).
- Secondary outcomes:
 - Clinical improvement in preterm infants' physiological markers and behavioral states
 - Reduction of parental anxiety levels
 - Improvement in attachment level between preterm infants and their parents

Research design: A single-center, time-cluster-randomized controlled trial with two parallel arms.

Method: Ten time-clusters of two months each, with a total of 68 preterm infants and their parents (mother, father, or both), were randomized to either control or experimental condition. In each cluster, all parent-infant dyads received the same allocation (MT+SSC or SSC alone) and participated in 2 sessions in the NICU and a 3-months' follow-up session at home. Infants' and parents' measurements were taken before, during and after each session.

The MT intervention applied the principles of the RBL model for neonatal MT (Lowey et al., 2013).

An additional qualitative investigation focused on parents' reflection on their participation in the MT intervention with their infant in the NICU. Nine parents had participated in a semi-structured interview after completing their participation in the RCT, and shared their perception on the MT intervention, The study design, and methods.

Current state of the study: The first article, the study protocol has been published. The data analysis for the primary outcome has been completed, currently working on the secondary outcomes' analysis. The second article, the results paper, has been formulated to a draft. For the third article, qualitative exploration of parents' perception from their participation in the MT study, data analysis has begun, and main themes were generate using thematic analysis method. A draft of the article was prepared as well.

Yakobson, D., Arnon, S., Gold, C., Elefant, C., Litmanovitz, I., & Beck, B. D. (2020). Music Therapy for Preterm Infants and Their Parents: A Cluster-Randomized Controlled Trial Protocol. *Journal of Music Therapy*, 57(2), 219–242. <https://doi.org/10.1093/jmt/thaa002>

One page summaries

Hugo Jensen: Group music therapy and health musicking in interdisciplinary rehabilitation of early to middle stage dementia

Titel of the study: Group music therapy and health musicking in interdisciplinary rehabilitation of early to middle stage dementia

Research questions: What is the impact of participation in group music therapy (GMT) combined with following health musicking at home on persons with dementia (PWD) and their relatives?

1a) Can GMT for PWD at the early to middle stage of dementia combined with following health musicking at home be effective as rehabilitation and increase well-being?

1b) Can GMT for PWD at the early to middle stage of dementia combined followed by health musicking at home be effective as rehabilitation and increase social participation, self-management and quality of life?

2a) How do PWD at the early to middle stage of dementia experience GMT and a following health musicking at home?

2b) How do relatives to PWD and professionals experience the the outcome of GMT and a following health musicking at home?

Research design: Convergent Parallel Design

Method: Quasi-experimental and interpretive

Current state of the study: Project approved (May, 2020). Currently searching for fundings. Expected start September 2022

Topic for the presentation:

The overall purpose of the DEM-REHAB project (2016-2020) was to develop and describe a cross-sectoral model for rehabilitation in (mild to moderate) dementia targeting older people with dementia living at home. The main research topic is to investigate group music therapy as an intervention following the the structure of the rehabilitation process model.

English summary page 7-10:

<https://www.rehpa.dk/wp-content/uploads/2021/01/DEM-REHAB-slutrapport-FINAL.pdf.pdf>

This project has similarities to research projects like ALMUTH (Alzheimer's and Music Therapy), MIDDEL (Music Interventions for Dementia and Depression in ELderly care) and HOMESIDE (Home-based family caregiver-delivered music), but it differs by focusing on both GMT and the subsequently health musicking at home. I wish to present the project description and get feedback on design and methods to improve clarity, feasibility and especially relevance prior to developing a protocol.



Julie Ørnholt Bøtker: The experience of authenticity in language and action. Analysis results of preliminary semi-structured interviews

Supervisor: Stine Lindahl Jacobsen

Title of the study: The concept of authenticity and its meaning and applicability within music therapy, music teaching and music performance in a family-oriented context.

The research project serves as follow-up research within the MUFASA-research project (Musik-Familier-Samspil // Music-Families-Interaction) lead by Stine Lindahl Jacobsen in cooperation with Ulla Holck and Gustavo Gattino.

Research questions:

- **How can the concept of authenticity be defined and understood** within the three different professions of music therapists, music teachers and music performers in a family-oriented context? Including: What could the benefits and challenges be for the professionals working with families in relation to the concept of authenticity?
- **How is an experience of being authentic** as a music therapist, music teacher or music performer **connected to the experience of the relation** to the participating families and vice versa?
- **How can the experiences and reflections from professionals** within the three musical professions **broaden and inform disciplines**, on a practical and theoretical level, based on the concept of authenticity?

Research design: The PhD study will be conducted within the qualitative research paradigm, applying interpretivist methods in the research design. The goal of the research methods is to discover and unfold meaning in the music professionals' subjective experiences of their own authenticity/inauthenticity. Furthermore, if possible, I also wish to search for patterns and similarities within and across the three different disciplines, relating my findings to existing literature. I therefore wish to apply phenomenological and hermeneutical research approaches in the overall design.

Method: Epoché-writing. Repertory grid interview on basis of the epoché. Preliminary semi-structured interviews. Thematic coding analysis. Semi-structured interviews with the music professionals participating in the MUFASA-project; Focus group interviews and solo interviews, hopefully using video excerpts from the MUFASA-project as part of the interview process. Thematic coding analysis of the transcripts of the interviews. Literature review(s). Triangulation of the findings with existing literature and with my own epoché.

Current state of the study: Finalizing analysis of preliminary interviews. Writing of article no. 1 in which the results of the preliminary interview data analysis will be disseminated. Preparing for MUFASA-workshops in April and May (postponed from Autumn '20).

Topic for the presentation: In my presentation I would like to share the results of the preliminary semi-structured interviews. I also wish to bring to debate some elements of the analysis process, e.g., how to define the borders of the final data analysis and when to opt-out themes that may/may not be of relevance.



Kerry Devlin: Perspective Matters: Explicating Case Formulation Methods in Music Therapy Clinical Practice with Neurodivergent Children

Title of the study: Case Formulation Methods in Music Therapy Clinical Practice with Neurodivergent Children

Research questions:

1. How do music therapists formulate cases in their clinical work with neurodivergent children?
2. How do these methods subsequently impact the way(s) these music therapists practice clinically with neurodivergent children?
3. When these processes are compared, what do they reveal about the case formulation methods of these music therapists?
4. What implications, if any, does this have for the education and training of music therapy students?

Research design: A maximum of 12 expert-level music therapists will be recruited through theory-based purposive sampling. At each US-based clinical site, the researcher will: (1) Observe and video at least two music therapy sessions given by the music therapist, and (2) Interview the music therapist about these sessions, using open-ended questions that illuminate the way(s) they formulate their clinical work with these clients. Interview questions will address the therapist's theoretical perspective, assessment process, types of data they deem important, formulation of clinical goals, approach to treatment planning, client-therapist relationship and the role of music. (3) Analyze one case vignette created by the researcher that asks these music therapists to articulate their understanding of the client, formulate goals, and describe how they would begin therapeutic work with the client.

Method: Procedures related to data analysis will be consistent with grounded theory (Charmaz, 2014; O'Callaghan, 2016) in order to construct a theory of case formulation practices that incorporate a range of theoretical perspectives (i.e., behavioral, developmental, music-centered, disability affirmative) in music therapy clinical practice with neurodivergent children. Data collection will be undertaken at two levels: (1) narratives generated from session observations, interviews, and video analyses, and (2) narrative responses to the case vignette. The goal of data analysis for data type (1) will be to identify and define the nature of case formulation undertaken by each of the music therapists. The goal of data analysis for data type (2) will be to identify similarities and differences in case formulation processes across theoretical perspectives, with an emphasis on the way(s) each participant understands the client, their needs, focus of therapy, and underlying approach to treatment.

Current state of the study: The initial proposal has been accepted by the program at AAU, but preliminary research will not begin until enrollment is complete.

Topic for the presentation: Project overview, exploration of core approaches to music therapy practice with neurodivergent children in the USA, and discussion of challenges related to articulating each approach in the context of case formulation processes.



Marie Falk: defining the subject: preliminary research on identification and description of possible characteristics in musical timing in live receptive music therapy for lowering of arousal and relief of painful symptoms in palliative care

Titel of the study: The Influence of Musical Timing in Receptive Music Therapy on Arousal and Wellbeing in Patients in Palliative Care

Research questions: The primary research question of this preliminary research project is: **How can the type of musical timing that is the subject of the research project on receptive music therapy for terminally ill patients be defined?**

To answer the primary research question it is divided into three secondary research questions that needs to be explored:

1. What are the characteristics of the specific type of musical timing that is the subject of the research project according to the researcher?
2. What characteristics in musical timing can be identified in selected moments of live receptive music therapy performed by the researcher to terminally ill patients with the aim of lowering of arousal and relief of painful symptoms?
3. What characteristics in musical timing can be described and/or identified in selected moments of live receptive music therapy performed by music therapists to terminally ill patients with the aim of lowering of arousal and relief of painful symptoms?

Research design: The secondary research questions are answered through qualitative methods.

Method:

1. Question 1 is answered through a Repertory Grid interview by and with the researcher.
2. Question 2 is answered through microanalysis of 2-3 clips of audio recordings of live receptive music therapy performed by the researcher to terminally ill patients with the clinical aim of lowering of arousal and relief of painful symptoms. The audio clips to analyze are chosen by 1) occurrence of flexible musical timing as experienced by the performer and 2) overall benefit of the music listening in the patient as either reported by the patient or observed in the patient.
3. Question 3 is answered through short semistructured phenomenological interviews with 2-3 music therapists in palliative care and through microanalysis of 2-3 clips of audio recordings of live receptive music therapy performed by music therapists to terminally ill patients with the clinical aim of lowering of arousal and relief of painful symptoms. The audio clips to analyze are chosen as described above.

Current state of the study: the study is at the preliminary stages of research, finding cooperational partners and funding, as well as getting justification and acceptance.

Topic for the presentation: to present the research design for a preliminary research project. To discuss and receive feedback on the presented ideas to improve the focus and research design of the preliminary research project.



Sheila Pereiro Martínez: Implementation of the Research Study in Music Therapy in Patients during the Process of Disconnection from Mechanical Ventilation (Weaning) in the Intensive Care Unit (ICU)

Title of the study: Music Therapy in Patients during the Process of Disconnection from Mechanical Ventilation (weaning) in the Intensive Care Unit (ICU): A Randomized Control Trial (RCT) Study

Research questions:

- Does music therapy intervention affect the duration of the process of disconnection from mechanical ventilation (weaning) in an experimental group of critically ill patients in an intensive care unit (ICU) receiving music therapy intervention, in comparison with a control group of critically ill patients receiving the usual clinical protocol of weaning (without intervention with music therapy)?
- Does music therapy intervention affect the average dose of sedation and analgesia needed during the process weaning?
- Does music therapy intervention affect the agitation during the process of weaning?
- Does music therapy intervention affect delirium during the process of weaning?
- Does music therapy intervention affect the perception of pain during the process of weaning?
- Does music therapy intervention affect the blood pressure, heart rate, breathing rate and oxygenation level during the process of weaning in the experimental group, in comparison with themselves?
- Does music therapy intervention affect perceived stress during the process of weaning?

Research design:

Randomized Control Trial (RCT) with parallel groups (control and intervention group)

Method:

This study is a quantitative research and statistical analysis methods will be applied in order to answers the research questions

Current state of the study:

The research study was designed and discussed by the different work teams involved in the development of it: University Hospital of Vitoria-Gasteiz (Basque Country), BIOARABA (Health Research Institute of Basque Country) and Música, Arte y Proceso Institute. The Ethical Committee of the University Hospital has accepted the study. Teams building and protocols have been carried out and the recruitment is I process. Nowadays, 25 patients have been included in the study.

Topic for the presentation:

The purpose of this presentation is to show the process of implementation of the study: the different phases, decisions and people involved to carry out this implementation process until present moment.

