

Book of abstracts and one page summaries

PHD COURSE IN MUSIC THERAPY RESEARCH

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PhD thesis

Britta Vinkler Frederiksen: The Development of Therapeutic Alliance in Music Therapy with Forensic Psychiatric Patients with Schizophrenia – an Exploratory Case Study Research Design

This PhD thesis investigates how music therapy can support the development of a therapeutic alliance in the initial phase of psychotherapy with forensic psychiatric patients. A prerequisite for success in the treatment of psychiatric patients in general is a good therapeutic alliance characterized by trust and cooperation. To develop therapeutic alliance with forensic psychiatric patients though is an extremely challenging task because of these patients' severe mental illness and behaviors sometimes characterized by hostility, lack of ability to regulate arousal and aggression, in addition a lack of recognition of own illness and need for treatment. The fact that these patients are sentenced to treatment complicate the development of a good therapeutic alliance. In this PhD thesis, Britta Vinkler Frederiksen investigates how music therapy can contribute to the development of therapeutic alliance in the initial phase of a psychotherapy by supporting the patient's ability and motivation to engage in social relationship and cooperate with the treatment. Among others, offering an alternative language where the patients may express anger and aggressiveness in a situation where it is socially acceptable.

Based in a case study including four forensic psychiatric patients with schizophrenia the thesis describe the process of developing the continua model, which describe dynamic micro processes in the interaction and relationship between the music therapist and forensic psychiatric patients with schizophrenia, toward a strengthening of the therapeutic alliance. The potential of music therapy is emphasized in order to engage the forensic psychiatric patient with schizophrenia in musical and non-verbal interaction and, through regulation and synchronization directly in the musical activity, to establish the first contact and support the alliance building process.

The continua model may support the structuring of actual observable interactions, non-verbal reactions and clinical reflections and, thus, help detect non-verbal dynamics, implicit knowledge and suggest interventions. Besides music therapists it may be relevant to other psychotherapists working with forensic psychiatric patients, and contribute to recognize the importance of treatment efforts in the initial phase with these patients.

The doctoral thesis and a summary is available at: <https://www.mt-phd.aau.dk/newslist/news/phd-thesis-by-britta-vinkler-frederiksen--the-development-of-therapeutic-alliance-in-music-therapy...cid402039> and will after successful defence be uploaded at: <http://www.mt-phd.aau.dk/phd-theses/>



One page summaries

Evangelia Papanikolaou: GIM with women in active treatment for gynecologic and breast cancer: Towards completion of an RCT pilot

Supervisors: Niels Hannibal & Cahty McKinney

Title of the study: GIM in active treatment for gynecologic and breast cancer

The project aims at studying GIM as an individual psychosocial intervention for women in active treatment for gynecologic and breast cancer. The main aims can be summarised as:

1. To investigate the feasibility of GIM in a Greek hospital as a psychosocial intervention for women with GC in chemotherapy and/or radiotherapy treatment
2. To explore GIM's potential for decreasing depression and anxiety and improving quality of life, increasing hope and decreasing fatigue amongst women in treatment of gynecologic cancer
3. To discover the perceived impact of GIM for the patients

This is a mixed-methods design, comprising of two studies, a descriptive feasibility study and an RCT pilot. During the feasibility part of the study, four women attended six individual shorten GIM sessions and answer to psychometric questionnaires and a qualitative interview at the end of the therapy sessions. The results and observations of the feasibility formulated the design of the RCT pilot.

Current state of the study: towards completion of the RCT pilot

Topic for the presentation: In this presentation, I will describe the process of setting up the RCT pilot, including all changes made according to the feasibility findings. I will discuss changes in overall design, changes of instruments and rationale, difficulties in recruitment process, collaboration with hospital staff and cultural considerations.

Jens Anderson-Ingstrup: Video micro-analysis of an event of attunement in a music therapy session with a person with dementia

Supervisors: Hanne Mette Ridder and Jacob Gorm Davidsen

Titel of the study: Fixing the flexible – Developing a suitable manual frame for person attuned musical interaction

Research questions:

The following research question relates to different sub-projects within the PhD study. The first question is related to the study of manual-based complex interventions in the field of dementia. The purpose of raising this question is to explore the current style of this field as well as discuss the current stage and propose suggestion for future manuals. The second question is related to a video analysis of a person attuned interaction between a music therapist and a person with dementia.

- How are manual-based complex interventions published in the field of dementia structured and how do they disseminate their content in refereed journals?
- How does an attunement/regulation process unfold in a music therapy session with a person with dementia, that causes the person to move from a state of hypo-arousal to being able to engage in a social dialogue/interaction?

Research design: Flexible design

Method: Literature review, video and musical analysis

Current state of the study: One peer-reviewed article has been published, a second is in the write-up phase, and the video analysis is being conducted.

Topic for the presentation: overview of the final thesis. The analysis process; event analysis, phenomenological analysis and transcript, musical analysis, interactional analysis and synthesis.

Julie Kolbe Krøier: How do music therapist relate non-verbally to persons with severe dementia living in nursing homes?

Supervisors: Professor Hanne Mette Ridder and Professor Brynjulf Stige

Titel of the study: Exploring person attuned musical interactions between carers and persons with moderate to severe dementia living in nursing homes

Research questions: Which theoretical, clinical and methodological elements define person attuned musical interaction (PAMI) with persons with moderate to severe dementia living in nursing home?

1. How is PAMI between carers and persons with dementia applied, understood and conceptualized according to evidence based research?
2. How do music therapists experience PAMI in their practice with persons with dementia?
3. a) How does PAMI unfold in the practice between carer and the person with dementia
b) Which musical components define PAMI with persons with dementia living in nursing homes?
4. How can PAMI can be disseminated to carers through a manual?

Research design: The study contains three parts:

1. A systematic review in order to explore the existing knowledge of how PAMI is understood and can be applied interdisciplinary in dementia care.
2. Six transcribed workshops where experienced music therapists are exploring PAMI analyzed by applying phenomenological text analysis.
3. Ethnographically informed participant observation of the interactions between carers and persons with dementia living in nursing homes.

Current state of the study: A systematic review and a meta-ethnographic synthesis were conducted on the use of “attunement” in dementia. The workshops data have been analysed and the results will be presented for two of the participating music therapists for peer validation. We have started to work on the PAMI-manual

Topic for the presentation: I will present the results of the workshop analyses and how I plan the do the peer validation of the results.



Rut Wallius: How can investigations and interventions at possible child abuse benefit from music therapy research? Developing an observation-based screening tool for child protection social work

Sheila Pereiro Martínez: Research study proposal: Active music therapy during weaning in mechanically ventilated patients

In collaboration with: Gustavo Gattino

Title of the study: Active music therapy and Posttraumatic Stress Disorder in patients during weaning from mechanical ventilation in the intensive care unit: A mixed methods study

Research questions:

Does the intervention with active music therapy affect the development of PTSD in patients in the process of disconnection of mechanical ventilation (weaning) in the intensive care unit?

In which way does the intervention with active music therapy affect the development of PTSD in patients in the process of disconnection of mechanical ventilation (weaning) in the intensive care unit?

Research design: My preliminary proposal shows a mixed methods design, in which qualitative and quantitative data can be obtained in parallel and analyzed in a convergent way. A randomized controlled Trial Design is suggested.

Method: It is planned to perform an intervention process with active music therapy during the weaning in patients with mechanical ventilation in the ICU. We propose the collection of physiological data pre, during and post weaning and 3 months after extubation. In addition, qualitative data collection is expected after 3 months of the extubation process completed with interviews.

Current state of the study: This is an initial proposal and for this reason, the study is in a previous phase of presentation, justification and acceptance.

Topic for the presentation: To introduce myself and my research idea, sharing with you my questions and reflections and taking in account your feedback, suggestions, comments,... to improve my proposal.

Tim Honig: GIM in the Treatment of Depression RCT: Work in Progress

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?

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

Phase II: 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?

Phase III: Case study 1. How does the client experience change in their lived experience of depression over the course of a series of GIM sessions? 2. How and to what extent are the three following factors related: the client's experience of change in their lived experience of depression, the client's imagery and session content, and the client's quantitative outcome measures of depressive symptomatology?

Research design: Mixed design with waitlist control group; mixed-methods case study

Method: Randomized controlled trial with a wait-list control group; descriptive case study using multiple types of data including interview, session materials, and quantitative data pertaining to the dependent variables

Current state of the study: The method and procedures for the RCT have been finalized. Final Ethics Approval hinges on approval of minor changes to the wording in several informational documents for recruitment. I have obtained a recruitment agreement from an outpatient mental health provider, who enthusiastically awaits permission to begin recruiting for the RCT. The Quality Assessment process has been refined and includes a treatment fidelity form that has been drafted and will be completed with feedback from two consulting researchers. That treatment fidelity form will be pilot tested in the first four-participant randomized block of the RCT and revised accordingly. A manuscript for the quality assessment process is being prepared. I received another grant to help fund the research: Research/Special Projects Award from the American Music Therapy Association–Mid-Atlantic Region, which will add to the funds already granted by the AMI Research Grant.

Topic for the presentation: The presentation will begin by outlining challenges and successes in the early stages of the RCT. Challenges include slow-downs due to the Ethics Approval process and difficulties recruiting a second clinician. Successes include successful applications for grants to partially fund the research and support from a key administrator to speed recruitment for the RCT. I will then outline the revised Quality Assessment process for the RCT, including a discussion of the form and attached manual for monitoring treatment fidelity in each of the GIM sessions.

