Danish Journal of Musicology

47 · 2026

Særnummer

Music and Well-Being

Danish Journal of Musicology · Volume 47 · Special Issue: "Music and Well-Being" · 2026
Dansk Årbog for Musikforskning

Address
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ISBN 978-87-88328-38-7 (volume 47); ISSN 2795-0859 (online edition)

Danish Journal of Musicology is a peer-reviewed journal published by
the Danish Musicological Society on https://tidsskrift.dk/music

Musical Waypoints in Primary School

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Prologue[1]

> *At 7:45 AM, I arrived at our public school with my son in 3rd grade. The late-autumn morning feels dark and heavy, but the atmosphere is light and peaceful inside the classroom. Soft synthesizer chords fill the air, accompanied by the slow-moving image of a tropical waterfall on the smartboard. The pupils quietly pick up their drawing books and settle at their desks, focused and calm. As more children join the scene, the atmosphere remains harmonious, suggesting the school day is off to a pleasant start.*
>
> *Yet, on my way home, a question lingers in my mind – one that pulls at my identity as a composer and artist. What if the music were something more? Something richer, more nuanced, and alive? What if it had perceptible musical development, form, depth, and emotion instead of being more generic, perhaps AI-generated loops sourced from the endless stream of YouTube? The potential of these art forms – music and visual art alike – feels unfulfilled. If we want our children to grow into aesthetic beings, we must surround them with art that evokes and nourishes emotional attunement.*

The Musical Waypoints *Project*

The *Musical Waypoints* project seeks to enhance school children's well-being by fostering calm focus in classroom settings in Danish primary schools (grades 0–4) through audio-visual artwork consisting of specially composed music and animated video art. Through integrating artistic, pedagogical and scientific methods, the project's aim is twofold: 1) to provide an aesthetically pleasing artistic tool to support children and teachers in making transitions between activities (lessons/playtime) throughout the school day; 2) to integrate the resulting piece of art into a simple classroom intervention and test the effect of it empirically. As such it combines methods from two different traditions: artistic research, involving knowledge creation through practice and reflection, and scientific research, involving systematic empirical investigation.

1 Funding statement: The project was supported by *Kulturministeriets pulje til kunstnerisk udviklingsvirksomhed (KUV)*. Center for Music in the Brain is funded by the *Danish National Research Foundation (DNRF117)*.

In many classrooms across Denmark, music is already used in various ways to create a peaceful atmosphere. However, to our knowledge, teachers often resort to generic relaxation or meditation music playlists from platforms such as YouTube.[2] Although well-intentioned, this practice may expose children to unrefined soundscapes not tailored to their needs and the particular environmental setting. Consequently, music's and visual arts' full potential as a creative and engaging tool often remains unfulfilled.

The project was motivated by insights from two teachers who teach 0th and 3rd grade in a Danish primary school. For years, these teachers have independently and intuitively used relaxation music with visuals streamed from YouTube at the start of the school day (approximately 7:45 to 8:00 AM). Their rationale is simple: *"It works."* Collaboration between the authors and these teachers involved gaining access to their reasoning behind these original practices and their choice of music. This was enabled by firsthand relationships and the teachers' goodwill to play an active role in the project. Based on this foundation, new compositions and animations were made with the aim to increase the impact of their intervention. The focus remained on creating music that facilitates the transition from children's arrival in the morning to the start of the first lesson.

The *Musical Waypoints* project represents a departure from traditional production aesthetics in its approach to creating music and visuals for primary school children. At its core is the composition "Quiet Music" written for bass with a loop pedal and baroque flute. Characterized by a slow tempo, low frequencies, and a carefully crafted melodic structure and form, this piece was specifically designed to induce a low arousal state in the children. Furthermore, the project incorporates a simple scientific investigation of children's subjective experiences of their mental state. The project explores how thoughtfully designed artistic interventions may enhance children's well-being in learning environments by investigating the interplay between music, animation, and children's well-being. See Figure 1 for a project overview.

This article describes the initial phases of the project, which led to the development of a proposal for a larger research study of the effect of the intervention in school settings nationwide. We begin by outlining the need for a focus on well-being amongst schoolchildren. Then, we provide a brief overview of the empirical landscape, which points to gaps in the scientific evidence of the effects of music on well-being in the present context. Relevant theoretical concepts are then unfolded with a primary focus on aesthetic experience and resonance, and we describe the artistic approach to creating the project's audiovisual artworks. Finally, we describe the empirical investigation, the results of which point towards expanding the scope of empirical investigation into a full-scale national scientific intervention study and research project. Based on this, we sum up by outlining how we envision the project to continue.

2 E.g.: Video w. composition by Peder B Helland, uploaded to YouTube by the user, Soothing Relaxation. Duration: 3h 6min. Accessed Jan 15th, 2025, https://youtu.be/V1RPi2MYptM?si=u4fVLtioRwurOGIC

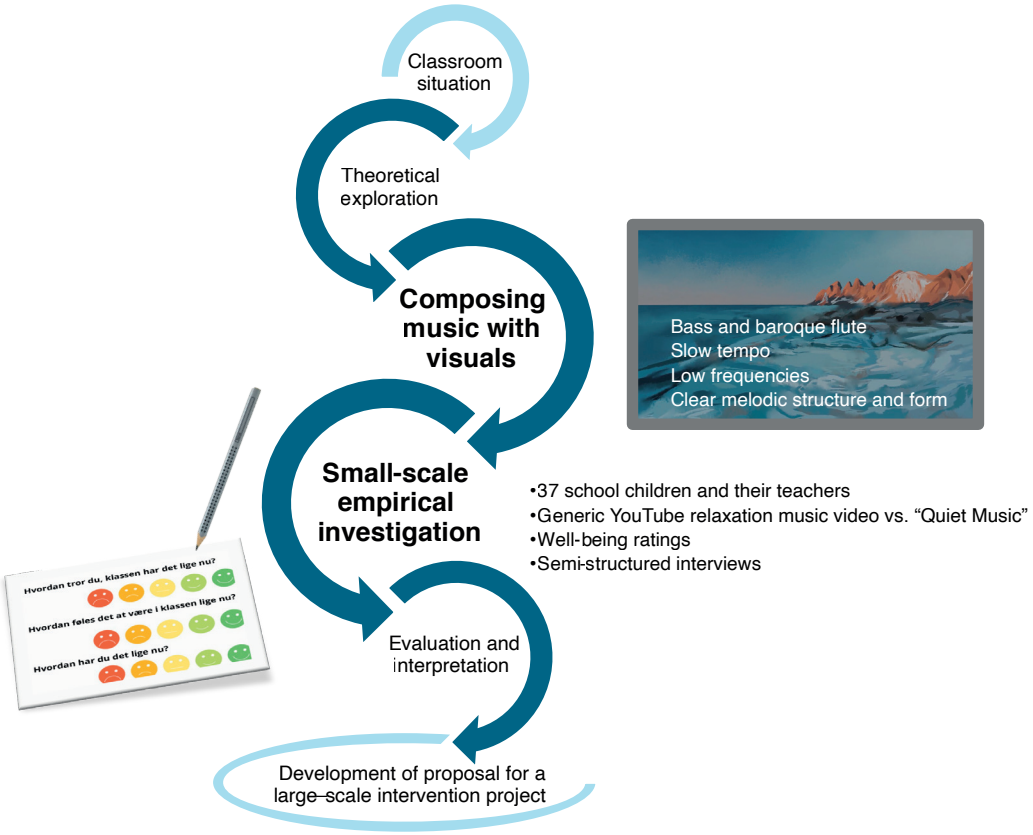

Figure 1. Overview of the Musical Waypoints project

Well-being and the Arts

The well-being of children and young people has received increasing attention recently, as national and international studies reveal declining well-being indicators.[3] At the same time, there is growing interest in the connection between art, culture, health, and well-being.[4] Active music making enhances well-being in school children,[5] and classroom-based choir singing as early as grade 0–3 has been suggested as a promising musical

3 Børns Vilkår, *Børn og unge kæmper for at passe ind* (Børns Vilkår, 2022); Sundhedsstyrelsen, *Danskernes sundhed: Den Nationale Sundhedsprofil 2021– centrale udfordringer* (Sundhedsstyrelsen, 2022).

4 Daisy Fancourt and Saoirse Finn, *What is the Evidence on the Role of the Arts in Improving Health and Well-being? A Scoping Review* (World Health Organization, 2019)

5 Katrina McFerran and Daphne Rickson, "Community Music Therapy in Schools: Realigning with the Needs of Contemporary Students, Staff and Systems," *International Journal of Community Music* 7, no. 1 (2014): 75–92.

intervention with potential benefits related to the strengthening of social networks and inclusion in the classroom.[6] Music research has also demonstrated links between music listening and various social and emotional functions including physiological and psychological health. Hence, music interventions are increasingly used for alleviating stress and physiological (e.g., heart rate, hormonal balance) and psychological (e.g., anxiety, restlessness) discomfort in a wide range of contexts.[7]

In an educational context this is particularly interesting as the links between positive emotions and student engagement are well established,[8] and ultimately linked to learning and academic achievement.[9] While the effects of background music on cognitive task performance are mixed and depend on a multitude of factors including personality traits, preferences etc.,[10] the effect on physiological and psychological arousal is more uni-directional. Specific auditory features of the music, such as tempo and intensity, play a substantial role in reducing heart rate, which in turn helps lower arousal levels.[11]

Previous studies of effects of background music in a school context have focused mainly on individual children's academic achievement, rather than on assessing well-being, which is the focus of the present project. Given the benefits of personalization, these previous studies have typically allowed children to use self-selected music, an approach that has proven effective for enhancing concentration compared to researcher-selected music. Moreover, the participants in such studies have generally been secondary school children, aged 13 years or older. In contrast, this project explores effects of background music with visuals in younger children (ages 6–10) in a social classroom context, where individualized music interventions are not feasible because these children do not have personal computers in the classroom. Therefore, for this age group, it is necessary to employ a group-based intervention.

6 Lars Ole Bonde and Stefan Ingerslev, "'Alle kan synge': Sangglæde og social og faglig trivsel i indskolingen via klassekorpædagogik og tolærersystem," in *Samsang gjennom livsløpet*, ed. R. V. Strøm, Ø. J. Eiksund, and A. H. Balsnes (Cappelen Damm Akademisk, 2022), 97–127.

7 Martina de Witte et al., "Effects of Music Interventions on Stress-Related Outcomes: A Systematic Review and Two Meta-Analyses," *Health Psychology Review* 14, no. 2 (2019): 294–324; Stephan Koelsch, "Music-Evoked Emotions: Principles, Brain Correlates, and Implications for Therapy," *Annals of the New York Academy of Sciences* 1337, no. 1 (2015): 193–201.

8 Ashley D. Lewis et al., "The Incremental Validity of Positive Emotions in Predicting School Functioning," *Journal of Psychoeducational Assessment* 27, no. 5 (2009): 397–408.

9 Ricarda Steinmayr et al., "The Importance of Students' Motivation for Their Academic Achievement – Replicating and Extending Previous Findings," *Frontiers in Psychology* 10 (2019): 1730.

10 Julia Vigl et al., "Melody for the Mind: Enhancing Mood, Motivation, Concentration, and Learning through Music Listening in the Classroom," *Music & Science* 6 (2023).

11 Edith Van Dyck et al., "Adopting a Music-to-Heart Rate Alignment Strategy to Measure the Impact of Music and Its Tempo on Human Heart Rate," *Musicae Scientiae* 21, no. 4 (2017): 390–404.

The Arts and Aesthetic Experiences

Central to this project is the concept of aesthetic experience, as defined by Austring & Sørensen,[12] which emphasizes the sensory, emotional, and symbolic dimensions of learning. They describe aesthetic experiences as an active, sensory-based process, primarily emotional and secondarily conscious, where curiosity, empathy, and the ability to decode symbols are key competencies of the recipient. The emotional resonance of these experiences is essential in opening individuals to the learning opportunities embedded within them. This process, referred to as *emotional attunement* (da: *stemthed*) by Pahuus,[13] highlights the importance of full-bodied engagement, where children are engaged, involved, captivated, and moved by what they encounter.

Rosa's Resonance *Concept*

Incorporating Hartmut Rosa's *resonance* concept further strengthens this project's theoretical foundation. Rosa defines resonance as a dialogical exchange "in which subject and world are mutually affected and transformed."[14] This idea is especially relevant to *Musical Waypoints,* which seeks to create moments of connection where children feel attuned to their environment through music and animation. The carefully composed music and visuals function as catalysts for resonance, inviting children to engage emotionally and cognitively with their surroundings in a way that fosters well-being and focus.

Rosa's theory identifies three dimensions of resonance: horizontal (relationships with family, friends and "the world"), diagonal (relationships with materials and objects), and vertical (relationships with broader existential or cultural contexts, such as art, nature, or spirituality)[15]. The *Musical Waypoints* project primarily engages the vertical dimension by providing an aesthetic experience that transcends the mundane and invites a deeper connection to the learning environment and the classroom. However, the horizontal dimension is also present, as the calming atmosphere created by the music and visuals supports harmonious social interactions among children and between children and teachers.

Moreover, Rosa positions resonance as a counterbalance to the alienation and detachment often caused by the accelerating pace of modern life. He argues that technological, social, or experiential *acceleration* can disrupt individuals' meaningful connections with themselves, others, and the world around them. The *Musical Waypoints* project offers an intentional slowdown, creating a space where children can experience

12 Bennyé D. Austring and Merete Sørensen, *Æstetik og læring* (København: Hans Reitzels Forlag, 2006), 162–163.

13 Mogens Pauhuus (1995), as cited in Austring and Sørensen, *Æstetik og læring*, 162–163.

14 Hartmut Rosa, *Resonance: A Sociology of Our Relationship to the World*, trans. James C. Wagner (Polity Press, 2019), 174.