Tim Honig: Preliminary Outcome Analysis for a Feasibility RCT on GIM for Depression

Supervisors: Dr. Niels Hannibal, Dr. Cathy McKinney

Title of the study: Treatment Effects of the Bonny Method of Guided Imagery (GIM) in the Treatment of Depression

Research questions:

Primary research question: Is a series of Bonny Method of GIM an effective treatment for persons with depression?

Part I: Development of a process to monitor treatment fidelity. Aim: Develop a quality assessment process including a form to monitor treatment fidelity for research purposes.

Part II: Pilot RCT. In individuals with depression, does a series of GIM sessions a) reduce severity of depression, b) reduce severity of anxiety, or c) improve mental wellbeing in comparison to a control group?

Part III: Exploratory interview-based study examining experiences of GIM via telehealth: What were participants' experiences of shifting to receiving GIM by telehealth during the COVID-19 pandemic?

Research design: Mixed design (2x4) with waitlist control group

Method: Randomized controlled feasibility trial with a wait-list control group

Current state of the study:

Part I: The article stemming from Part I, *Monitoring Variation to Guided Imagery and Music (GIM): Development of the GIM Treatment Fidelity Instrument*, has been published by the Nordic Journal for Music Therapy (available by advance online publication).

Part II: Data collection for the feasibility RCT has been completed. I have conducted preliminary statistical analyses for the outcome variables, as well as additional exploratory tests for additional data of interest, which will be presented at the Spring 2021 course.

Part III: The design has been completed for a small interview-based exploratory qualitative study to better understand participants' experiences of shifting to having their GIM sessions provided by telehealth instead of in-person due to the COVID-19 pandemic.

Topic for the presentation: I will present the preliminary statistical analysis for the outcome variables (depression, anxiety, stress, and mental wellbeing), as well as exploratory analysis for other factors of note. Special attention will be given to specialized procedures for conducting the nonparametric statistical tests, which were required by issues with the data due largely to challenges posed by the COVID-19 pandemic.

Kasper Ehlers: Implementing Music Therapy with an existential approach in a Danish hospital setting - a participatory study

Lars Rye Bertelsen: Music Medicine, creating expert curated playlists as adjunct to ECT treatment

Supervisors: Stine Lindahl Jacobsen, Christian Gold

Title of the study: Receptive music intervention for the abatement of anxiety for in-patients diagnosed with unipolar depression who receive standard ECT treatment

Research questions:

1. Can listening to playlists before and during ECT treatment reduce the patient's anxiety level, and is there a difference in the three research arms from listening to music for 4 or 8, and listening to nature sounds during ECT treatments 1 through 9?
2. How can the patient's overall experience of listening to playlists with either nature-sounds or music during ECT treatment be described?

Research design: RCT Design, mixed-method, with self-reported questionnaires in REDCap, MusicStar logfiles and follow-up interviews with a few participants from each of the three research arms.

Method: Prior to-, and during-, and after their standard ECT treatment, patients are offered to listen to one of two playlists specially curated to support the trajectory of the treatment.

The patients are randomized to TAU + listening to playlists with music or TAU + listening to playlists with nature sounds. Data is collected at baseline, before the second, the fifth and the ninth ECT treatment. A few participants in each research arm will have a semi-structured follow-up interview.

The current state of the study: Approval from the Science Ethics Committee, the project with randomisation and questionnaires is prepared in REDCap and being tested, several cooperations- and legal agreements in place.

Data collection expected to run from May 2nd2021 till July or August 2023.

The topic of the presentation: Expert curated music playlists vs. playlists with nature sounds, generalised- vs. individualised playlists. Could the use of AI and Machine Learning be helpful?



Lectures and workshops at the course

Alfred Bordado Skjöld: Interview research for exploring relationality, finitude and bereavement. Methodology and analysis

My lecture draws on the methodological considerations from my PhD dissertation *Relationality and Finitude: A Social Ontology of Grief* (2021). I will begin asking some fundamental questions about the nature and purpose of research: What is the relationship between research, life and music? Why do we do research?