Lectures and workshops at the course

Brian Bemman and David Meredith: Applications of music information retrieval in music therapy

The purpose of this lecture is to introduce some applications of music information retrieval in music therapy. The emphasis will be on providing a hands-on introduction to the programming environment, Matlab, for which many toolboxes relevant to music therapeutic practice and research have been created. We will focus in particular on using Matlab to extract musically meaningful information from audio and MIDI data. This lecture assumes no prior knowledge of programming.

Brian Bemman is a post-doctoral researcher at AAU working on computational creativity in music. His background is in computer science, music, and philosophy. Work for his PhD focused on the creation of algorithms for analyzing and generating music in the style of a particular composer. A key feature of these algorithms is that they attempt to model the actual compositional process of this composer. More recently, he has worked on evaluating computational models of rhythmic syncopation and the perception of high-groove music. His recent interests have led to exploring the use of computational tools for aiding music therapists and improving client care.

Technical Preparation

Prior to Monday afternoon's lecture, you will need to (1) install Matlab and (2) download two Matlab toolboxes.

1. Install Matlab R2019a

For AAU affiliated participants, the most easy way is to log in and follow the instructions through ITS: <https://www.ekstranet.its.aau.dk/software/mathworks/download-mathworks/>

Another way is to download link: <https://se.mathworks.com/downloads/>

After downloading the file above, double click to run the installer.

- Click on "Login with MathWorks Account" and accept the terms and services.
- If you do not already have Matlab through your university, click on "Create a MathWorks Account" and use your university email address.
You will need to input an Activation Key which will be emailed to your account.
- Choose the default installation folder.
- Chose the recommended products.

2. Download MIRtoolbox 1.7.2 and Miditoolbox 1.1

Download link:

<https://www.jyu.fi/hytk/fi/laitokset/mutku/en/research/materials/mirtoolbox/Download>

Download link: <https://github.com/miditoolbox/1.1>

To download the MIRtoolbox, you will need to provide your name and academic affiliation.



- Place both downloaded folders for MIRtoolbox and Miditoolbox in the "MATLAB" folder that was created when you downloaded Matlab. The "MATLAB" folder was likely created in your "Documents" folder.
- Open Matlab.
- Double click on the "MIRtoolbox 1.7.2" folder to the left in the "Current Folder" window.
- Click on the "HOME" tab at the top of the Matlab tool strip then click on "Set Path" to the right.
- Click "Add with Subfolders" and then save and close.
- Set the path in the same way for the "Miditoolbox 1.1" folder.

3. After you have successfully installed Matlab and if you have time, watch the two tutorial videos below:

<https://se.mathworks.com/videos/getting-started-with-matlab-68985.html>

<https://se.mathworks.com/videos/working-in-the-development-environment-69021.html>

More tutorials can be found here: <https://se.mathworks.com/videos.html>

If you don't have time, don't worry. We will go through all the basics together.

Suggested reading

Monday afternoon's lecture will primarily be a hands-on introduction to relevant computational tools. However, it would be useful to have a quick look through the following papers:

- [1] Erkkilä, J., Ala-Ruona, E., and Lartillot, O. (2014). "Technology and clinical improvisation – from production and playback to analysis and interpretation", *I: Music, Health, Technology and Design*, pp. 209–225.
- [2] Foubert K., Collins T., and De Backer, J. (2017). "Impaired Maintenance of Interpersonal Synchronization in Musical Improvisations of Patients with Borderline Personality Disorder", *Frontiers in Psychology*, 8, p. 537.
- [3] Sandak, B., Cohen, S., Gilboa, A., and Harel, D. (2019). "Computational elucidation of the effects induced by music making", *PLoS ONE*, 14(3), 1–22.
- [4] Hahna, N., Hadley, S., Miller, V., and Bonaventura, M. (2012). "Music technology usage in music therapy: A survey of practice", *The Arts in Psychotherapy*, 39(5), pp. 456-464.
- [5] Letulé, N., Ala-Ruona, E., and Erkkilä, J. (2018). "Professional freedom: A grounded theory on the use of music analysis in psychodynamic music therapy", *Nordic Journal of Music Therapy*, 27(5), pp. 448-466.
- [6] Streeter, E., Davies, M., Reiss, J., Hunt, A., Caley, R., and Roberts, C. (2012). "Computer aided music therapy evaluation: Testing the Music Therapy Logbook prototype 1 system", *The Arts in Psychotherapy*, 39(1), pp. 1-10.
- [7] Wärja, M. and Bonde, L. (2014). "Music as Co-Therapist: Towards a Taxonomy of Music in Therapeutic Music and Imagery Work", *Music & Medicine*, 6(2), pp. 16–27.

Bolette Daniels Beck and Inge Nygaard Pedersen: The process of registration and publication of RCT study protocols

Bolette Daniels Beck, associate professor, Department of Communication and Psychology, AAU.
See <http://vbn.aau.dk/en/bolette@hum.aau.dk>

Inge Nygaard Pedersen, associate professor, Department of Communication and Psychology, AAU.
See <http://vbn.aau.dk/en/inp@hum.aau.dk>

Reading preparation

Beck, B. D., Lund, S., Sjøgaard, U., Simonsen, E., Tellier, T., Cordtz, T., & Laier, G. (2018). Music therapy versus treatment as usual for refugees diagnosed with posttraumatic stress disorder (PTSD): study protocol for a randomized controlled trial. *Trials*, 19, [301].
<https://doi.org/10.1186/s13063-018-2662-z>

Jacob Gorm Davidsen: Video analysis: Seeing the unnoticed details of human interaction

In this talk, I will briefly present the historical roots of video analysis and address some of the theoretical and methodological assumptions of video analysis. Further examples of seeing the unnoticed details of human interaction will be shared based in my own research. Finally, I will share some basic recommendations for doing video analysis, including collecting video, achieving and editing video data and transcribing video.

Jacob Gorm Davidsen, PhD, is associate professor at the E-learning lab, Department of Communication and Psychology, Aalborg University (AAU). He has published on collaborative learning, problem based learning, and video based interaction analysis. He is board member of Video Interaction Lab Aalborg (VILA) and the PBL academy at (AAU). He is the co-editor of "Videoanalyse af social interaktion" (2018).

Gustavo Gattino: Interpreting statistical information in music therapy articles

Regardless of which type of research you carry out, you need to be able to interpret the statistical information from published research articles. In this lecture/workshop we will explore the statistics in a practical way by reading abstracts, statistical analyses and results from selected articles to see how we can interpret the information, especially considering the research design used.

Gustavo Schulz Gattino, PhD, is assistant professor at the music therapy programme, Department of Communication and Psychology at Aalborg University. He has worked as music therapist, lecturer, researcher in music therapy in Brazil and Portugal. Recently, he has worked as and researcher at Santa Catarina State University, Brazil, teacher of the Master Training Course in Music Therapy in Valencia, Spain, as as director of two postgraduate training courses in music therapy at the institutions Candeias College (Brazil) and São Fidélis College (Brazil). He has practiced music therapy with wide range of clients with special needs, including Autism Spectrum Disorder, multiple disabilities and cerebral palsy. He is a co-

founder and coordinator in Brazil of the Ibero-American Group of Research in Music Therapy. He has been a site manager of the TIME-A study in Brazil and an associate editor of the Brazilian Journal of Music Therapy. vbn.aau.dk/en/gattino@hum.aau.dk

Helen Odell-Miller: Current and future music therapy research for people with dementia and their family home carer

Helen Odell-Miller is professor of Music Therapy, Director of The Cambridge Institute for Music Therapy Research and Director, Cambridge Institute for Music Therapy Research (CIMTR) at the Faculty of Arts, Humanities and Social Sciences. Helen is a clinician, researcher, supervisor and teacher, and supervises PhD students. She is currently lead researcher for the international EU/Alzheimer's Society UK funded multi-site research project, HOMESIDE, an RCT trial for home-based music therapy for people with dementia and their family carer. Her research and clinical work has contributed to establishing music therapy as a profession, for over 40 years, and specifically to innovating approaches in adult mental health, including early links between music therapy and psychoanalysis. She has published widely on music therapy for people with personality disorders, psychosis and depression, and also on arts therapies and mental health. She founded music therapy in the adult NHS mental health service in Cambridge and advises HEE England and the Department of Health on music therapy, serving on many National and International Boards. She was co-founder of the Music Therapy MA at Anglia Ruskin University. For more information, see <https://www.anglia.ac.uk/people/helen-odell-miller>

Hanne Mette Ridder: Theory and research in the therapeutic use of music in dementia care at MT/AAU

For persons in late stages of dementia, music plays an important role in meaning-making, regulation and social engagement, and music therapy shows decreases in behavioural and psychological symptoms of dementia. In the lecture, I will present a theoretical understanding of music in dementia as well as ongoing research in the use of music in dementia care, and how music may be integrated in person-attuned interactions in therapy and in everyday activities.

Hanne Mette Ridder, professor of music therapy, Department of Communication and Psychology, AAU. Head of Doctoral Programme in Music Therapy. See <http://vbn.aau.dk/en/hanne@hum.aau.dk>