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The effect of music on the interaction and mental health of Danish families

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Registration date 16/03/2022	**Overall study status** Completed	
Last Edited 27/12/2024	**Condition category** Other	

Plain English summary of protocol

Background and study aims
The general mental health and interpersonal skills of families are crucial to the children's development and future. However, in Denmark there are not many services for families with school-aged children (7-12 years) that focus on prevention and strengthening family interaction and thereby also reduce the risk of children not thriving and developing optimally in terms of social and emotional competencies. It is known from a number of studies that there is a clear link between participation in music activities and individuals' own sense of mental health, as well as an effect in objective measures of health such as quality of life, social skills and rehabilitation of various kinds. The aim of this study is to asses the effect of music on the interaction and mental health of Danish families.

Who can participate?
Families with children aged 7-9 years at public schools

What does the study involve?
Participants are randomly allocated to one of three interventions:
1. Music therapy intervention: the approach in family-centred music therapy is mainly resource-oriented, with a focus on adapting to the family's individual needs. Flexibility and variety are often worked with in the family to strengthen the family's ability to meet and juggle daily demands.
2. Community music: the unique and essential goal of the Community Music intervention is to enable positive shared musical experiences between family members and to enable musical expression in the family. It is about exploring and enhancing musical creativity and musical abilities together.
3. Family concert: the primary goal for family-concerts is to provide families with shared and meaningful experiences to strengthen family well-being. This is includes concerts aimed at families in their description and/or title including both classical music and rhythmical music in both small and larger ensembles. The rationale behind these criteria is that included concerts should portray or represent regular possibilities in everyday life for families with children aged 7-9 years.

What are the possible benefits and risks of participating?
The researchers hope that the families enjoy themselves and each other's company in sharing music experiences and expressions in different settings. The interventions are expected to increase good emotional communication, decrease parental stress and improve child well-being. There is of course a risk that the families do not enjoy themselves, feel overstimulated and/or pushed into activities they either don't like or find too challenging.

Where is the study run from?
Aalborg University (Denmark)

When is the study starting and how long is it expected to run for?
January 2019 to March 2024

Who is funding the study?
Det Obelske Familiefund (Denmark)

Who is the main contact?
Stine Lindahl Jacobsen
slj@ikp.aau.dk

Contact information

Type(s)
Principal investigator

Contact name
Dr Stine Jacobsen

ORCID ID
https://orcid.org/0000-0001-8991-1078

Contact details
Musikkens Plads 1, 333
Aalborg
Denmark
9000
+45 (0)99409103
slj@ikp.aau.dk

Additional identifiers

Protocol serial number
951842

Study information

Scientific Title
Music, Families and Interaction (MUFASA): a randomised controlled trial

Acronym

MUFASA

Study objectives
It is predicted that through the targeted use of music therapy methods, group music therapy can enable families to strengthen family interaction as well as improve general well-being, decrease levels of stress in the parent and enhance the well-being of the child. Also, it is expected that through targeted community music activities, community group music can provide families with opportunities to strengthen family interactions as well as general well-being and decreased levels of stress in the parent and enhance well-being in the child. Finally, it is predicted that participating in family concerts will provide the families with opportunities to increase general well-being and decrease levels of stress for the parent and strengthen the well-being of the child.

Ethics approval required
Old ethics approval format

Ethics approval(s)
The study has been evaluated by the Regional Committees on Health Research Ethics for Northern Denmark and it was declared that ethics approval was not required.

Primary study design
Interventional

Study design
Randomized controlled trial

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Quality of life for families in Denmark

Interventions
The project is both a classical controlled effect study (pilot, before, after and follow-up measurement) and a correlation study of the relationship between participation in everyday art /music activities and parental stress, child well-being and parent-child interaction in the family. After inclusion in the study and baseline assessment, participants will be assigned to one of the study conditions. Paired samples randomization will be used to ensure equal distribution of types of families between each intervention and control. The allocation ratio of intended numbers of families in the comparison groups will be 1:1:1 so that the number of families receiving each intervention will be similar. Before random assignment is performed, it has to be confirmed by the investigator recruiting participants that the eligibility criteria have been met and participants are formally enrolled. The researchers decided to have three dyads in the music therapy (MT) group and 5 or 9 in the community music (CM) group. It will still be the same number of people, but the group size will be different. Once recruitment and data collection at baseline are complete and informed consent to participate in the study has been obtained, the respective randomisation code will be revealed to the investigator by an administrative person at the central randomisation office who will have no contact with the participants.