In the second part, I will discuss the art of interviewing specifically. What kind of knowledge can be generated by talking to people? How is an interview preferably conducted and what to do with the transcriptions?

Analysis is the black box of qualitative research and in the third part, I will take a point of departure in the argument developed in my dissertation to exhibit one way of thinking in dialogue with empirical material. Research, I will suggest, is a craft that one learns by doing it in cooperation with others. The lecture will be illustrated with examples relevant to Music Therapy Researchers.

Preparation: Reflect upon the question: *Where does music come from?*

Alfred Bordado Sköld is a PhD fellow at the Department of Communication and Psychology at Aalborg University, Denmark. He carries an MA in philosophy and an MSc in psychology from the University of Copenhagen. His present affiliation is with the research center *The Culture of Grief*, which investigates grief in the borderland between the existential universal and culturally specific. Alfred's PhD project consists of a longitudinal interview study of bereaved partners in different generations, whereby he explores the socio-ontological aspects of losing a life partner. His other interests include death studies, the philosophy and psychology of love, as well as critical happiness studies.

Christian Gold: Reproducible science: Who is afraid of computer code?

So, you have become a musician to then become a music therapist to then become a researcher. You are not an engineer or a computer scientist. Why should you use computer programming? Because it helps you to improve your systematic thinking as a scientist, to work more effectively, and to remember later what you actually did in your analyses. And because it helps you to communicate efficiently with your PhD supervisor who lives in a faraway place.

Reproducibility of research is a topic that has received much attention, with some even proclaiming a "reproducibility crisis". This has led to increased attention to many aspects of replicability, among them the replicability of analyses, with sharing of data and code becoming more and more common. In this presentation I will describe my own experience with using and sharing computer code. I will argue that it is a language to be learned, ultimately not too different from the ability to read a music score.

Within music therapy, I was probably one of the first (or maybe the only one?) to share my code in my PhD thesis in 2003. (I didn't share the data, though.) This would enable me (or



others) even now, 18 years later, to check what analyses exactly I conducted - if I ever wanted to replicate them.

After my PhD, I started to get involved in more and more projects simultaneously, and it became harder to remember all the details of each project. Even simple things, like: Where had I stored the last version of the data? What was the name or the meaning of this variable? But also more complicated things, like: What specifications exactly did I use in that statistical analysis? Using and keeping code helped me; especially when kept tidy and explained with comments. For example, when a manuscript we had sent to a journal came back months later and a reviewer asked for a slightly different analysis, this became the only feasible way to not only remember what we had done, but also to adapt it quickly.

In supervising PhD students, I have learned that sending code snippets (as well as error messages) back and forth through chat software can be an effective way for them to learn statistical skills and develop their analyses. PhD students often need to run the same analyses for many variables. They learn that they can do this more efficiently with code than by clicking through dialog boxes. That includes also the less tech-savvy students, who initially may be rather afraid of computer code!

In some fields, it is now very common to share code publicly (e.g. github, osf.io), in addition to data and preprints. I have shared data at nsd.no; preprints at arxiv.org; but have not publicly shared code as much as I think I should.

Whether you share your code publicly or just with your supervisor: In the end, it's not so different from a music score. Music scores, like computer code, use a variety of notation systems, and can range from very simple to very complex, and from very clean to very messy.

Christian Gold, PhD, research professor, [NORCE Norwegian Research Centre AS](#), Bergen, Norway; professor II, Grieg Academy Department of Music, [University of Bergen](#), Norway. Adjunct Professor, Faculty of Humanities, [Aalborg University](#), Denmark, Professorial Research Fellow, Faculty of Psychology, [University of Vienna](#), Austria. Editor of the [Cochrane Developmental, Psychosocial and Learning Problems Group](#). Gold's main research interests include outcome research (clinical trials and meta-analyses), their methodology and application in music therapy in mental health. He is also interested in research connecting process and outcome.