15 Rosa, *Resonance*, 195–296.

resonance and a sense of presence that counters the fragmentation of modern educational environments.

Finally, Rosa emphasizes the unique potential of aesthetic experiences to foster resonance. He notes that art and music, in particular, provide tangible, sensory ways for individuals to connect with the world around them. In the context of this project, the interplay between slow-tempo music, low frequencies, and visually soothing animations creates a rich aesthetic landscape that invites children to engage deeply, promoting focus, a sense of belonging, and emotional attunement.

Løgstrup's Philosophy on the Arts

To address the project's foundational assumptions, we turned to K.E. Løgstrup's philosophy on sensation and art. This philosophy offers profound insights into how we experience the world through our senses. His reflections emphasize art's ability to refine and abstract sensory impressions, providing new ways to engage with reality.

According to Løgstrup, *sensation* (da: sansning) provides a direct and immediate connection to the world, occurring so naturally that we do not consciously reflect on how it happens. He explains that our access to the world is immediate and ongoing; we continuously and automatically engage with things and events without a need for deliberate attentional processing. Løgstrup refers to this as *distance-free* (da: afstandsløs)—an experience where what we see and hear is directly intertwined with our senses, unmediated by conscious thought. He further describes this immersion as a state where the perceiver becomes completely absorbed by the universe, leaving no part of themselves untouched. This way, *sensation* eliminates the separation between the individual and the world, creating a profound connection.[16]

This immediacy contrasts with *understanding* (da: forståelse), which introduces distance and analysis. While *sensation* is bodily and direct, understanding places sensory experiences within a framework of meaning. This distinction highlights the significance and impact of humanly created artwork. Løgstrup views art as a means to free us from the practical and everyday contexts in which sensory experiences are usually rooted.[17] He explains that engaging with art lets us briefly step out of the physical world and into a different realm. Art isolates sensory impressions, presenting them in a refined form. As Løgstrup notes, art reimagines reality, showing us how it might appear if certain foundational elements were removed or altered.

This connection between sensory immediacy and abstraction is especially evident in music and animation, which unfold over time. Both art forms guide the listener and viewer on a sensory journey—a progression from one point through an experience

16 Steffen Støvring, "Løgstrup," in *Lidenskab for liv: præsentation af fire eksistenstænkere* (Akademisk Forlag, 2017), 175–225.

17 Nils Gunder Hansen, *En afgrund af tillid: guide til Løgstrups univers* (Gyldendal, 1998), 194–223.

toward something new. This temporal quality reflects the natural rhythms of life, aligning sensory experiences with dynamics that promote calmness and focus.

Løgstrup also emphasizes music's ability to abstract sensory elements and liberate them from their typical cognitive and practical associations. As an art form, music enables us to engage with pure tones, harmonies, and rhythms, free from the interpretive frameworks that typically accompany listening. For example, when we hear birdsong, we immediately associate it with a bird. Music, however, distills sound into its essential components, fostering a deeper connection to its sensory essence.

Music and animation, with their structured temporal flow, support this principle by evoking a meditative awareness of the present moment while fostering anticipation of what lies ahead.

Central to this sensory engagement is the performing artists,[18] along with the composer and animator, who preserve and express the emotional resonance – or *emotional attunement* from sensation. Løgstrup[19] emphasizes that the meaning of a sensory impression is conveyed through its emotional resonance, which remains hidden until artistically articulated. For this articulation to succeed, it must reflect the original resonance of the impression, achievable only through transformation into an artistic form. The artist is thus tasked with refining and abstracting sensory elements to preserve their emotional and experiential depth, ensuring the resulting expression retains the richness and resonance of the original experience.

Creating "Quiet Music"

This project began with teachers using YouTube-animated music videos in a local school, prompting us to investigate whether tailor-made music could lead to enhanced aesthetic experiences. We reflected on the aesthetic potential of art and how resonance, as discussed by Rosa, might influence children's aesthetic experiences in the classroom.

To create the desired atmosphere, we considered which low-frequency, slow-moving musical compositions and instrumentations would be most effective. We also determined the type of animation that would best complement the music. The animator received two primary instructions: (1) incorporate forward-moving motion and (2) maintain a slow pictorial movement. The final result was a watercolor-animated landscape of mountains, created using 3D computer animation techniques that allowed the viewpoint to gradually immerse in the scene.

18 The performers contribute with their "ability to manage nuance in aesthetically significant ways." A. C. Lehmann, J. A. Sloboda, and R. H. Woody, "Expression and Interpretation," in *Psychology for Musicians: Understanding and Acquiring the Skills* (Oxford University Press, 2007), 85–106.

19 K. E. Løgstrup, *Kunst og erkendelse: Metafysik II: kunstfilosofiske betragtninger* (Klim, 2018), 11.

The music was recorded in a studio while the animation was completed alongside the final mixing and mastering process. Once finalized, the result entitled "Quiet Music" was uploaded to YouTube,[20] making it easily accessible for teachers to use in the classroom.

Empirical Investigation

To compare the effect of "Quiet Music" – the newly created music-with-visuals (henceforth MuVi) – with the relaxation MuVi that is typically played via YouTube in Danish classrooms, we designed an empirical investigation combining qualitative and quantitative methods to assess classroom well-being. The aim of the investigation was twofold:

1) to investigate differences in perceived well-being in the classroom after playback of approximately 10 minutes of either "Quiet Music" or MuVi streamed from YouTube, and
2) to serve as a feasibility study for a larger nationwide project which aims to implement and test MuVi routines in schools that currently lack such practices.

Methodology

A total of 37 primary school children and their teachers from grade 0 (n = 16) and grade 3 (n = 21) in a Danish primary school participated in the investigation. Owing to the school's teachers' yearlong positive experiences with MuVi playback, the children in these two classes were already accustomed to using MuVi streamed from YouTube for emotional alignment before the first lesson.

Over a two-week period, the school day started with playback of either "Quiet Music" or MuVi from YouTube. These were presented in random order four times each (Monday to Thursday morning). The children assessed their own and their impression of the classroom's well-being on a 5-point smiley scale immediately after 10 minutes of MuVi playback. Specifically, they responded to the question, *"How are you feeling right now?"* [DA: "Hvordan har du det lige nu?"] and *"How do you think the class is feeling right now?"* [DA: "Hvordan tror du klassen har det lige nu?"]. Children in grade 3 also responded to the question, *"How does it feel to be in the classroom right now?"* [DA: "Hvordan føles det at være i klassen lige nu?"]. As such, the questions were designed to assess well-being at individual and social levels, rather than the children's aesthetic judgments of the two different kinds of MuVis.

Teachers used the same 5-point smiley scale to assess the well-being of the classroom as a whole both before and after the music sessions, and they provided additional

20 "Quiet Music" composed by Torben Westergaard, w. animation by Lukas Ø. Damgaard, video uploaded to YouTube by Torben Westergaard. Duration: 10min 22sec. Accessed Jan 15th, 2025, https://www.youtube.com/watch?v=Ieo1EqwOLG4

evaluations and comments in writing after the first week's intervention. The investigation concluded with short semi-structured interviews with two teachers, one from each grade, to provide qualitative insights into their experiences with the two different kinds of MuVi and the logistics surrounding the children's participation in the investigation.

Findings

Children's Perspective

Children's well-being ratings were compared between the two MuVi conditions. Because of the exploratory nature of the investigation, the relatively small sample size (n = 37), and the limited number of MuVi playback repetitions (four per condition), no inferential statistics are reported here. Interpretation of the data is therefore based on descriptive statistics and visual inspection of the raw data, which in turn show some clear patterns.

Figure 2 shows the distribution of responses into the five smiley response categories, separately for each MuVi condition. It summarizes all the data and as such, each child is represented up to 16 times for grade 0 (8 days x 2 questions) and 24 times for grade 3 (8 days x 3 questions). The figure shows that across all questions, "Quiet Music" (the black bar) was more often rated using the most positive smiley (5) than the second most positive smiley (4), while the opposite is the case for the MuVi streamed from YouTube. The YouTube MuVi was more often rated as second most positive (4) than as most positive (5). Thus, it appears that in the present context, playback of the specially composed MuVi "Quiet Music" resulted in increased well-being compared to playback of the MuVi streamed from YouTube.

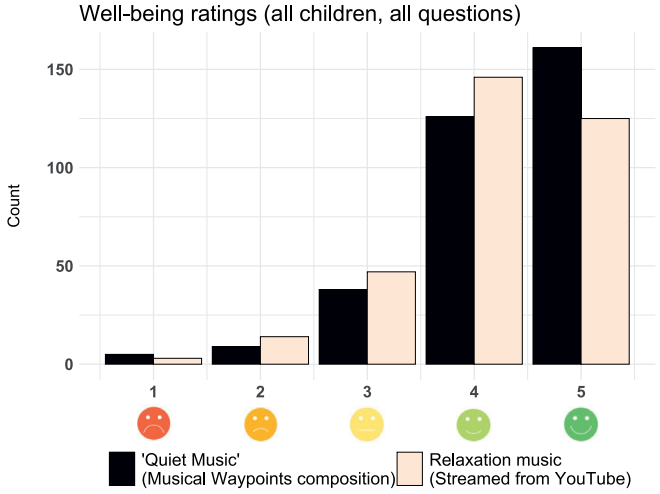

Figure 2. Bar graph showing all ratings collected after playback of the two MuVi conditions. Over eight days, children rated each MuVi four times in random order using the smiley scale. Grade 0 responded to two questions and grade 3 responded to three questions.

Looking more closely at the ratings within each class, it appears that the higher well-being ratings in "Quiet Music" are driven by the ratings of children in the 3rd grade. In Figure 3, which shows mean ratings split by grade and question, it is evident from the steeper slopes of the dark red lines that the apparent effect of MuVi condition was more pronounced among 3rd-grade children and particularly so in response to the question *"How do you think the class is feeling right now?"*. It is also clear that children in both grades rated current classroom well-being (narrow dashed lines) higher than they rated their own current well-being (solid lines). Finally, considering the well-being challenges in today's society, it is somewhat comforting that the vast majority of the children used the positive end of the rating scale, although ratings in grade 3 were generally lower than ratings in grade 0.

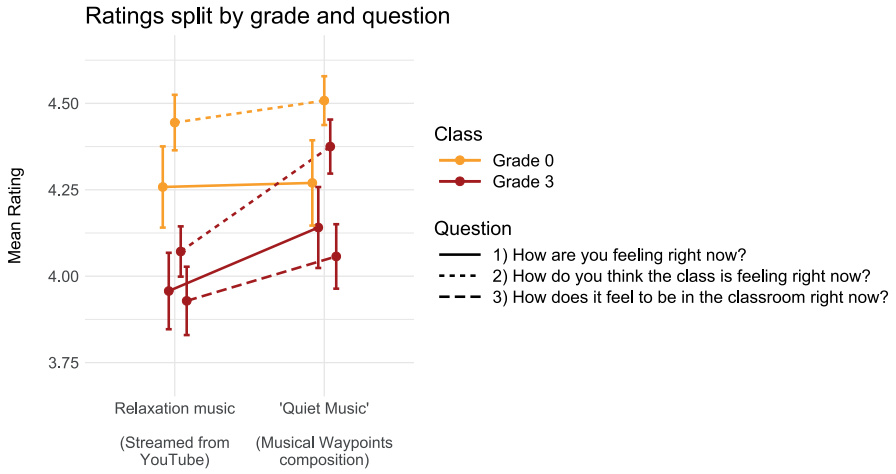

Figure 3. The plot shows children's average responses to each of the well-being questions after playback of relaxation music streamed from YouTube and Quiet Music, i.e., the composition created for the present project.

Teachers' Perspective

Interestingly, while the children, most obviously in grade 3, rated well-being after "Quiet Music" playback higher than after YouTube MuVi, the teachers did not notice any differences in the children's behaviors between the MuVi conditions as evident from the semi-structured interviews conducted at the end of the two-week intervention. This notion is supported by the teachers' smiley ratings. A comparison of their ratings before and after MuVi playback revealed an increase of approximately half a scale point, yet again with no specific advantage of one or the other type of MuVi. Note, though, that with just two respondents the statistical power is much too weak to draw firm conclusions based on these quantitative data.

Although they did not notice differences in the children's behavior, the teachers did point to noticeable differences when asked about their impression of the two different kinds of MuVi. "Quiet Music" was described as having "something more," being more nuanced, and with "something in the music standing out more," all of which were perceived by the teachers as more pleasant, providing a sense of inner peace.

Both teachers mentioned in the interviews that the MuVi routine in itself provided a structure that was beneficial for the children's level of arousal in the classroom. The daily requirement to fill out the questionnaires during the two weeks added to this routine in that children knew what they were expected to do once the MuVi came to an end and the lesson started. They also mentioned that the beneficial effect of MuVi playback was highly noticeable, "that music means peace and quiet," but also that "the effect probably only lasts as long as the music plays." Still, giving the children a serene start of the day was perceived as valuable.

Discussion

Combining insights from educational practice, aesthetic theory, and sociological concepts of resonance, the *Musical Waypoints* project explores the extent to which carefully designed artistic interventions can address the complex well-being challenges of today's young generation. The project addresses these challenges by building on the experiences of primary school teachers who have used background music from YouTube to support transitions between activities. By introducing specially composed music and accompanying animations, the project aims to move beyond generic solutions such as relaxation and meditation playlists sourced from YouTube. The composition, "Quiet Music", is designed specifically for school children and tailored to create meaningful moments of calm, focus, and engagement in the classroom. The composition offers both artistic depth and emotional attunement, as well as psychological benefits, serving as a bridge between aesthetic experience and well-being in educational settings.

The empirical part of the project involved testing the effects of "Quiet Music" against the typically used YouTube MuVi on children's well-being in the classroom setting. The children's well-being ratings were higher after listening to "Quiet Music" compared to YouTube MuVi, with grade 3 showing the strongest effect, especially when rating classroom well-being. The teachers, however, did not observe behavioral differences between the conditions. Although their ratings increased, they increased similarly after both MuVi types. Furthermore, the teachers described "Quiet Music" as more nuanced and pleasant, providing a sense of inner peace. They also highlighted that regardless of the MuVi type, the MuVi routine itself, including the subsequent pen and paper ratings, helped to decrease the overall arousal level in the classroom. The calming effect was, however, seen as lasting only a limited period of time.

According to one of the teachers, the reason for the experienced lack of difference between the two kinds of MuVi was that there was not much room for improvement. One teacher explained that they had spent the past 10 years narrowing down the selection of YouTube videos to only the most effective ones. When asked to play a MuVi that they would normally play in the classroom setting, they picked one that was already very fitting for the purpose.

One might ask why we chose to run this initial investigation in a school which already had experience with MuVi playback in the classroom. Because the children were already accustomed to using MuVi streamed from YouTube for emotional alignment before the first lesson, we could make reliable relative comparisons between the effects of the two types of MuVi on well-being in the classroom, as opposed to assessing the absolute effects of MuVi playback compared to no MuVi playback. The latter effect may be confounded by a number of other factors, such as novelty effects or the general impact of introducing any structured intervention into the classroom environment, which could independently influence well-being regardless of the specific content of the intervention. An example of non-specific factors influencing well-being was the introduction of not only the MuVi but also the questionnaire into the children's daily routine, which the teachers highlighted as having a positive effect. Yet because the routine was the same across MuVi conditions, it is safe to assume that it also affected the children's ratings similarly.

Another relevant question is why we chose recorded over live music when the aim was to create meaningful musical experiences for the children in the classroom. Indeed, live music in clinical settings contributes to meaningful moments and may reduce anxiety and stress.[21] Also, it may offer relational benefits—such as social presence, real-time responsiveness, and joint attention—that some research links to greater health-related quality of life in clinical settings.[22] Importantly, however, the present project sought to maximize feasibility, repeatability, and to make the routine available in every classroom. Recorded music was therefore used in order to support a routine daily practice by providing a consistent dose and minimizing teacher workload, while again controlling effects of potential confounding variables unrelated to the music itself. Whether positive effects of live music occur in classrooms is an open empirical question and warrants a structured comparison that considers both outcomes and implementation costs.

With the current design it is not possible to discern whether playing MuVi in the classroom is better than introducing any other structured intervention, for instance a

21 Linette Thorn et al., "Live Music in the Intensive Care Unit—A Mixed-Methods Pilot Study Exploring the Experience and Impact of Live Music Played for the Adult Intensive Care Patient," *Australian Critical Care* 38, no. 1 (2025); Pia Dreyer et al., "Live Music in the Intensive Care Unit – A Beautiful Experience," *International Journal of Qualitative Studies on Health and Well-Being* 19, no. 1 (2024).

22 J. Matt McCrary et al., "Association of Music Interventions with Health-Related Quality of Life: A Systematic Review and Meta-Analysis," *JAMA Network Open* 5, no. 3 (2022).

drawing, knitting or board game intervention. To allow such conclusions to be made, we would need active control conditions which included one such task. Similarly, to assess the absolute effect of MuVi playback, we would need a passive control condition, i.e., one in which the children also rated their well-being after no MuVi playback. Both such conditions could be relevant to include in a larger study, particularly when the aim is to introduce MuVi routines into schools without such practices.

Along the same lines, we do not assert that any single piece of high-quality art music consistently outperforms well-selected generic compositions on every measure of well-being. Rather, the arguments we make based on this project are that calm, focused musical routines have inherent classroom value; that the implementation of high-quality, intentionally composed music may add to this value; and that the subgroup patterns of children's responses in this project suggest that high-quality art music may provide additional benefits worth testing at scale – both for momentary well-being and for developing aesthetic attunement over time.

A concept central to the Musical Waypoints project is *artistic citizenship*, which emphasizes how art can and must play a role in the challenges of society. We believe that the combination of artistic research and scientific research qualifies this particular aspect. The ultimate aim of the Musical Waypoints project is to enhance well-being in the classroom with artistic expression serving as the means to achieve it. In addition, we used scientific methods to assess whether the artistic intervention created for the project outperformed the generic relaxation playlists typically used in Danish classrooms.

Our artistic position aligns with the Health Musicking concept,[23] which understands musical materials, i.e., composition, timbre, and form, as affordances appropriated differently across contexts and over time; high-quality artistic choices broaden the range of beneficial affordances without necessarily assuming uniform responses. We designed Quiet Music with a slow tempo, emphasis on low to mid frequencies, gradual changes in volume, clear phrasing and form, and high predictability; all parameters that align with Wärja & Bonde's therapeutic taxonomy of "supportive," low-intensity, "safe" music and with related playlist practices in clinical settings.[24] Our target state was calm alertness: down-regulation without sedation, with a gentle sense of forward motion to support the transition into the first lesson. Instrumentally, the bass (with loop pedal) provides stable low-frequency grounding, while the baroque flute offers breath-paced, human timbre without sharp transients—features consistent with supportive profiles in that taxonomy. Conceptually, this specification operates at the micro level (individual regulation) with intended spillover to the meso level (classroom climate), following the Health Musicking model's ecological layering of practice (Bonde et al., 2023). Teachers' interview language

23 Brynjulf Stige, "Health Musicking: A Perspective on Music and Health as Action and Performance," in *Music, Health, and Wellbeing* (2012), 183–195.

24 Lars Ole Bonde, Karette Stensæth, and Even Ruud, *Music and Health: A Comprehensive Model* (Centre for Research in Music and Health [CREMAH], Norwegian Academy of Music, 2023).

("something more,") suggests that these compositional affordances were perceptible even when immediate behavioral indicators did not clearly distinguish conditions.

The findings of the empirical investigation reported here suggest the potential benefits of integrating structured music routines into school practices. While the scale of this initial investigation is small, the results are promising and highlight the need for further exploration in broader contexts with additional passive and active control groups targeting absolute and relative effects of classroom interventions independently.

Epilogue

> *What began as an intuitive pursuit sparked by an autumn morning at a public school ultimately led to the creation of "Quiet Music" – an artistic work of music and animation that would not have existed without this project. This intuition was driven by curiosity, creative expertise, confidence, and the quest for truth in artistic expression, aimed specifically at engaging the local schoolchildren.*
>
> *In this way, artistic creation is a profoundly personal act – staying true to oneself – and an offering to others who may resonate with it. What made this project unique was that we not only shared the music with those who might be interested but also committed to testing our intuition, taking the risk to see if it held value beyond personal artistic conviction. We arranged a collaboration with a local school, where we tested "Quiet Music" against existing YouTube offerings – something artists do not typically embrace.*
>
> *What we found in Løgstrup's philosophies on art, sensation, and understanding became a way to articulate what the scientific findings – though based on a small dataset – also suggested: that art is created through resonance. It then allows others to more easily enter into emotional attunement (stemthed) themselves. This, in turn, fosters a deeper connection to oneself and one's surroundings.*
>
> *True art, it seems, has that "something extra." And, following up on Løgstrup,*[25] *if every encounter with another person means holding a part of their life in our hands, the question is: will we give our children anything less than the best possible?*

The authors wish to thank the children and teachers who generously shared their time, thoughts, and energy with us while participating in this project. Cecilie Møller wishes to dedicate this work to the family of Torben Westergaard in ever-present memory of a dear and ever-present collaborator and friend.

25 Nils Gunder Hansen, *En afgrund af tillid: guide til Løgstrups univers* (Gyldendal, 1998), 17.

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Abstract

Children's and adolescents' well-being has become an area of heightened concern recently, as national and international surveys have shown declining well-being indicators. Concurrently, researchers have increased focus on interrelations between art, culture, health, and well-being. Focusing on the influence of background music on young children's well-being in classroom settings, the Musical Waypoints project combines artistic and scientific research methods. After creation of mindfully developed audiovisual artwork, we conducted a small-scale classroom investigation to explore whether the resulting "Quiet Music" enhanced children's well-being more effectively compared to the relaxation YouTube videos used by teachers in their existing routines. Although teachers reported no behavioral differences between conditions, the children reported higher well-being ratings after "Quiet Music" with the strongest effects in grade 3. The project and its results are discussed in light of theoretical frameworks on resonance and aesthetic experiences, highlighting feasibility and implications for scalable music-based well-being interventions in schools.

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