When comparing different interventions, it is important to be able to identify real differences between the interventions. Waltz and colleagues (1993) discuss how to secure interventions and

still keep them flexible to meet the need of participants. They suggest a differentiation between four different layers: Unique & and essential, essential, compatible and proscribed (Waltz et al., 1993). Working with the creative media of music and the dynamic complexity of families, developing a treatment guide can be quite a challenge. However, several music therapy research projects have successfully addressed the issue of creating clear intervention manuals and treatment guides (Geretsegger et al., 2015; Hannibal et al, 2019; Rolvsjord et al., 2005). Below are intervention guides for the active interventions including family-centred music therapy and community music therapy implemented in the MUFASA project including underlying theory, goals, role of the therapist, role of music, forms of intervention, techniques, and methods. There are no specific guidelines for family concerts as they are of a more receptive nature and not possible to control or impact within the scope of this project. However, the project did create criteria for which types of family concerts to include which are also described below.

Music therapy intervention

The unique and essential goal is to provide the family with the opportunity to strengthen their emotional communication and interaction (Waltz et al., 1993). It is about creating a safe, respectful, and non-judgmental environment where the family can experience positive interaction, strengthen their musical skills and confidence, and where they can play and explore different ways of being together. Perhaps new friendships can be made with other families, and the family may become more aware of the use of music (either as individuals and/or as a family). It is about making the family believe in themselves, strengthening their coping strategies and resilience and making them the primary change agents in their family life (empowerment). The goal is to help the family to become clear to each other, to find their own inner resources and to help them find good ways of being together (Jacobsen & Thompson, 2016).

The approach in family-centred music therapy is mainly resource-oriented, with a focus on adapting to the family's individual needs. Flexibility and variety are often worked with in the family to strengthen the family's ability to meet and juggle daily demands. There is no objective reality, but rather many different valid perspectives on understanding the different family members. The music therapist often focuses more on solutions than problems, and change is seen as constant and inevitable. Everyone is an expert in their own reality, or all experiences are acknowledged. All families have their own core values and beliefs and their own unique set of challenges.

The music therapist can both act as a role model for healthy and clear interaction and communication, but also needs to be constantly aware of not overshadowing the parent by forming a strong alliance with the child or conversely forming a strong alliance with the parent and overshadowing the child - this does not happen very often though as music therapists working with families tend to always meet the child's needs first. Regardless, imbalances in alliance must be avoided, so the music therapist also acts as a facilitator of parent-child interaction and attachment, and here it is often an advantage to be able to switch modes into music, where it is possible to take on several roles simultaneously. Indeed, one can act both as a support and as a pioneer in musical improvisations and settings. The music therapist is therefore also an active participant in musical activities. As the approach is family-centred, the whole family is involved and there is a strong focus on orienting and adapting to the family's dynamics, patterns and emotional needs. The music therapist also adapts to the family's musical skills and focuses on being welcoming, inviting, playful and flexible. Sometimes the music therapist helps facilitate the use of instruments and may also explain how music can be used intentionally. The music therapist is careful to refer according to current ethical guidelines and chooses activities that are appropriate to their own musical and therapeutic skills.

Music obviously has a very specific role, which links strongly to underlying psychology around parent-child interaction and relationships (Jacobsen & Thompson, 2016). The family's musical interaction can be understood as a reflection or mirror of the family's general communication patterns, and therefore the family's interaction can be strengthened and vitalised through music. Musical interaction between family members facilitates dynamic and varied social interaction and, depending on the need, the focus can be on the training of social skills in the form of, for example, mutual turn-taking or exploration of different patterns and roles. Music motivates engagement and involvement through play because music facilitates play and the inherent communicative functions of play (Jacobsen & Thompson 2016). Through musical play, interaction occurs naturally and spontaneously, and in music parents and children can experience intimate encounters and try out new patterns through shared timing, rhythm, pulse, melody and pitch. Music enables the sharing of feelings and thoughts, and can basically act as a common third, can help reminisce, explore identity and sometimes bring aesthetic and vitalising experiences (Willingham, 2021).

The primary focus is on improvisation, exploring non-verbal emotional communication and allowing the family to explore and experience their own and others' family patterns, family traits and family identity through music. The aim is to set up opportunities for family members to become straightforward to each other and to share meaningful experiences. Activities are group-based, with the music therapist inviting the use of different instruments and different ways of using the instruments. The music therapist may also use other music therapy techniques including songwriting and receptive methods, but not as primary activities. It is also about what the families themselves want and adapting the activities flexibly accordingly.

Community music intervention
The unique and essential goal of the intervention is to enable positive shared musical experiences and to enable musical expression. It is about exploring and enhancing musical creativity and musical abilities (Yerichuk & Krar, 2021). Of course, it must be a safe place for the family, so that family communication and individual self-esteem can be strengthened. For some families it may be about discovering particular genres or different preferences within the family, while for others it may be about forming new friendships across families or deepening existing relationships.

The approach to music with families is mainly resource-oriented, with a focus on flexibility, diversity, and facilitation. There is a parallel focus on process and product, and much of the approach is about listening and adapting to families' individual skills social as well as musical and allowing space for diversity across. It is about seeing opportunities rather than constraints and creating a safe space that is accessible to all and where everyone makes space for each other (Coffman & Higgens, 2012). At the beginning of the course, the focus is on getting to know each other and creating a safe space.