Gustavo Gattino: Online music therapy delivery: from the practice to the research field

Based on the challenges posed by the COVID-19 pandemic, online music therapy sessions have become a worldwide trend. Different countries developed guidance and standard for this practice in this field. This lecture aims to present the main fundamentals of online music therapy delivery practice and the possibilities for future research in this field, based on the main challenges and difficulties the music therapists face in different parts of the globe to carry out this work modality.

References

Gaddy, S., Gallardo, R., McCluskey, S., Moore, L., Peuser, A., Rotert, R., ... & LaGasse, A. B. (2020). COVID-19 and music therapists' employment, service delivery, perceived stress, and hope: A descriptive study. *Music Therapy Perspectives*, 38(2), 157-166.



Knott, D., & Block, S. (2020). Virtual Music Therapy: Developing New Approaches to Service Delivery. *Music Therapy Perspectives*, 38(2), 151-156.

Vaudreuil, R., Langston, D. G., Magee, W. L., Betts, D., Kass, S., & Levy, C. (2020). Implementing music therapy through telehealth: considerations for military populations. *Disability and Rehabilitation: Assistive Technology*, 1-10.

Gustavo Gattino, PhD, associate professor of music therapy, Department of Communication and Psychology, AAU.

Niels Hannibal: Workshop: Bias in your research

Normally bias in research is something to control or avoid completely. However, everybody has their own interest, understanding, point of view that we carry with us during the research process. Thoughts and questions like:

- I hope it works, or/and
- this theory makes sense, but that theory is nonsense, or/and
- I am objective and don't influence my science, or/and
- there is no objective reality only constructed reality, or/and
- I don't like the diagnostic system because it is repressive, so I won't use diagnoses as inclusion criteria, or/and
- I want a Ph.D. so I can get tenure.

As preparation for this workshop, I want you to reflect on the following questions.

- How does your research focus/question reflect your view and thinking?
- What do you hope to find/discover through your research?
- What is your favorite theoretical framework, if any?
- How did you "choose" your data?
- What is new knowledge?
- What is reality?
- What is truth?

Write down your thoughts before we meet and bring them to the workshop. Don't write an essay and don't do a literature review. It is your own personal opinion that is the focus. You can write statements, paragraphs or more. It's up to you. Bring this material to the workshop.

At the workshop I will make the introduction and then you will work in groups of two. The aim of this workshop is to investigate your bias as reflected in these questions so you understand how it is a part of your study and can be aware of possible influences in the final thesis. Bias is like a friend that you need to know, accept, acknowledge and respect in order not to make decisions and priorities based on this friendship and not some unconscious or hidden agenda.

Niels Hannibal, PhD, associate professor of music therapy, Department of Communication and Psychology, AAU.

Stefania Serafin & Ali Adjorlu: Sonic interactions in mixed reality: can they provide useful technologies in music therapy?

In this talk we will provide an overview of the work performed in the Multisensory Experience lab (melcph.create.aau.dk) on the use of music technology for therapy. Specifically, we will present projects on sonic interaction design to help autistic children in social interactions, and VR for coping with social anxiety. We will also present ideas for future research at the intersection of music technology, mixed reality and music therapy.

Stefania Serafin is professor of Sonic interaction design at Aalborg University Copenhagen and leader of the multi sensory experience lab together with Rolf Nordahl. She is the president of the Sound and Music Computing association, project leader of the Nordic Sound and Music Computing network and head of the Sound and music computing Master at Aalborg University. She received a PhD entitled “The sound of friction: computer models, playability and musical applications” from Stanford University in 2004, supervised by Prof. Julius Smith III. Her research on sonic interaction design, sound for virtual and augmented reality with applications in health and culture can be found here: tinyurl.com/35wjk3jn

Ali Adjorlu is a postdoctoral researcher at Aalborg University in Copenhagen. He did a Ph.D. on how virtual reality can be used to teach social- and daily living skills to children and adolescents with autism spectrum disorder (ASD). In close cooperation with teachers and psychologists working with children and adolescents diagnosed with ASD, he designed and developed several VR interventions to train skills required for independent adulthood, such as shopping, safe street crossing, money management, turn-taking, sharing, disruptive classroom behavior, and social anxiety. Currently, he is exploring how musical interventions in VR can help develop social skills in children and adolescents diagnosed with ASD. More details about these interventions can be read in his publications and Ph.D. dissertation found at <https://vbn.aau.dk/da/persons/126473>

Simon Høffding: Musicking as Mental Exploration - A phenomenological analysis

In this talk, I propose that musicians sometimes play and perform music in order to experiment with or explore their own minds. In order to show how this exploration unfolds, I rely extensively on empirical data from “phenomenological interviews” from two cases. The first with the “Danish String Quartet” and the second with the saxophonist and free improviser, Torben Snekkestad. After describing the methodological frame of this interview format – essentially performing two overlapping analyses from philosophical phenomenology and ethnography or qualitative research – I turn to describe the expert practices of these two cases. While it seems self-evident that musicians experiment with aesthetic expression and the technical handling of their instruments, it is less obvious that they’d also use the music as a tool for self-exploration. I nevertheless show that this seems to be the case for both the score-following quartet and the improvising saxophonist, albeit in different ways. I use this demonstration to aid my general argument that musical absorption can be understood as certain more or less controlled and controllable alterations of basic, pre-reflective self-

awareness and in particular the sense of agency. In the end of the talk, I conjecture how this might be important for music therapy.

Simon Høffding is associate professor at the Department of Sports Science and Clinical Biomechanics at the University of Southern Denmark. He obtained his PhD from the Centre for Subjectivity Research, University of Copenhagen in 2015 and has since held positions at the Interactive Minds Centre, University of Aarhus, the Department of Psychology, University of Copenhagen and the RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion, University of Oslo. His main interests are in phenomenology, 4E cognition, bodily self-awareness, musical absorption, expertise studies, shared minds, and improvisation. He pursues these interests through interdisciplinary methodologies combining phenomenological analysis, ethnographic fieldwork and physiological experiments. This work is published in *Phenomenology and the Cognitive Sciences*, *Journal of Consciousness Studies*, *Topoi*, *Synthese*, *Mind & Language*, and *Musicae Scientiae* and in his first monograph, *A Phenomenology of Musical Absorption* (2019 Palgrave Macmillan).

Aase Marie Ottesen: Online manual: Use of song and music in dementia rehabilitation

"Vita is angry and resists all types of interaction. When the caregiver wants to help her to the toilet, she spit, scratches and hits. Vita has a dementia disease and lives in a nursing home". This presentation is based on my postdoctoral research with the title: "Song and Music as Communicative intervention form in Rehabilitation of Persons Suffering from Dementia".

The research focuses on a rehabilitation strategy where song and music practiced and applied as a communicative intervention, based on the belief that this can help make it possible to facilitate the interaction with persons like Vita with dignity and respect.

The research method of the project was action research. The communicative intervention studied from the perspective of persons with dementia and their families, from a professional and interdisciplinary perspective and from an organizational perspective regarding the conditions necessary for implementation of the intervention in practice. Persons with dementia and their families, professional staff and their managers has been involved as co-researchers in collaboration with the researcher.

As result of the action research project there where created a research-based, realistic and user-friendly manual for institutions and interdisciplinary staff on how to implement and embed song and music as a communicative intervention in rehabilitation of persons with dementia. The manual is internet based and contains authentic videos from practice.

The expectation is that the manual can contribute to knowledge building and knowledge creation regarding the use of psychosocial methods in rehabilitation of persons with dementia, as well as contributing to the development of methods and to revealing the organizational basis for implementing methods.

Aase Marie Ottesen, PhD, Master in Humanities and Health Studies (MHH). Post doc. from May 2016 until November 2019 and is currently project manager and researcher, Department of Communication and Psychology, Aalborg University. Certified as Marte Meo therapist, coach and in Dementia Care Mapping. Educated nurse in 1980. Currently working on a

development project with the title: “Testing the on line manual focusing on prevention and reduction of citizen’s aggressive and inappropriate behavior in a nursing home in the municipality of Aarhus”, funded by The Danish Health Authority. In addition an action research project with the title: “Meeting through song and music as an integral part of the culture and everyday life for persons with dementia in a nursing home”, funded by the Danish Alzheimer’s Research Fund.

Open web-seminar on AI, Arts & Health: Benefits & challenges in research and practice with Thomas Moeslund, Stine Jacobsen, Elizabeht Jochum, Brian Bemman, Sofia Dahl and Rasmus Birk

As AI technologies are penetrating one research discipline after another, the focus for this open web-seminar is to discuss the possible influence AI solutions can have on individuals, disciplines and society in various beneficial and challenging ways, and how this should be governed.

Ethico-legal aspects can and should not be researched in isolation, but jointly within a multidisciplinary collaboration including humanistic science. Therefore, a multidisciplinary collection of researchers within AI, arts and health in will present their perspective on benefits and challenges of AI with arts and health and arts and health within AI.

The seminar will include dialogues, questions and debate across disciplines and across research level in breakout rooms as well as plenary format with the aim of increasing exchange of knowledge.

For zoom link: <https://www.kommunikation.aau.dk/arrangementer/arrangement/seminar-on-ai--arts---health--benefits---challenges-in-research-and-practice.cid504379>

Web-seminar presenters

Thomas Moeslund, PhD, Professor, head of ‘AI for the People Centre’, head of ‘Visual Analysis of People Lab’ and head of ‘Section for Media Technology’, Aalborg University. Overall research interest is building intelligent systems that make sense out of data. Topics include: computer vision, AI, XAI, AI & Ethics, image analysis, deep learning, machine learning, robotics, machine vision, surveillance, drones, human-robot-interaction, motion capture, human perception, augmented reality, visualization.

Stine Lindahl Jacobsen, PhD, Associate Professor, head of Art, Health and Technology Study Board, head of Music Therapy Knowledge Group, Aalborg University. Assessment of Parent-Child Interaction (APCI) developer, researcher & trainer. Clinical & research areas mainly include arts and health, families at risk, child protection, effect and assessment studies.

Elizabeth Jochum <https://vbn.aau.dk/da/persons/128508>

Brian Bemman is currently an Assistant Professor in Media Technology within the Dept. of Architecture, Design and Media Technology at Aalborg University. His primary research interests lie within computational creativity – a multidisciplinary field of artificial intelligence concerned with getting computers to do creative things and better understanding human creativity from an algorithmic perspective.

George Palamas, PhD, Assistant Professor, Dept. Architecture, Design and Media Technology, Lighting Design Group, Aalborg University. Research interests: Machine learning, design and the arts. Philosophy of computation and aesthetics.

Sofia Dahl, PhD, Associate Professor, Dept. Architecture, Design and Media Technology, Media; Media Cognition and Interactive Systems Group; Aalborg University. Research interests: Embodied music cognition and embodied interaction.

Rasmus Birk is Assistant Professor in Psychology at Aalborg University, Denmark. He uses qualitative methods to explore the ecosocial dimensions of mental health, focusing especially on urban mental health.

Reading list for the PhD course

Høffding, S., Satne, G. (2021). Interactive expertise in solo and joint musical performance. *Synthese* 198, 427–445. <https://doi.org/10.1007/s11229-019-02339-x>

Høffding, S., Schiavio, A. (2019). Exploratory expertise and the dual intentionality of music-making. *Phenomenology and the Cognitive Sciences*. <https://doi.org/10.1007/s11097-019-09626-5>

Sköld, A. B., & Roald, T. (2020). An Existential Structure of Love. *The Humanistic Psychologist*. Advance online publication. <http://dx.doi.org/10.1037/hum0000165>

Yakobson, D., Arnon, S., Gold, C., Elefant, C., Litmanovitz, I., & Beck, B. D. (2020). Music Therapy for Preterm Infants and Their Parents: A Cluster-Randomized Controlled Trial Protocol. *Journal of music therapy*, 57(2), 219-242. <https://doi.org/10.1093/jmt/thaa002>