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Adults' engagement in music learning during and after online coaching

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ABSTRACT
This article sheds light on adult engagement in a learning activity during and after online coaching on piano, guitar, or songwriting. Data was collected from the participants using thematic semi-structured interviews and experience sampling. To investigate the extent to which adult learners are involved in learning during and after online music coaching, we analysed the visibility of four components of engagement – namely behavioural, cognitive, affective and social. During the coaching, flexibility, a regular and repetitive course structure and the learning community positively influenced engagement. However, only a few participants continued their active music-making after the coaching period ended. A lack of time and goals were potential explanations for non-continuance, whereas participation in a music-related community beyond the coaching was recognised as a potential factor in continuing to make music when it stopped.

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Adult learners; engagement; online music course; non-formal learning environment

Introduction

Opportunities and motivations vary in terms of engaging in music education throughout the life span, and many people begin or continue studying music as adults (Tsugawa 2009). Most music learning in adulthood is non-formal or informal, taking place outside of school venues (Folkestad 2006). The development of digital technology continuously brings about ubiquitous new possibilities for lifelong music learning (Ojala 2017; Partti 2017; Ruokonen et al. 2019). One could even argue that the digital revolution has democratised (music) education by offering almost anyone the chance to upload their own educational content on the Internet (see e.g. Partti and Karlsen 2010; Waldron 2013). However, there are wide-ranging challenges related to pedagogical quality, for instance, and to language and responsiveness in the instructional video content of user-generated content (UGC) on the Internet (Schmidt-Jones 2021). Hence, rather than solely depending on UGC adult learners are also seeking music education in more organised and goal-oriented learning environments.

In the following, we describe a study investigating adult learners' engagement in a learning activity during and after online music coaching. The study was conducted in a learning environment created by a Finnish company called Rockway (http://rockway.fi/), which has been providing a wide variety of music-related online learning materials since 2007. The study reported in this article investigated Rockway's new service, entitled 'Coaching', which they launched in 2020. Coaching in this context refers to eight-to-ten-week-long online courses on piano, guitar or

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songwriting, offered by Rockway. All the courses had a similar weekly structure, including the publication of learning materials and a webinar with the coach. Learning materials were published in a Facebook group and webinars were conducted on Facebook and via Zoom. Webinar recordings were also available to the participants. Each week included new assignments, such as playing a song in a particular style or composing a chord progression. Inherent in many of these assignments was the possibility of submitting them in audio or video format in order to obtain feedback from the teacher and the other participants.

The majority of research on engagement has been carried out in schools and universities, thus often missing informal and non-formal learning settings (Ben-Eliyahu et al. 2018). In the context of music education, the very concept needs clarifying (Wang 2021). Scholars tend to perceive engagement in music as something that professional as well as future musicians – meaning those studying music in higher education – already possess (see e.g. Jääskeläinen 2023). Thus far, however, pedagogical practices that could help music hobbyists to engage in musical learning are understudied. In fact, adult learners (Harnum 2007), and more specifically their musical learning in online environments (Bayley and Waldron 2020), have been overlooked in research on music education. In order to bridge these knowledge gaps, the current study seeks an answer to the following question: How do adults engage with music learning during and after online coaching?

Engagement in non-formal online learning environments

Given that the coaching took place outside of the formal educational system, but still required a 'coach' and tightly structured weekly programmes, the learning environment could be described as non-formal (see Figure 1). In other words, it is located somewhere on the continuum between formal and informal learning (see Folkestad 2006). Learners in informal education acquire skills and knowledge independently of any educational structure, whereas non-formal education (NFE) is an organised process with educational objectives set by someone other than the learner (Rogers 2005, 75). NFE is usually characterised as easily accessible, participatory, learner-centred and holistic (Rogers 2005). Hence, compared to formal education characterised by heavily structured, often compulsory systems, it allows learners more space for spontaneity (Romi and Schmida 2009). Typically, NFE consumers participate in their studies voluntarily during their leisure time, and often 'enjoy feelings of belonging, as it legitimises their norms of behaviour, even those bordering on adventurism and risk taking … without fearing the reactions of the surrounding' (Romi and Schmida 2009, 267).

Engagement has been studied extensively during the past decade (Ben-Eliyahu et al. 2018; Salmela-Aro et al. 2021), the aim being to explain a wide range of activities that improve learning (Wang and Eccles 2013). Researchers investigating engagement are typically interested in how and why students focus on and invest in their studies, and how they interact in diverse educational settings over time (Salmela-Aro et al. 2021). Broadly defined, engagement is a multidimensional construct that could be linked with motivational concepts such as affect, liking, belonging and valuing (Salmela-Aro et al. 2021). Hence, the relationship between motives and engagement could be described as reciprocal (Vahlo, Tuuri, and Välisalo 2022).

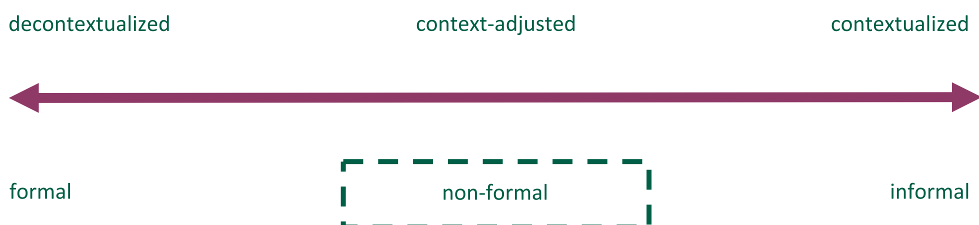

Figure 1. Formal, non-formal and informal learning environments along a continuum (Rogers 2005, 260).

Engagement has been conceptualised as comprising different distinguishable components, perhaps most commonly behavioural, affective and cognitive (Fredricks, Blumenfeld, and Paris 2004; Wang and Eccles 2013). Having reviewed the literature on student engagement (e.g. Furrer and Skinner 2003; King 2015), we also found it useful to include the social dimension in our examination. Given our aim to investigate how actively adult learners engage in learning music in a nonformal environment, we chose to focus on the four aspects of engagement introduced by Bowden, Tickle, and Naumann (2021), namely behavioural, cognitive, affective and social. These four aspects are analytically separable even though, in practice, they can be intertwined, especially in the context of art education (Marrucci and Piazzoli 2017).

Behavioural engagement refers to participation and activities related to learning (Bowden, Tickle, and Naumann 2021, 1212). It could be understood as active attention, concentration and behaviour (Skinner 2016). Our focus in this research is on a wide range of behavioural engagement, including becoming familiar with new learning materials, practising and discussing the subject of the coaching with the teacher or a peer (cf. Ben-Eliyahu et al. 2018). Given that online learning is essentially mediated, we also draw from studies on media engagement (Koistinen, Ruotsalainen, and Välisalo 2016), and include in our conceptualisation of behavioural engagement activities that do not take place on the course platform or with the materials, such as finding and engaging with other content related to the course topic.

Cognitive engagement refers to mental effort and the strategies learners use in learning situations (Wang et al. 2019). It could be defined as paying attention and focusing, and is reflected in the planning and organising of learning (Bowden, Tickle, and Naumann 2021, 1213). Although some scholars differentiate cognitive engagement from task-specific cognitive strategies (Ben-Eliyahu et al. 2018), in our view it includes learners analysing their own learning strategies, and purposefully developing and trying new strategies and learning practices (cf. Wang and Eccles 2013).

Affective engagement here concerns emotions related to learning (Bowden, Tickle, and Naumann 2021, 1212), including the feelings that learners have about the learning environment or the task (Fredricks, Blumenfeld, and Paris 2004). It has been suggested in recent research that positive emotions such as enjoyment and optimism related to the learning activity correlate positively with academic performance, whereas negative emotions correlate negatively (Camacho-Morles et al. 2021; Sainio et al. 2021). However, different negative emotions may have different effects on engagement. For instance, boredom is seen as a strong indicator of detachment from the ongoing activity, whereas tiredness may just indicate a lack of sleep; furthermore, some negative emotions, such as confusion, may lead to active inquiry (Ben-Eliyahu et al. 2018). Our approach to affective engagement in this research is based on our understanding of affect as something that takes on a linguistic form, even though we also recognise its existence as a bodily, sensory response (e.g. Rozin 2002).

Social engagement means orienting towards cooperation and interaction with others in the learning setting (Bowden, Tickle, and Naumann 2021, 1212–1213). It could also be understood as identification with peers, teachers or other related figures, or a sense of belonging (Bowden et al., 2021, 1212). Research carried out in school contexts has shown that both the quality of the teacher – student relationship (Hughes, Im, and Wehrly 2014; King 2015; McGrath and Van Bergen 2015) and a sense of belonging in a peer group (Furrer and Skinner 2003; Wang and Eccles 2013) have a significant impact on school achievement. The role of the teacher and the peer group in informal or nonformal learning environments has received less research attention.

Materials and methods

Study participants

The 21 study participants were receiving various types of coaching (see Table 1). We recruited them in cooperation with the provider of the coaching service using multiple channels: the course

Table 1. The distribution of research participants (N = 21) in online music courses: one person participated in both Pop/Rock Piano Accompaniment and Basics of Acoustic Guitar.

	All participants	University students
Basics of Piano Accompaniment	4	3
Pop/Rock Piano Accompaniment	7	5
Basics of Acoustic Guitar	5	3
Basics of Electric Guitar	1	0
Basics of Song writing	5	2

information email sent to participants before the course started, a message on the online platform posted by the teacher, a video message from the researchers posted on the online platform, and a personal invitation from the researchers given during a course webinar. All the participants were adults between 20 and 63 years of age, with an average age of 38, and they represented a wide range of occupational fields. A limited number of university students in educational sciences were given the possibility to take part in the coaching free of charge. Free participation was offered by the company as a marketing method, and it gave the students an opportunity to continue their music studies beyond the university courses. As a result, there were 12 student teachers among the participants. However, participation in the study was voluntary also for the university students. All the data were gathered in accordance with the Helsinki Declaration and its later amendments. The ethical review was conducted according to the Finnish National Board on Research Integrity guidelines (2019): further evaluation was not required as the research participants were adults who had given their informed consent, the data collection did not intervene with their physical integrity or cause them mental harm, nor did it involve a threat to their safety.

Data collection and analysis

The data were collected using two different methods, thematic semi-structured interviews and experience sampling method (ESM). All the participants were interviewed during the coaching and were invited to participate in an experience sampling period and in a second interview after the coaching. The first round of interviews included 21 participants, and 18 of them agreed to take part in further data collection. These participants were included in the 14-day data-collection period using ESM. Eventually 15 participants answered the ESM surveys. A second round of interviews were conducted after the coaching. From the initial 18 participants, three did not participate in this second round (see the timeline in Figure 2).

Thematic semi-structured interviews were conducted online using the Zoom video-conferencing service. This choice was made due to the restrictions in place at the time related to the global Covid-

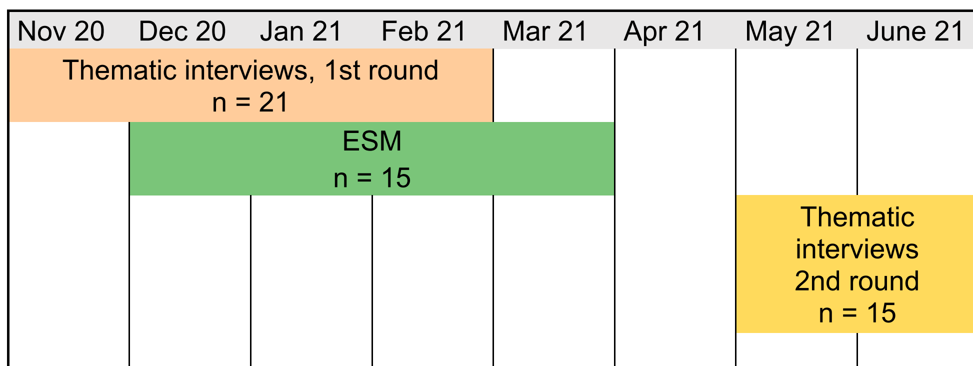

Figure 2. The data-collection timeline.

19 pandemic. Two of the authors conducted the interviews using an interview structure designed by the whole research group. The following topic areas were included: musical activities and the role of music in the participants' lives, learning music, learning in general and online learning in particular, and motives for and experiences of participating in the music coaching. The second round of interviews also included learning outcomes as a topic.

The experience sampling method (ESM) is used to gather information about people's immediate experiences in their everyday lives, and about changes in these experiences over time and in different contexts (Hektner, Schmidt, and Csikszentmihalyi 2007, 3, 32; Fisher and To 2012). We used ESM to complement the interview data: it captures immediate or recent experiences and activities, whereas interviews are more retrospective in nature. We applied ESM in this study using a mobile application called the PIEL Survey, a tool developed specifically for this method, which the participants downloaded into their mobile devices. A mobile application was chosen given the ubiquitous nature of mobile devices in everyday lives, and was thus meant to lower the threshold for participation. The application prompted participants to answer a short survey each day consisting, primarily, of closed-ended questions and covering their everyday experiences and activities with the coaching during a 14-day period.

The interview data was coded in Atlas.ti software, and the codes were further grouped to form broader topics. The coding was done using a coding schema based on the interview structure. We further analysed the interview data by deciphering the connections of the codes with different components of engagement during and after the coaching.

Results

In the following we present an analysis of the participants' engagement with music learning during and after the coaching, based on the interviews and ESM. We used the four aspects of engagement (Bowden, Tickle, and Naumann 2021) to arrive at an understanding of how it is structured in this context, although in interviews, these different components were often blended or intertwined in our data.

Behavioural engagement during the coaching

ESM revealed some of the everyday patterns of engagement. On average, the participants reported either going through the course materials or doing exercises or assignments on eight days (SD = 2.44, range 4–12 days) during the 14-day period. We also asked them whether they had engaged in other activities related to the coaching, such as discussing its contents with others, following news, online discussions or other media content related to the topic, or using the contents of the coaching in their work or studies. They reported such forms of engagement during ten days, on average (SD = 3.86, range 3–14 days) during the period. Thus, engaging in other activities was more common than engaging with the coaching in itself. When both forms of engagement were included, the average of active days increased to 11 (SD = 2.36, range 6–14 days). Hence, for these participants, merely studying engagement with the course contents would not give a full picture of their behavioural engagement.

The interviews reveal more about the participants' practice routines. Some of them engaged with the coaching when they had the time or were in the right mood for studying, whereas others made a schedule:

> The webinar is on Tuesdays. Well, on Wednesday you eagerly tackle the new weekly task and try to finish it by Thursday or Friday so that it [the video] can be published, sometimes it will continue till Saturday. And if it's done earlier, then I'll find something else to play on YouTube.

Perhaps not surprisingly, it is implied in our data that the possibility to study whenever and wherever they liked was one of the factors that helped the participants in engaging with the

coaching. As one of them said: 'When my daughter goes to a gym class … I'll give her a lift and go to the cafeteria … I take my computer and hit the course'.

The weekly course structure and the teacher's role turned out to be other significant factors related to behavioural engagement. One participant, who had previously tried to study independently using Rockway's video-on-demand service, compared these earlier experiences as an independent learner to their experience of the coaching: 'This is more structured. You have a schedule and someone is leading, and you hand over the tasks and so on … I thought, well, maybe this time'. In other words, a tight schedule with weekly webinars and deadlines successfully engaged the participants in learning during the course. However, many pointed out that it was sometimes hard to find relevant learning content on Facebook because of how the platform organised its content, especially when trying to return to the material after a while.

Cognitive engagement during the coaching

The participants differed in how methodically they approached the coaching. Some described studying when they felt like it, apparently without a specific plan, whereas others chose their approach based on their self-perceptions as learners. One of them, for example, needed long study sessions because it was impossible to concentrate deeply enough 'between dinner and walking the dog', and another admitted: 'I am … a slow learner. But since I recognise it, it is easier to … give myself time … for learning'. Some of the interviewees said that they learned best by imitating, whereas others considered themselves analytical learners. Most of them said that they started listening to music more analytically as their musical knowledge and skills increased. Analytical learners also acknowledged the importance of understanding the musical phenomenon rather than simply learning to play one song:

> I remember when I learned to play a song on YouTube … and it shows on the screen which key I need to press at any time. That's how I almost completely learned a song … But then I noticed that I don't really understand anything … I didn't know how to improvise or do anything with that instrument myself … which is not so satisfying.

The participants also mentioned that personality traits affected their engagement with the coaching: 'If you have a perfectionist nature … you expect a lot from yourself and demand too much from yourself … for example, those videos … it may be that I will record it dozens of times when something bothers me about it'.

Some of the interviewees described developing or trying new learning methods during the coaching, such as playing on top of a video of the teacher's playing. Others recalled trying out new learning techniques referenced by the teacher, such as adding 15-to-20-minute time slots in the calendar, and setting an alarm reminding them when to train.

Social engagement during the coaching

Another factor that seemed to facilitate engagement was social in nature. Given that none of the participants mentioned the desire to find a new learning community as a reason for taking the course, we found it surprising that many of them emphasised the importance of the social dimension of the coaching. Indeed, the social quality seemed to be a positive surprise for many: 'this includes such a social aspect … quite a lot of questions and comments are posted … it's the social side that I couldn't foresee'.

The feeling of belonging to a group of people who are in a similar situation, and who share common interests, clearly helped some participants to engage in learning. Many of them highlighted this sense of belonging during the coaching as something that was personally beneficial: 'This is our team that is studying here … when people comment on everything … it somehow makes me feel like I'm in a bit of the same process with these guys. So it's kind of important'. Interestingly, some of the participants in the songwriting coaching found or founded other songwriting communities after the course.

The learning community also seemed to put positive pressure on the participants. Knowing that their peers would watch and comment on their videos on the one hand, and watching excellent videos made by fellow course members who started with a similar skill set and similar challenges on the other made some of them try their best when turning in their weekly assignment: 'It forces me to try harder … it's been pushing me a bit so that the video has become tolerable to listen to or to watch … different from only having to send it to the teacher, or just for yourself'.

The learning community did not really matter to some of the participants. As one of them said: 'the group had little effect, except sometimes a good question might come from others that you wouldn't have thought to ask yourself'. However, it is notable that some coaches clearly tried harder than others to build a learning community. For instance, participants in the songwriting coaching webinars co-wrote a song and used Zoom (which also allows participants to open their mic and camera) instead of Facebook live (which only allows active participation via chat).

The role of the teachers was also significant in terms of helping the participants to engage in the course by creating a warm and relaxing atmosphere and providing feedback. Given that the provision of feedback is considered one of the major factors that foster learning (Ruiz-Primo and Brookhart 2017), it was to be expected that the participants of this study would clearly acknowledge the importance of receiving feedback. From their point of view, on the pedagogical level the most beneficial comments came from the teacher, but the feedback from peers was also important. One participant referred to the content of feedback from others as secondary: the most valuable thing about the comments was in signifying that someone actually watched their videos. Furthermore, seeing feedback from the teacher to other participants was also experienced as educational: 'It was also nice to see the feedback given to the others directly … it's nice to know what the teacher thinks about them [other participants' assignments]'. The importance of being able to ask the teacher and peers questions was also evidenced in the data: 'When I've tried before, I've … watched some videos on YouTube … But no, it didn't work for me … too many questions that couldn't be answered'.

Affective engagement during the coaching

The participants described a wide variety of feelings that arose during the coaching, particularly when they were studying independently. Those on the beginner level were sometimes frustrated with their slow progress: 'You have to use your capacity so much and you feel like it's really slow … you have to repeat and repeat the same things and do it in peace … it feels sometimes a bit numbing'. There were also expressions of uncertainty in relation to their self-perceived lack of skills or abilities to learn and to keep up, especially at first. Many of them expressed frustration related to the online learning environment and other technological tools they used.

Some participants expressed feelings of joy when making music, and when realising that they had made progress: 'The instruments have generated really strong feelings of joy … feelings of success … feelings of pride'. Some described the experience of pleasure in creating music: 'being able to create harmonic sounds, that feels good'. These emotions, which are commonly considered positive, were described in connection with experiences of making music as well of advancing in their skills.

The importance of a safe and relaxed atmosphere was also stressed by some interviewees: 'I really didn't have the feeling that if I screw something up … I'll be thrown out or something'. The fact that the coaching was voluntary was also reflected in the atmosphere, causing positive feelings towards learning: 'You don't have to, I think that's the best. In a way, it's a prerequisite for that creativity, you don't have to worry so much about doing it'.

Engagement after the coaching

Most of those interviewed during the coaching thought that they would continue their music studies independently afterwards: 'A positive, good experience … I was able to learn these basics

… I have already received really good tools. Now you just have to make sure that you put them to reasonable use so that they are not forgotten’.

However, we found after the second round of interviews that only a few participants (6 out of 15) had continued to train actively after the coaching. Others had either trained significantly less than before, or had stopped altogether. Reasons mentioned for not continuing to make music included a lack of time, busy lives with families, work, studies and prioritising other hobbies. Sometimes these other hobbies were related to music or art, but still something other than coaching. The lack of a study structure was also given by several participants as one reason for not continuing actively to make music: without clear goals or clear weekly deadlines, music-making evaporated from their everyday lives. As one of them recalled:

> I didn’t train very actively during the coaching in the end … after Christmas it stopped altogether, there were new courses [at the university] … it is also kind of typical for me to get excited about something for a time and then it just fades away.

Discussion and conclusions

Our aim in this article was to investigate how adult learners engage in non-formal education in online music coaching. We did this by analysing participant interviews and ESM surveys to assess the extent to which the four components of engagement, namely behavioural, cognitive, affective and social (Bowden, Tickle, and Naumann 2021), were present during and after the coaching. The components were used as an analytical tool, and articulations of engagement often included elements from more than one component.

During the coaching, the participants highlighted the possibility to study independently of time and place, as well as the regular and repetitive course structure as significant factors encouraging behavioural engagement. By means of ESM we also found that the participants regularly engaged with the topic using not only the materials provided in the coaching, but also other materials and activities they found independently. The social aspect of the coaching helped some of them to engage in learning consistently, which was surprising given that the coaching sessions were not designed around social interaction among those involved. The sense of belonging to a group of people with mutual interests increased the level of social engagement. The role of the teachers was significant, too, especially in providing feedback. As for affective engagement, feelings of frustration were sometimes aroused. However, the joy of learning new skills and slowly reaching goals helped the participants to engage in the course. Cognitive engagement was visible in how they used self-perception as a basis for their chosen learning strategies. However, there was variation in how methodically they approached the coaching, some advancing without a plan and others trying and developing new learning methods.

Few participants actively continued their training after the coaching period ended, even though most participants expected otherwise during the coaching. The reasons stated for not continuing to make music included being busy with children, work or studies, or prioritising other hobbies. However, the lack of goals, of a study structure and of a learning community also appeared to be significant reasons for non-continuance.

These results enable us to make some preliminary conclusions about possible factors that could facilitate long-term engagement. Some of the participants in the songwriting coaching formed new communities independently, and it would be worth examining the factors that enabled them to do so. These could include the social factor, but identity factors could also be influential. For example, a ‘songwriter identity’ might be more meaningful to participants in songwriter coaching than a ‘pianist identity’ among the piano-coaching group. Individuals’ existing skills and personality traits also seem to affect whether or not they continue with their music-making, but this needs further study. It would also be useful to study the connections between engagement and pedagogical and technical solutions in online music learning, as well as the interplay between engagement and motives for participation.

Music educators nowadays have a multitude of options enabling them to enhance their students' knowledge and skills flexibly, regardless of time and place. On the basis of our results, we recommend all pedagogical and technical solutions that help students to engage socially. Such solutions could help to support peer learning and to build learning communities (Ojala 2017). Teachers could actively aim to build teams that would ideally become music-related communities of practice (Wenger 1998) in which students are able to share musical knowledge and skills and negotiate their musical identities. Finally, we encourage teachers to discuss with their students matters such as metacognitive skills that relate to learning, such as perseverance and the ability to set personal goals.

Disclosure statement

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Ethical approval

All data was gathered in accordance with the Helsinki Declaration and its later amendments. The ethical review was conducted according to the Finnish National Board on Research Integrity guidelines (2019), stating that further evaluation is not required as the research participants are adults who have given informed consent, the data collection does not intervene with their physical integrity or cause them mental harm nor does it involve a threat to their safety.

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Mikko Myllykoski is a university teacher at the University of Jyväskylä. His research has focused on music technology.

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