The role of the facilitator is to empower and make music accessible to families. Although the activities are based on the families' own social and personal skills and preferences, it is the facilitator who initiates and leads the activities to enable participation by all families and family members - possibly in turn (Higgens & Bartleet, 2012). It is about being welcoming, playful and flexible and helping families to get started using instruments or voice and including families and letting them be co-creators. The facilitator is careful to choose activities that suit the families and their own personal musical level and individual pedagogical considerations. Sometimes it makes sense to motivate families through their own musical skills, and other times it can have the opposite effect. It is the facilitator's role to keep an eye on this balance (Higgens & Bartleet, 2012).

Everyone has the right and ability to create and enjoy their own music. The role of music is to enable shared aesthetic and revitalising experiences and expressions. Music can be understood as a common third, and as something that enables social interaction (Higgens & Bartleet, 2012; Yerichuk & Krar, 2021). For some families it may be about exploring identity and evoking memories. Music motivates engagement and involvement through play because music facilitates play and the inherent communicative functions of play. Through musical play, interaction occurs naturally and spontaneously, and in music parents and children can experience positive encounters as also described in the music therapy intervention guide.

The content of the sessions consists of structured activities that facilitate positive musical experiences and expression. There should be repetition and a sense of practicing something together, collaborating on a specific product. The facilitator guides primarily group-based use of music, and other types of community music-focused activities such as singing games, circlesongs, stomp elements, etc. may also be included to a lesser extent. The facilitator has an eye on the difficulty of the activities also in relation to the start of the process, and facilitating a safe space for everyone.

Training facilitators
For it to make sense to compare and differentiate between the two active music interventions, according to Waltz (1993) it is necessary to describe them in detail and train facilitators of the intervention thoroughly. The MUFASA group worked towards making the level of “essential and unique” obviously different while elements of both “essential” and especially “compatible” and “proscribed” are more alike. The facilitators were trained separately and their training including reading the intervention guides and relevant literature and trying out the interventions in a role model format where co-trainees and voluntary music therapy students roleplayed different types of family dyads with children aged 7-8 years. Based on short descriptions of the dyads, the facilitator-trainee planned a session with activities, tried it out in the role-model format and received feedback from peers as well as members from the MUFASA group. The group discussions were also used to clarify and edit elements of the written treatment guideline. The trainees only had access to one intervention guideline to avoid confusion about differences and similarities and to not be influenced by the other guideline.

Concerts for families
The primary goal for family concerts is to provide families with shared and meaningful experiences to strengthen family well-being. The criteria for which family concerts families should be offered to participate in are developed together with Musikkens Hus in Aalborg and Musikhuset in Aarhus, respectively, which also have many years of successful experience in offering activities for families with school children. Due to COVID-19, it was not possible during the pilot study to choose or have families participate in family concerts. However, based on discussion with Musikkens Hus and Musikhuset the following criteria were chosen for the main study; concerts aimed at families in their description and/or title including both classical music and rhythmical music in both small and larger ensembles. The rationale behind these criteria is that included concerts should portray or represent regular possibilities in everyday life for families with children aged 7-9 years.

Duration: 2 hours 4 times in May 2022 for group 1 and group 2 (music therapy and community music groups). 10-12 concerts (1-3 hours) over 1 year for group 3 (concerts for families).

Intervention Type
Behavioural

Primary outcome(s)

Parent-child interaction measured using the Assessment of Parent-Child Interaction (APCI) at baseline, 3 and 12 months

Key secondary outcome(s)
1. Parenting stress measured using the Parenting Stress Scale at baseline, 3 and 12 months
2. Child properties measured using the Strength & Difficulties Questionnaire at baseline, 3 and 12 months

Completion date
01/03/2024

Eligibility

Key inclusion criteria
Families with school-age children (aged 7-9 years) invited from primary schools in Aalborg and Aarhus municipalities

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Mixed

Sex
All

Total final enrolment
18

Key exclusion criteria
Does not meet the inclusion criteria

Date of first enrolment
27/03/2022

Date of final enrolment
30/05/2022

Locations

Countries of recruitment
Denmark

Study participating centre

Aalborg University
Musikkens Plads 1, 333
Aalborg
Denmark
9000

Sponsor information

Organisation
Obel Family Foundation

ROR
https://ror.org/032wd7d36

Funder(s)

Funder type
Charity

Funder Name
Det Obelske Familiefond

Alternative Name(s)
Obel Family Foundation, The Obel Family Foundation, The Obelisk Family Fund

Funding Body Type
Private sector organisation

Funding Body Subtype
Trusts, charities, foundations (both public and private)

Location
Denmark

Results and Publications

Individual participant data (IPD) sharing plan
The data-sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		04/11/2022	07/11/2022	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes