

Research article, word for word identical to the published version in:

*Research Studies in Music Education* 1–21, online first  
<https://doi.org/10.1177/1321103X241235575>

## Understanding learners' relationships with music

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### Abstract

Relationships with music are at the core of music education. However, they are rarely studied from learners viewpoints—especially those of exceptionally motivated, advanced students—as they are incorporated into the theoretical underpinning or methodological stance of research in instrumental education. In this research project we follow the musical lives of ten advanced, mastery-oriented adolescent instrumentalists. The focus of this first report of our narrative ethnography is on how their relationships with music manifest in written narratives on the role of music and instrument learning in their life. While corroborating findings of previous research, the results demonstrate many idiosyncracies in the trajectories of our participants, including critical events. The results show that studying relationships with music and their development may reveal complex ecological systems in instrument learning and interconnected theoretical concepts, such as self-regulation, self-efficacy, agency, autonomy, identity, and metacognition. These phenomena—which can be challenging to differentiate, adapt, and apply in terms of learning practices—may seem far-removed from everyday musical practices, but can be consolidated when looking at relationships with music as gateways to the learning of musical instruments.

## Keywords

adolescence, agency, career, identity, instrumental pedagogy, mastery learning, music performance, narrative inquiry, relationship with music

Aiming at decolonializing music education philosophies, Bradley (2012, p. 6) noted how “developing students’ unique relationships with music ought to be a fundamental goal of musical education.” This goal seems well accepted in learner-centered music education (Daniel & Parkes, 2019; Huhtinen-Hildén & Pitt, 2018). However, considering the centrality of the topic, explicit studies on learners’ relationships with music are sparse. This article puts forward that explicit study of relationships with music serves as a holistic gateway to understanding the complex system of the learning ecologies of adolescent instrumentalists.

What we mean by a relationship with music is a music learner’s position in the *complex dynamic system* of factors that affect their musicianship, learnership, and growth; the *meanings* given to the factors by the learner; and the *resulting expectations* projected by them. By musicianship, we refer to “the knowledgeable actions” that “project” personal musical understanding based on the musician’s envisaged intentions of the composer and the former performers, in relation to the musician’s elected expectations of the audience reactions (Elliott, 1995, pp. 165–166). We consider a relationship with music to be inherently path-dependent, evolving through the subject’s life history in physical, social, and cultural environments (Gaunt & Hallam, 2018; Hallam et al., 2012; McPherson et al., 2012; Papageorgi et al., 2010).

The complex system of learning ecologies (Gaunt & Hallam, 2018; O’Neill, 2017) is a system of interaction between how students’ musicking manifests and grows in practices of musics varyingly afforded to them. It includes the accumulated, shared experiences, events, and situations (Lonie & Dickens, 2016; Upitis et al., 2017); their impacts and perceived values (Hallam, 2013; Hill et al., 2020); and the ways students perceive themselves as musical agents and learners (e.g., O’Neill, 2012; Papageorgi et al., 2010). The system involves the developmental dynamics of individuals’ interaction with the environment (Gaunt & Hallam, 2018; Welch, 2007), self-efficacy (McCormick, 2006; Nielsen, 2004), autonomy (Bonneville-Roussy et al., 2020; McPhail, 2013), and identity (Evans & McPherson, 2015; Hargreaves et al., 2016). Furthermore, it encompasses motivation (Evans & McPherson, 2015; Hallam et al., 2021) and metacognition (Concina, 2019; McPherson et al., 2019)—in addition to acquisition of the practical skills and knowledge of the musical practices (Hallam et al., 2021). The accumulating history of these factors tends to lead to vicious or virtuous circles of action, experience, and subsequent redirection of motivation and

activity (Hallam et al., 2021; McPherson et al., 2012), and to the construction of agencies and identities within music (Saarikallio, 2019).

Strategies that tackle the complexity of the system of instrumental learning are challenged by the quest for balance between more focused but atomistic, and more holistic but superficial approaches. In research on specialization and growth toward musical talent, excellence, or profession, key strategies have included sociological (Wagner, 2015) and environmental (Gaunt & Hallam, 2018) examination of the diachronic development of career stages. Other key strategies have differentiated the components contributing to the healthy and sustainable building of musical talent (e.g., Martin & Evans, 2022) and integrated them toward understanding the acquisition of musical skills, but with less emphasis on the learner’s viewpoint of the process (e.g., Gagné & McPherson, 2016; McPherson & Williamon, 2015). This has led to the notion of *syzygies*, the “unity or alignment of key and often wide-ranging transactions—across social, biological, psychological, and environmental spheres—that create promotive conditions for significant musical growth” (McPherson et al., 2012, p. 183; cf. Brown, 2015; see also Hargreaves & Lamont, 2017).

How different strategies shed light upon the complex system depends on their respective approaches and conceptual frameworks. While a thorough critique is well beyond the scope of this article, approaching the complex system from one viewpoint, such as agency or identity, may lead to a suboptimal holistic understanding. For instance, approaches which place the learner and teacher in the cultural–historical activity theory (CHAT, see, e.g., Welch & Ockelford, 2016; Ngo, 2022) are challenged by the current notion of mind not only as sociocultural but simultaneously also embodied.

Admittedly, relationships with music are themselves complex, individually and socially constructed phenomena (Westvall, 2007). The dynamic, holistic complexity spans from embodied experiences to rationalized stances, skills to formal knowledge, and values, all constituting what music is for us. As an example, Sam, an 18-year-old musician, pondered this in our data as follows<sup>1</sup>:

What is the significance of music, anyway? This question causes an immediate existential crisis. Is music imperative, what does anyone need it for? What is my position in the society, does anyone need me for anything? I would claim that music is built in us. It is almost impossible to begin defining its significance, but it is obvious that without it, the world would be emptier. (Sam 1:14)

This complexity involves the ontological question of what music is—reflected also in the distinction of the relationship *with* music versus the relationship *to* music (Björk, 2016). Combining “relationship” and “music” might escape delineations to the point where systematic study is challenged—but not rendered impossible. For example, the

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<sup>1</sup> The numbers after the pseudonyms indicate the document and segment in the data.

ontological question may seem to lead to a circular argument if one follows Small's (1998) notion of musicking as:

an activity by means of which we bring into existence a set of relationships that model the relationships of our world, not as they are but as we would wish them to be, and if through musicking we learn about and explore those relationships. (p. 50)

However, musicking as activity leads to opportunities to examine students' evolving relationship with music through their engagement in music as musicians and learners, and to the chance to investigate the various factors reciprocally affecting such activities (see O'Neill, 2012). Being a musician and a learner—whatever the role or activity may entail—is at the core of music education (Wiggins, 2016).

Hence, we consider the development of the relationship with music as the fundamental goal in music education.<sup>2</sup> We recognize the need to further develop holistic, chronological, and indepth strategies for addressing the interplay of factors in the complex system, and the learner's viewpoint. In this study, our aim was to ascertain whether the direct strategy of using the relationship with music serves to reach the complex system of learning ecologies and its various factors efficiently, and how the factors contribute to the evolving musicianship and *learnership* (i.e., to being a learner, to learners' positions, conditions, qualities, and skills) of the research participants. To serve our aim, we focused on the learner's perspective of advanced adolescent instrumentalists in Western art music, and how they narrate their evolving relationships with music.

As an outcome, we propose that explicit study of the relationship with music provides a welltargeted yet holistic, optimally in-depth gateway to address the interplay of factors in the complex system. As an approach, the relationship with music encompasses both sociocultural and embodied perspectives (as well as temporality). It is direct, open-ended, music-specific, and genuinely learner-centered.

## Relationship with music

Infrequently addressed as an explicit topic in and of itself, relationship with music has nevertheless been studied from various viewpoints (e.g., Konoval, 2020; Lamont, 2019; Maus, 2019). In music education research, the longitudinal and multi-method study by McPherson et al. (2012) transformed researchers' view on the role of music in their participants' lives. Beginning with a focus on musical development, they ended in discussion of “promotivational” and “demotivational” (i.e., risk) factors in

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<sup>2</sup> In Finland, the context of our study, relationship with music prevails as the focal point of the extracurricular music education rationale (Finnish National Board of Education, 2017). About translating the Finnish expression *hyvä musiikkisuhde* (relationship with music) into English, see Björk (2016).

those musical transactions (pp. 186–93) that foster and authorize “meaningful transaction between music and self or between music, self and other” (p. 204). They concluded that:

[a] developmental theory of music in our lives must look at what music does in people’s lives, the relationship they have with it rather than what music is in people’s lives by virtue of the technical skills they may have acquired for it. (p. 221).

Hence, the rationale of instrument education (theory), according to McPherson et al. (2012), should capitalize on the inherent powers of music as a means for self-regulation in terms of cognitive–emotional and (intra-)communicative expression, instead of promoting mere technical skills—and even instead of fostering social and interpersonal relationships and factors. The ultimate goal in music education is “how people learn to music-regulate self” by facilitating and mobilizing “music’s transactional power and regulative potential” (p. 208), pointing to the sustainable development of the relationship with music. In this study, we approach the questions of instrumental pedagogy from the viewpoint of the learner and the quintessential role of music as such within music education. Our study connects with and subscribes to the outcome of the extensive research of McPherson et al. (2012) and supplements it by focusing particularly on advanced, mastery-oriented adolescent instrumentalists.

Musical agency (“capacity to conceive of music and act musically,” Wiggins, 2016, p. 102) and learner agency (“the capability of individuals to make choices and to act on those choices,” “in the learning context,” Code, 2020, pp. 1, 3) are crucial aspects in accomplishing personal autonomy so important in mastery learning (Hruska, 2011; McPherson & Renwick, 2011). A mastery approach—a relatively stable goal orientation that considers the ability to be something that can be developed by increasing effort and therefore generates expanding competency (Belenky & Nokes-Malach, 2012; Hattie, 2012, pp. 42–43)—is a prerequisite for developing effective learning, especially with those showing potential and motivation. Developing mastery approach goal orientation benefits from the support of the educational system at large; from the learning ecologies and environments that involve teachers, families, peers, and institutions (Hattie, 2012, p. 24).

Relationship with music constitutes a quintessential goal and an integral facilitator of music education and offers the learner’s perspective to music education. Supported by our findings, we argue that it also presents itself as a sound approach in music education research that not only is genuinely holistic in terms of reflecting the important factors of music education, but also takes seriously the ontologically fundamental aspect of music: its values and impact—its “meta-relatedness, its communicative, expressive, and affective potential” that has “transactional power and regulative potential” (McPherson et al., 2012, p. 208). In our view, more traditional approaches to the complex system of music learning, such as agency (e.g., Wiggins, 2016), identity (e.g., Hargreaves et al., 2016), or activity theory (e.g., Welch & Ockelford, 2016) fail to account for the holistic nature of the system.

## Method

This article is the first report of a larger study focusing on the relationships with music of a group of mastery-oriented instrumental music students. Our interest is in the varieties of advanced adolescents' narratives of their relationships with music and in how relationships with music serve as a gateway to the factors of the complex learning system and their interplay.

The methodological frame in our project, narrative ethnography (Gubrium & Holstein, 2008), suits our intention to explore and understand our participants' own views on their relationship with music and its evolution in a holistic and comprehensive way. In this study, the analysis and interpretation of participants' narrations are supported by ethnographic data based on observations and contextual ad hoc interviews.

### *Participants and ethics*

Recently, several “music academies” for different instruments have been established in Finland to support more goal-oriented children and adolescents. These have been privately funded or initiated by the Sibelius Academy. This contrasts with the national, publicly funded extracurricular music school system, where inclusiveness and equality of participation are increasingly on the agenda (Björk et al., 2018; Väkevä et al., 2017). The 10 participants of our study, aged 11–18 years (median age 16; see Table 1), are members of one of these coaching groups. All participants, invited through auditions, are experienced performers and have been successful in national or international competitions. Five of the participants were first-year members in the group, the other five had been members for 4–6 years. The privately funded groups bridge formal and non-formal education by constituting a network that operates without direct affiliation to institutions and hires nationally and internationally eminent instrumentalist-teachers. The groups aim at creating an inspiring and motivating environment for students to learn with professionals and peers.

Our ethical stance was guided by Barrett and Stauffer (2012), that is, by recognizing the necessity of being responsible (aware of the effect of research on the participants), rigorous (self-critical and holistic), respectful (sensitively dialogical), and resilient (open and flexible). The participants and parents of those under 15 years of age gave their informed consent to participate. To safeguard anonymity, we use gender neutral pseudonyms and *an instrument* and its derivatives instead of the names of participants' actual musical instruments. Before participant recruitment, the study was granted approval by the Ethical Committee of the University of the Arts Helsinki.

### *Data production and analysis*

We asked the instrumentalists to write a free-form text on their relationship with music, how it has evolved and what kind of musicians they aspire to be, to describe how they learn to play their instrument, what hinders their learning, and what they

find easy or difficult in playing—thus encompassing the key properties of the relationship with music described above (Table 1).

We analyzed the texts in an abductive process through several inductive iterations. The data-driven approach was boosted in each stage by the ethnographic data (recorded in our research diaries), theoretical considerations, and negotiations between the researchers until mutual understanding and consensus were reached. The thick contextual and positional meanings of the data manifested in the numerous double, triple, and even quadruple codings of each segment. We report five *themes* according to the questions posed to the participants: (1) *explicit narration of the relationship with music*; (2) *musicianship*; (3) *learning*; (4) *path to the present*; and (5) *future aspirations*. Later, we connect these themes with factors that rose from the narrations. The factors—environmental, social and identity factors, action and agency factors, and cognitive and emotional factors—contribute to the relationship with music across the themes.

**Table 1.** Pseudonyms, Ages, Descriptions, and Lengths of the Participants' Essays<sup>a</sup>.

Name	Age group	Descriptions based on ethnographic observation and interview data	Essay length <sup>b</sup>
Jade	17–19	Quiet but socially active second cycle student in a conservatoire. Enjoys chamber music.	1,103
Robin	17–19	Second cycle instrument student. From a family of artists, including siblings.	5,439
Sam	17–19	Third cycle multi-talented student. Very advanced in more than one field of music performance.	16,242
Bonnie	14–16	High school student. Talkative and sociable with multiple interests in music and beyond.	1,355
Hillary	14–16	Upper secondary student. Comes from a family of musicians, including siblings.	1,489
Kim	14–16	High school student. Less talkative but enjoys company and is active in Internet music communities.	1,042
Tam	14–16	High school student. Plays a second instrument and studies privately another field of music.	5,445
Elwyn	11–13	Secondary school student. Extremely motivated and joyful.	1,533
Luna	11–13	Primary school student, sibling to Hillary. Shy but thrives in the company of peers.	1,593
Merle	11–13	Secondary school student. Quiet. Quick learner.	1,588

<sup>a</sup>The essays were gathered between January and May 2019; five instrumentalists wrote their texts by hand during two weekend periods (with the authors present to prevent intersubjective impulse) and the texts were transcribed into text files. The rest sent their texts via email. The translations from Finnish to English were made by the first author and double-checked by the second author.

<sup>b</sup>Characters with spaces, in Finnish.

## Results

Our results support the view that relationship with music may be empirically found as an integrative perspective of the phenomena considered essential in music education research, such as agency, identity, or skill and talent development, as well as one that

acknowledges social– environmental and embodied factors. Below, we demonstrate how the evidence of learners’ relationships with music entails, illuminates, and enriches the understanding about the aforementioned factors in musical engagement and music education in each theme.

### *Explicit narration of relationship*

The participants have invested much in music and benefited greatly from it. The strong relationship with music is seen either as a close companionship or as an immersive relation. Music is taken as an entity to the point of embracing one’s whole life or becoming an object, or rather, a reified *subject* with which to engage in interaction, displayed in descriptions of music-historical figures as companions and role models. More than preference, companionship is about positioning oneself as a fellow agent and hence a matter of identity construction and an index of enculturation into Western art music. The strength becomes evident through the use of intensifiers and wordings, such as “wonderful” or “love” (see Elwyn, Table 2), and even spiritual references:

Music is really important to me, because I really often think that if there were no music, then probably my life wouldn’t have a particular meaning. Music means really lot to me. It has become a really big part of my life. (Hillary 4:3)

I quote Sibelius: “Music is like a mosaic, created by God.” For Bach, music was worship to God, as the letters SDG imply. I absolutely agree. (Sam 1:7)

**Table 2.** Emblematic Citations Organized into the Array of Themes and Factors Contributing to Relationship with Music.

	Environmental factors	Social and identity factors	Agency and action factors	Cognitive and emotional factors
Explicit report of relationship	Music is present all the time in everything I do. Like many people, I have a partly obsessive need to consume music all the time—sitting in a tram is boring if I don't listen to anything, and so is emptying the dishwasher in the kitchen. (Sam 1:2)	My relationship with music is extremely close—for me, there is no life without it. The best friends of mine include Wagner and Mahler, Bruckner and Sibelius, Strauss, and Shostakovich. (Sam 1:1)	I feel my relationship to music is really close, but at the same time also "practical". I listen to music very often, and a great deal of my leisure time involves music. (Tam 2:1–2)	I love music. It is wonderful. Music is very rewarding to listen to, to sing, and to play. It can make [me] glad, or contemplative, or very happy. (Elwyn 5:1)
Musicianship	The same piece might bring the Finnish sauna to some people and an urban city scenery to others. Therefore, I don't get stuck this kind of images too much during playing . . . As a listener, I again get all sorts of associations and feelings very often. So, there is an effect on mediating and receiving music, depending on which side of the stage you're sitting. (Tam 2:7–8)	Music is important to me also because it'll be my profession when I grow up. . . When I have started to listen to music since I was small . . . so, it has become a thing close to my heart. (Luna 6:3–6)	. . . before my hand problems . . . I thought of myself primarily as an instrumentalist, and maybe not so much as a human being. . . . What this currently unresolved hand problem of mine has opened to me, is an opportunity [possibility] to be much more than just a classical instrumentalist. (Robin 9:17, 18)	I enjoy listening to music, I always have. Popular music, classical music, jazz. It's also enjoyable to produce music; finding a good melodic or harmonic passage when composing produces great pleasure; in playing the instrument, executing the piece in a way you interpret it to be played motivates and makes you like the piece even more. (Bonnie 8:1–4)
Learnership	It is difficult to play if there's a loud racket, or if others are for instance watching a movie . . . (Merle 3:19)	The teachers have been a really important part in my playing career. From them, you always get excellent instructions, encouragement, support, and they also instruct how you can promote and improve everything. (Hillary 4:8)	I learn best through repetition and through the way we were told [in group meeting], the [method of] recalling. Playing slowly helps me play quick pieces. (Elwyn 5:5–6)	New pieces help in finding motivation. If I've played the same pieces for too long, my learning slows down, because I get easily bored with them if they are not important to me. (Kim 7:10–11)
Future	I would like to be a concert instrumentalist and take part in the [top international] instrument competition [arranged in Finland]. (Merle 3:20)	In the future, I'd like to be an [instrument] teacher, as I want to share the experience and the excellent tips I've got from different teachers . . . (Hillary 4:12)	I want to be able to play the instrument and create as well as interpret music as skilfully as possible alongside my other career. It would be wonderful to be able to enjoy music at a high level without professional aspirations in the field. (Bonnie 8:10–11)	I want to get to the point where I can play whatever I like, and I have technical and mental know-how to execute that. I want to study music as much as possible, go to concerts and get to know other musicians to get inspiration and "peer support". (Jade 10:12–15)
Path	I started to play at the age of five, when my father taught me to play Beethoven's <i>Für Elise</i> on an electric instrument, when we were traveling. I soon learned the piece by heart and wanted to learn more. (Kim 7:5–6)	My parents have "fed" me music since I was small and I grew amidst it. I'm grateful to my parents for that they familiarized me with different styles of music. (Jade 10:4–5)	Soon I started to play the other instrument anyway, although I was drawn to this instrument. I started playing my other instrument pieces on this instrument until Mom realized that I could apply for [studying] this instrument. (Luna 6:10)	[My sibling] showed me with gestures and all that goes with the pieces and improvised for me small pieces that I always wanted to hear. . . . I admired [their] playing so much that I began to play by ear the [pieces they] played. I was so excited about playing that my parents put me in the conservatory . (Robin 9:5–7)

How music is acknowledged as a career choice or commitment varies notably between whole-hearted and unquestioned dedication, rational or even nonchalant acknowledgment, and critical rumination. Even when undergoing crises, the participants seem skilled in articulating and resolving the issues, one way or another:

Through [the coaching group] this hobby has already turned into a slightly more important, a "job," in fact. (Tam 2:3)

About two years ago, I would've said my music and instrument is my whole life . . . [describes how their crisis ensued]. So, I can practise only for short periods of time, and no longer feel the pleasure of playing . . . This has radically changed my relationship with [the instrument] and music. (Robin 9:1, 16, 17)

Regardless of occasional crises, positive valence permeates music. The participants are vocal about the extra-musical values of music, also other than hedonistic, short-term rewards. The communicative function of music is given occasional attention, reflections varying from outright enjoyment of being on stage to the appreciation of creativity in performance, and to problematizations of communicability:

Music helps me if there's a problem. It is somehow wonderful. . . . I also love to perform, because then many people can hear how talented I am. (Merle 3:1, 3–4)

The listener will not experience the piece same way as I do anyway. The performer's task is to create a “blank version” of the piece, because then each listener can create their unique images of the piece. (Tam 2:8)

Through engagement, the participants learn or have learned the potential of music as a tool for self-exploration: many of them explicitly bring this up or describe music as a mysterious domain of inquiry and the musician as an inquirer into sound, emotions, and self, all contributing to the significance of music:

Music is also fascinating; biologically negligible patterns of stimuli produce similar emotional responses in several people. (Bonnie 8:7)

I cannot imagine my life without music. For me, music is a way to express emotions, and when I listen to music, I might understand something new about myself as well. (Jade 10:2–3)

### *Musicianship*

More significant than age-related differences is the variety between the individuals. For instance, Bonnie does not talk about their musicianship explicitly at all, whereas Kim and Jade concisely connect musicianship with learnership, and Robin, Merle, Tam, and Sam richly elaborate their musicianship.

The participants position themselves either as a musician specialized in their instrument, or as a musician who also improvises, conducts, plays another instrument, or composes. For some, this is natural, effortless, well-settled—even unquestioned—whereas others may struggle between the roles or rethink their position as a musician at large:

I thought of myself primarily as an instrumentalist, and maybe not so much as a human being. . . . What this currently unresolved hand problem of mine has opened to me, is a prospect of being much more than just a classical [instrumentalist]. (Robin 9:17, 18)

Recently, I've often bumped into a conflict . . . . One of my most significant teachers . . . , has often mentioned Daniel Barenboim in this context—it is possible to be two things at the same time. Might disagree a little: I can't name anyone else, besides Barenboim, who would be equally accomplished in both fields. (Sam 1:40)

Some participants link musicianship to music ontology and communication, differentiating the affective role of listener from that of performer. According to Tam, music is “experiencing and feeling, and it does not need to involve any kind of

understanding” (2:9) and a “way to mediate different emotions and moods” (2:7), and the performer cannot assume a listener’s experience to be similar. Sam concurs, and for them, the detachment from the responsibility to produce a certain interpretation also gives more enjoyable freedom for expression in creative performance situations:

I try not to decide all possible details in the practice booth, so that on stage, I get a greater liberty to do how I exactly then feel like. . . . there is always something new one can invent and do something little differently each time. However, my musicing does not interest anyone in the audience that much, that I could not do whatever I want. (Sam 1:36–37)

The issue of quality is seldom if ever brought up. It appears the participants take high standards as granted—not as an externally imposed criterion but as an internal (or internalized) principle, moral, or ideal. That being said, the narration of musicianship repeatedly brings forth how important the meanings and enjoyment of music are for the adolescents. The experience of musicianship is personal, holistic, empathetic, emotional, and embodied—but this does not exclude being analytical.

### *Learnership*

The participants’ willingness or ability to reflect on their own learning varies greatly, even regardless of age. Motivation comes across as strongly established and multifaceted even among the youngest, and covers key elements: the satisfaction of personal needs, identity formation with self-efficacy, effective approaches to learning, and supportive environment. Extrinsic motivation manifests more rarely although not without importance. Performance motivation manifests in challenging oneself with difficult pieces, in small self-imposed rewards, and in importance of encouragement and critical analyses of expectations set by others. Few take the initiative to describe their life outside music. Regarding self-efficacy, the participants seem earnest and realistic when expressing their strengths and weaknesses. Even the youngest have trust in their own capabilities and ability to reflect their own competence:

When I was younger, big and difficult pieces provided much motivation. (Kim 7:8)

Remembering [the score] is a strength of mine, meaning I manage to memorize the piece quickly, usually. By contrast, developing the motor skills and the musical finalizing takes time, because they are matters of muscular memory and developing own ideas. (Tam 2:18–19)

The specific expressions concerning what is easy and difficult illuminate set, internalized mastery goals. The narratives show internalized acceptance of how one works for the quality, and how the grinding and finalizing require motivation. Learning has become “an experience of identity” (Wenger, 1998, p. 215). Hence, there is no need to express the obvious premises of excellence:

Personally, I relate to music and practising with certain ease, so it won’t become too serious or laboured. (Tam 2:4)

Learning is largely attributed to the hard, well-regulated work of practising, and less to natural abilities, or challenges in learning beyond their control. Half of the

participants, regardless of age, show strong agency in how they narrate their learning, usually without mentioning teachers, parents, or peers. Meanwhile, some seem to be quite unaware of their ways of learning. More than the older, the youngest attribute their learning partly to extraneous factors, such as convenience or disturbances in rehearsing facilities, or to support. Regarding natural abilities, the lay concept of “musicality” as genetically inherited makes a few appearances, but largely learning is seen as driven by socio-culturally supported practising (see Paths below):

What helps my learning is that . . . right after school I get to go to the . . . parish house because our house is 10 kilometres from the school. (Elwyn 5:9)

My learning is hampered by tiredness and lack of time. (Jade 10:9)

The musicality of family members or close relatives hasn't affected that much, either. . . . However, I have heard that my great-grandfather would have been able to play an old folk instrument . . . Maybe this has been latent musicality, which just happened to skip a few generations. (Tam 2:16)

Practising is a self-evident part of the lives of the participants. Even the youngest show well-internalized motivation to practising routine and describe their practising with concepts used by professionals, showing a degree of socialization into the profession. Some older participants articulate more methodical, self-reflective approaches. Only Sam and Robin, for different reasons, question the practising routine, indicating conflicts in musical identity: Sam negotiating between career choice options; Robin undergoing the health-related crisis and its impact on their musical career. Sam (1:34) deliberates on time and effort allotted to practising, efficiency, and motivation: if diligent “rubbing . . . doesn't make you tick” any more, even at this stage motivation redirects toward ways of learning that take less toll, like “just by playing the piece through,” or other activities:

I learn to play by listening to the piece and reading the notation and by practising slowly and articulating, raising the tempo as I practise. (Bonnie 8:8)

At times, my learning is helped by certain practising methods, but usually I just play the piece through and then use time to examine the piece and to practise the difficult parts. I feel the practising methods help with memory while repetition helps my muscle memory. I don't have any special gimmicks that would get the piece done with less practising. On the other hand, practising too much may obstruct learning, especially if practising is just [handling the instrument] with no objectives. (Tam 2:20–24)

## ***Futures***

The question of career choices entails both committing to music or other career options, and the professional profile within the career choice. For most, a profession in music seems certain. Especially for the younger ones, and some of the older, the future job description seems clear: a charismatic concert instrumentalist, building a career through competitions. While all participants perceive and acknowledge the investments made and their mastery of the instrument, many find a profile of a versatile musician attractive compared with that of a specialized musician, and at least two are likely to pursue a career in music beyond performing on the instrument,

such as in teaching and composing. However, some aspirations of non-professional engagement with music may have been left untold here. As a counter-narrative, Bonnie (see Table 2) aspires to hold on to music, but not professionally:

I want to be a musician with a strong personality. I am interested in a concert career. (Kim 7:12)

I would like to be a musician, who plays different kind of pieces and bravely takes up new challenges. (Elwyn 5:10)

### *Paths*

The development of relationships with music and its support are of particular interest. All participants were absorbed in playing the instrument before school age, many at the age of 4 years. Most report their own initiative and will; some are unable to recollect the early start, let alone having expressed initiative:

I learned the basics of playing so young that I don't remember pretty much anything. (Merle 3:15)

I grew [up] amidst opera, and by [the instrument], but didn't realize my passion for music until I turned eight. I'm grateful that I wasn't forced into music school before this . . . but I got to make my own decision of applying. (Sam 1:19)

Due to challenges recalling early experiences, the interest may sometimes be perceived as “given” rather than “taken.” Regardless, success in early engagement seems evident, whether provided, for example, by fascination with the sound of the instrument, adoption of family traditions, optimal learning tasks, or context-specific peak experiences in early learning. The significance of early success is highlighted in the reports of flow-induced diligence:

From my mother's side I'm already the fifth generation playing the instrument, and in our family, there are many pieces circulating in our family that everyone has played. (Luna 6:8)

When I was in daycare, I played many hours every day at home. In kindergarten, I was home every Friday. I would then play the rudiment instrument book for about 5–6 hours a day. (Merle 3:12–13)

Almost all narratives convey the significance of family support to engaging with music, spanning from Luna's intergenerational heritage, to affectionate, supportive bonds with close siblings, in addition to the learning environments provided by the parents:

My parents are not musicians, but my father's mother is . . . . In my childhood, I spent a lot of time at my grandparents and got a strongly classical upbringing. My grandma is practically allergic to anything but art music and she was able to effectively transmit this attitude to me as well. (Sam 1:17–18)

My mother has completed [a grade level] and therefore she was able to teach the basics. (Tam 2:16)

Sooner or later, the role of the family gives way to rewarding teacher–student matches. While not all narration of teachers is positive, most participants tell of at

least one teacher that has been extremely important for their development. Even Merle's "accidental" beginning can be attributed to a keen-eyed music educator. For some, the multitude of teachers has been essential:

They gave me a good musical foundation, but their teaching was somehow stiff, the fun disappeared. I played pieces that felt completely indifferent to me, and practising became really arduous . . . . Also, they didn't teach me any kind of playing technique and that caused problems later on . . . . I also played very demanding pieces all the time. (Robin 9:8–9)

Originally, I started playing by accident. When I was two years old and my big [sibling] three years, the idea was that only my [sibling] would go to a special kindergarten . . . . But the good-hearted instructor enrolled us both . . . . We tried many other instruments as well, but the instructor said it would absolutely be worthwhile for me to continue playing [the instrument]. (Merle 3:9–11)

Music has become a great object of interest to me likely when . . . I got another . . . teacher . . . . My teacher told me everything about music in such a fascinating way and got me to read all the music books and to be simply very interested [in music]. (Elwyn 5:3–4)

My relationship with music has chiefly come from having been influenced by different teachers. ♡ (Luna 6:7)

## Discussion

In sum, the narratives of the participants, arrayed in Table 2, richly reflect the path dependency of significant life episodes or events, where one option, choice, or decision leads toward another while excluding some other options (e.g., Juuti & Littleton, 2010; Macnamara et al., 2014; McPherson et al., 2012). The narration of their relationship with music and its development covers environmental factors, social and identity factors, agency and action factors as well as cognitive factors, including emotional ones, thereby showing its appropriateness and usefulness in illustrating an integrative, holistic approach to the complex system of learning ecologies. The relationship with music development results not only in advanced musicians' technical and practical skills, know-how, and well-being but involves a broader enculturation into the practices and values of, in our case, Western art music (e.g., those of quality and continuous learnership; Wagner, 2015).

This development is characterized by positive experiences encompassing the holistic complexity of participants' affectionately described, dedicated relationships with music. The *syzygetic alignment* covers the successful and engaging early start, rewarding peak experiences afforded in formal and informal contexts (Araújo & Hein, 2019; Gabrielsson et al., 2016), continuous, significant support by family and teachers (albeit not all report this; only Jade tells of peer support). Furthermore, it covers learners' growth into the self-propelling virtuous circle of motivation, agency, self-efficacy, self-regulation, and autonomy in learning music (Evans & McPherson, 2015; Zhukov & Rowley, 2021). Regarding our research aims, it is important to notice that all these factors were included in the participants' essays, *without prompting for them*.

The thematized stories of our participants are primarily positive and permeated by success across the factors in the array of learning ecologies. Negative incidents or episodes (including hardships in well-being) are encountered. However, they can be, at least partly, overcome by the resilience provided by strong relationships with music and the availability of music as a tool for the self: all participants expressed their deep attachment to, even love of, music—as advanced by Bonneville-Roussy et al. (2011) and McPherson et al. (2012), in contrast to loving one’s instrument, proposed by Sternberg (2021). The participants experienced deep musical immersion or treated music as a personified companion with which to interact, or both.

Still, in some cases, external motivation shown through the values of career achievement (predisposition to perform and succeed in competitions; Woody, 2021), may endure and even prevail (see McPherson et al., 2012). Also, physical injuries, identity dilemmas, bad performances, the fluctuation of self-efficacy, and other obstacles cannot always be avoided (Martin & Evans, 2022). For some instrumentalists, parental support seems to be irrelevant or unworthy of mentioning. This may partly be due to their extraordinarily early attainment of musical or learner independency and agency, and age, since dependence on parents typically diminishes in later adolescence (cf. McPherson et al., 2012, p. 187). One educated guess here would be, especially if parents are less musically oriented, that at later stages of adolescence participants fail to realize or remember the role of their parents or teachers. Although awareness and self-regulation of learning seem to vary (Miksza, Blackwell, & Roseth, 2018), the association of learning with hard work (e.g., practising rather than innate ability) is shared between the participants (Papageorgi et al., 2010).

While being in the liminal space between serious hobby and career choice, all participants show “natural inclination toward assimilation, mastery, spontaneous interest, and exploration” (Ryan & Deci, 2000, p. 70). The musical mindsets of the adolescent instrumentalists, therefore, approximate those of professionals, and may consequently predict occupational attainment in many ways (López-Iñiguez & Burnard, 2022; Schoon & Parsons, 2002), as also overtly stated in their narrations. Musical activities extraneous to performing on the instrument that our participants reported (improvising, conducting, composing, playing another instrument), underscore their enculturation into the Western art music culture and its values (e.g., Wagner, 2015). Meanwhile, through the observation data, we know that some participants are intensely interested in other diverse areas, such as sports, politics and social affairs, or musical theater and comedy. This combination suggests that the mastery-approach goal orientation, at least regarding other hobbies, may be transferable (see Belenky & Nokes-Malach, 2012). In consequence, we envisage—and indeed, as the research is ongoing, our more recent data already show—that the adolescent instrumentalists, in the near future, must make hard decisions to maintain balance in their time management and restructure their future aspirations and prospects. Approaching adulthood, the adolescents encounter the watershed question

of whether to commit to pursuing music as a profession. Their narrations display varying degrees of acuteness and ripeness in negotiations of self-identity and professional or semi-professional profiles as musicians. The question of profiles entails, for example, the professional commitment, the question of niche specialization versus broader expertise, and the stance on audience and positioning of oneself as a communicational agent (Kondo, 2020; MacDonald, 2021).

In terms of the trustworthiness and limitations of the narrative data, what our participants have told us reflects the way they wish to be seen. They have been willing to express their views intelligibly and cleverly—and certainly with as much eagerness and consideration that could be expected of them by researchers with backgrounds in music performance, about which the participants know. Pre-adolescents can form a subjective perspective on events, which reflects and facilitates their evolving self-concept (Reese et al., 2010), while insight into the meaning of life events for one's identity is first demonstrated in early adolescence (Habermas & de Silveira, 2008; McLean et al., 2010). This was evident among the participants. Their ability to reflect and verbalize their relationships with music and their instrument was surprisingly fluent. However, the data portray the varying abilities of reaching, reflecting upon, and verbalizing the largely nonverbal activities and experiences inherent in music: the conception of musicianship may be tacit, or richly depicted—and there may be great variety in this, particularly in what might be left untold. The participants may have expressed their views in socially desirable ways, including both self-deception and other-deception (impression management; Nederhof, 1985). Nevertheless—and, indeed, therefore—we read their stories as “multivocal, voicing experience in the varied ways in which he [she] has learned how to tell and not to tell his [her] life, which are reflexively related to the unfolding life he [she] describes” (Gubrium & Holstein, 2008, p. 255).

The question remains as to what may have been masked due to participants not wanting or being unable to reveal to us. They told us about their crises and difficulties in learning but little about negative competition with fellow instrumentalists, or any possible disagreements or conflicts with their teachers, musical or other, for instance. Furthermore, although from the ethnographic data we know that the participants are active in other kinds of musicking as well as pursuing other, different engagements—some even with considerable effort and skill—these matters were not mentioned in their essays, presumably not only because of the assignment setting but also because of impression management. Instead, they concentrated on their relationship with music in connection with their position as Western art music instrumentalists. Furthermore, they mostly attributed their learning and success to themselves and less so to their teachers or their innate talent—although here partly interpreted from the fact they did not write much about their teachers. Evidenced by the observations, the participants showed solidarity, support, and good companionship with each other, were extremely polite and “proper” in their interactions with their (especially foreign guest) teachers, even if they quite obviously seemed to oppose against some of their

musical-aesthetical opinions or practices and criticized them among themselves. Indeed, this suggests tight enculturation into the Western art music master–apprentice model (e.g., Gamble, 2001; Uptis et al., 2017) and may even challenge the Nordic values of educational equality, learner-centredness, and customary informality. The dependence on teachers’ tuition, goodwill, and potential later support (maybe as an evaluator in a competition jury) makes students, such as our participants, vulnerable and subject to unequal power relations with and by their influential teachers (Wagner, 2015). There remains a need to analyze these and other discrepancies between participants’ narratives and our live observations.

## Conclusion

Recent studies have indicated a need to pay closer attention in pedagogical practice to self-regulation in learning of music (Miksza, McPherson, et al., 2018; Nielsen, 2001; Osborne et al., 2021). Through the empirical evidence of learners’ own viewpoints on their understanding of the role of music in their lives, our study underlines that relationship with music can effectively be used as a research approach to reach an integrated understanding of the complex system of learning ecologies. Through the gateway of the relationship with music, we can understand self-regulated, teacher-scaffolded learning and development that also encompasses perspectives on socio-environmental aspects, agency, identity, motivation, and sentiment, as well as the holistic well-being of exceptionally motivated and developed adolescent musicians (e.g., confronting hand problems, declining self-efficacy, harmful competition). Due attention to the relationship with music benefits all those (meeting challenges in) orienting toward a professional career and those who are not. This is supported by our narrative snapshot of our participating group of advanced adolescent instrumentalists at the watershed of professional orientation.

Further studies of individual trajectories of development, and their commonalities and differences ought to shed more light on the interconnectedness of factors and themes (see Table 2). This may serve a better systemic understanding that involves the cognitive, emotional, motivational, and experiential aspects of individuals engaged in musicking at this level of expertise in their sociocultural contexts and embodied environments. As a holistic approach, the relationship with music reaches beyond the Bronfenbrennerian views of micro-, meso-, macro-, and exo-systems (Gaunt & Hallam, 2018), or the notion of learning environments (Papageorgi et al., 2010). Exactly how relationship with music ought to be an explicit part of instrument pedagogy remains to be seen (see Björk, 2016). Should students be guided to explicitly reflect and learn to direct their relationship with music, including the ontological questions of music? And, if so, how and at which point of the approaching watershed moment between a professional career and non-professional orientation?

Our research suggests that explicit study of students’ relationship with music can serve as a welcome avenue to understanding the student’s perspective, an avenue that might build bridges between specialized research and the immediacy of pedagogical

practice. Focusing on the relationship with music turns the pedagogical light onto teachers' and students' awareness and reflects key matters in the productive and transformative power of music such as music ontology and signification, learnership, and paths to, profiles of, and aspiration to (or perchance away from) musicianship. As a strategy, it respects the holistic interconnectedness of the multiplex affordances in the young musical lives amidst their emerging adulthood. If the development of relationships with music—with its best implications of harnessing the inner power of music—is the fundamental goal in music education, and if studying relationship with music (and the entailed self-reflexivity) offers a rewarding, holistic approach to the complex system of learning ecologies, why not study it directly?

## References

- Araújo, M. V., & Hein, C. F. (2019). A survey to investigate advanced musicians' flow disposition in individual music practice. *International Journal of Music Education*, 37(1), 107–117. <https://doi.org/10.1177/0255761418814563>
- Barrett, M. S., & Stauffer, S. L. (Eds.). (2012). *Narrative soundings: An anthology of narrative inquiry in music education*. Springer. <https://doi.org/10.1007/978-94-007-0699-6>
- Belenky, D. M., & Nokes-Malach, T. J. (2012). Motivation and transfer: The role of mastery-approach goals in preparation for future learning. *The Journal of the Learning Sciences*, 21(3), 399–432. <https://doi.org/10.1080/10508406.2011.651232>
- Björk, C. (2016). In search of good relationships to music: Understanding aspiration and challenge in developing music school teacher practices [Doctoral dissertation]. Abo Akademi University Press.
- Björk, C., Tillborg, A. D. L., Heimonen, M., Holst, F., Jordhus-Lier, A., Rønningen, A., Aglen, G. S., & Laes, T. (2018). Music education policy in schools of music and performing arts in four Nordic countries: The potential of multi-actor processes. *Finnish Journal of Music Education*, 21(2), 10–27.
- Bonneville-Roussy, A., Hruska, E., & Trower, H. (2020). Teaching music to support students: How autonomy-supportive music teachers increase students' well-being. *Journal of Research in Music Education*, 68(1), 97–119. <https://doi.org/10.1177/0022429419897611>
- Bonneville-Roussy, A., Lavigne, G. L., & Vallerand, R. J. (2011). When passion leads to excellence: The case of musicians. *Psychology of Music*, 39(1), 123–138. <https://doi.org/10.1177/0305735609352441>
- Bradley, D. (2012). *Good for what, good for whom? Decolonizing music education philosophies*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780195394733.013.0022>
- Brown, A. R. (2015). Engaging in a sound musicianship. In G. E. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 208–220). Oxford University Press.

- Code, J. (2020). Agency for learning: Intention, motivation, self-efficacy and self-regulation. *Frontiers in Education*, 5, Article 19. <https://doi.org/10.3389/feduc.2020.00019>
- Concina, E. (2019). The role of metacognitive skills in music learning and performing: Theoretical features and educational implications. *Frontiers in Psychology*, 10, Article 1583. <https://doi.org/10.3389/fpsyg.2019.01583>
- Daniel, R., & Parkes, K. A. (2019). Applied music studio teachers in higher education: Evidence of learner centred teaching. *Music Education Research*, 21(3), 269–281. <https://doi.org/10.1080/146138082019.1598345>
- Elliott, D. J. (1995). *Music matters*. Oxford University Press.
- Evans, P., & McPherson, G. E. (2015). Identity and practice: The motivational benefits of a long-term musical identity. *Psychology of Music*, 43(3), 407–422. <https://doi.org/10.1177/0305735613514471>
- Finnish National Board of Education. (2017). *Core curriculum for basic education in the arts. Extended syllabus* [in Finnish: Taiteen perusopetuksen laajan oppimäärän opetussuunnitelman perusteet 2017]. Opetushallitus. <https://www.oph.fi/fi/tilastot-ja-julkaisut/julkaisut/taiteen-perusopetuksen-laajan-oppimaaran-opetussuunnitelman>
- Gabrielsson, A., Whaley, J., & Sloboda, J. (2016). Peak experiences in music. In S. Hallam, I. Cross, & M. H. Thaut (Eds.), *The Oxford handbook of music psychology* (2nd ed., pp. 745–758). Oxford University Press. <http://oxfordhandbooks.com/view/10.1093/oxfordhb/9780198722946.001.0001/oxford-hb-9780198722946-e-44>
- Gagné, F., & McPherson, G. E. (2016). Analyzing musical prodigiousness using Gagné's Integrative Model of Talent Development. In G. E. McPherson (Ed.), *Musical prodigies* (pp. 3–114). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199685851.003.0001>
- Gamble, J. (2001). Modelling the invisible: The pedagogy of craft apprenticeship. *Studies in Continuing Education*, 23(2), 185–200. <https://doi.org/10.1080/01580370120101957>
- Gaunt, H., & Hallam, S. (2018). Individuality of learning musical skills. In S. Hallam, I. Cross, & M. Thaut (Eds.), *Oxford handbook of music psychology* (2nd ed., pp. 463–478). Oxford University Press.
- Gubrium, J. F., & Holstein, J. A. (2008). Narrative ethnography. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 241–264). Guildford Press.
- Habermas, T., & de Silveira, C. (2008). The development of global coherence in life narratives across adolescence: Temporal, causal, and thematic aspects. *Developmental Psychology*, 44(3), 707–721. <https://doi.org/10.1037/0012-1649.44.3.707>
- Hallam, S. (2013). What predicts level of expertise attained, quality of performance, and future musical aspirations in young instrumental players? *Psychology of Music*, 41(3), 267–291. <https://doi.org/10.1177/0305735611425902>

- Hallam, S., Papageorgi, I., Varvarigou, M., & Creech, A. (2021). Relationships between practice, motivation, and examination outcomes. *Psychology of Music*, 49(1), 3–20. <https://doi.org/10.1177/0305735618816168>
- Hallam, S., Rinta, T., Varvarigou, M., Creech, A., Papageorgi, I., Gomes, T., & Lanipekun, J. (2012). The development of practising strategies in young people. *Psychology of Music*, 40(5), 652–680. <https://doi.org/10.1177/0305735612443868>
- Hargreaves, D. J., & Lamont, A. (2017). *The psychology of musical development*. Cambridge University Press.
- Hargreaves, D. J., MacDonald, R., & Miell, D. (2016). Musical identities. In S. Hallam, I. Cross, & M. H. Thaut (Eds.), *The Oxford handbook of music psychology* (2nd ed., pp. 759–774). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198722946.013.45>
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.
- Hill, A. P., Burland, K., King, E. C., & Pitts, S. E. (2020). Perfectionistic self-presentation and emotional experiences in music students: A three-wave longitudinal study. *Psychology of Music*, 48(6), 766–776. <https://doi.org/10.1177/0305735618824155>
- Hruska, B. J. (2011). Using mastery goals in music to increase student motivation. *Update: Applications of Research in Music Education*, 30(1), 3–9. <https://doi.org/10.1177/8755123311418477>
- Huhtinen-Hildén, L., & Pitt, J. (2018). *Taking a learner-centred approach to music education: Pedagogical pathways*. Routledge.
- Juuti, S., & Littleton, K. (2010). Musical identities in transition: Solo-piano students' accounts of entering the academy. *Psychology of Music*, 38(4), 481–497. <https://doi.org/10.1177/0305735609351915>
- Kondo, S. (2020). Musical communication in scaffolding young learners' expressive agency. *Research Studies in Music Education*, 42(3), 293–309. <https://doi.org/10.1177/1321103X18821198>
- Konoval, B. (2020). Max Weber and the sociology of music. In E. Hanke, L. Scaff, & S. Whimster (Eds.), *The Oxford handbook of Max Weber* (pp. 463–486). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190679545.013.40>
- Lamont, A. (2019). Musical preferences and the imagined self. In M. Grimshaw-Aagaard, M. Walther Hansen, & M. Knakkegaard (Eds.), *The Oxford handbook of sound and imagination, volume 1* (pp. 249–266). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190460167.013.12>
- Lonie, D., & Dickens, L. (2016). Becoming musicians: Situating young people's experiences of musical learning between formal, informal and non-formal spheres. *Cultural Geographies*, 23(1), 87–101. <https://doi.org/10.1177/1474474015587477>
- López-Iñiguez, G., & Burnard, P. (2022). Toward a nuanced understanding of musicians' professional learning pathways: What does critical reflection contribute? *Research Studies in Music Education*, 44(1), 127–157. <https://doi.org/10.1177/1321103X211025850>

- MacDonald, R. (2021). The social functions of music: Communication, wellbeing, art, ritual, identity and social networks (C-WARIS). In A. Creech, D. A. Hodges, & S. Hallam (Eds.), *Routledge international handbook of music psychology in education and the community* (pp. 5–20). Routledge.
- Macnamara, B. N., Hambrick, D. Z., & Oswald, F. L. (2014). Deliberate practice and performance in music, games, sports, education, and professions: A meta-analysis. *Psychological Science*, 25(8), 1608–1618.  
<https://doi.org/10.1177/0956797614535810>
- Martin, A. J., & Evans, P. (2022). Buoyancy, resilience, and adaptability. In G. E. McPherson (Ed.), *The Oxford handbook of music performance, volume 1* (pp. 629–651). Oxford University Press.  
<https://doi.org/10.1093/oxfordhb/9780190056285.013.22>
- Maus, F. E. (2019). Listening and possessing. In C. Thorau & H. Ziemer (Eds.), *The Oxford handbook of music listening in the 19th and 20th centuries* (pp. 441–460). Oxford University Press.
- McCormick, J. (2006). Self-efficacy and music performance. *Psychology of Music*, 34(3), 322–336. <https://doi.org/10.1177/0305735606064841>
- McLean, K. C., Breen, A. V., & Fournier, M. A. (2010). Constructing the self in early, middle, and late adolescent boys: Narrative identity, individuation, and well-being. *Journal of Research on Adolescence*, 20(1), 166–187.  
<https://doi.org/10.1111/j.1532-7795.2009.00633.x>
- McPhail, G. J. (2013). Developing student autonomy in the one-to-one music lesson. *International Journal of Music Education*, 31(2), 160–172.  
<https://doi.org/10.1177/0255761413486407>
- McPherson, G. E., Davidson, J. W., & Faulkner, R. (2012). *Music in our lives: Rethinking musical ability, development and identity*. Oxford University Press.
- McPherson, G. E., Osborne, M. S., Evans, P., & Miksza, P. (2019). Applying self-regulated learning microanalysis to study musicians' practice. *Psychology of Music*, 47(1), 18–32. <https://doi.org/10.1177/0305735617731614>
- McPherson, G. E., & Renwick, J. M. (2011). Self-regulation and mastery of musical skills. In D. H. Schunk & J. A. Greene (Eds.), *Handbook of self-regulation of learning and performance* (pp. 234–248). Routledge/ Taylor & Francis Group.
- McPherson, G. E., & Williamon, A. (2015). Building gifts into musical talents. In G. E. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 340–360). Oxford University Press.
- Miksza, P., Blackwell, J., & Roseth, N. E. (2018). Self-regulated music practice: Microanalysis as a data collection technique and inspiration for pedagogical intervention. *Journal of Research in Music Education*, 66(3), 295–319.  
<https://doi.org/10.1177/0022429418788557>
- Miksza, P., McPherson, G. E., Herceg, A., & Mieder, K. (2018). Developing self-regulated musicians. In M. K. DiBenedetto (Ed.), *Connecting self-regulated learning and performance with instruction across high school content areas* (pp. 323–348). Springer. [https://doi.org/10.1007/978-3-319-90928-8\\_11](https://doi.org/10.1007/978-3-319-90928-8_11)

- Nederhof, A. J. (1985). Methods of coping with social desirability bias: A review. *European Journal of Social Psychology*, 15(3), 263–280.  
<https://doi.org/10.1002/ejsp.2420150303>
- Nielsen, S. G. (2001). Self-regulating learning strategies in instrumental music practice. *Music Education Research*, 3(2), 155–167.  
<https://doi.org/10.1080/14613800120089223>
- Nielsen, S. G. (2004). Strategies and self-efficacy beliefs in instrumental and vocal individual practice: A study of students in higher music education. *Psychology of Music*, 32(4), 418–431. <https://doi.org/10.1177/0305735604046099>
- Ngo, C. L. (2022). Vygotsky's, Leontiev's and Engeström's cultural-historical (activity) theories: Overview, clarifications and implications. *Integrative Psychological and Behavioral Science* 56, 1091–1112. <https://doi.org/10.1007/s12124-022-09703-6>
- O'Neill, S. A. (2012). Becoming a music learner: Toward a theory of transformative music engagement. In G. E. McPherson & G. F. Welch (Eds.), *The Oxford handbook of music education, volume 1* (pp. 162–186). Oxford University Press.  
[https://doi.org/10.1093/oxfordhb/9780199730810.013.0010\\_update\\_001](https://doi.org/10.1093/oxfordhb/9780199730810.013.0010_update_001)
- O'Neill, S. A. (2017). Young people's musical lives: Learning ecologies, identities, and connectedness. In R. MacDonald, D. J. Hargreaves, & D. Miell (Eds.), *Handbook of musical identities* (pp. 79–104). Oxford University Press.  
<https://doi.org/10.1093/acprof:oso/9780199679485.003.0005>
- Osborne, M. S., McPherson, G. E., Miksza, P., & Evans, P. (2021). Using a microanalysis intervention to examine shifts in musicians' self-regulated learning. *Psychology of Music*, 49(4), 972–988. <https://doi.org/10.1177/0305735620915265>
- Papageorgi, I., Haddon, E., Creech, A., Morton, F., de Bezenac, C., Himonides, E., Potter, J., Duffy, C., Whyton, T., & Welch, G. (2010). Institutional culture and learning I: Perceptions of the learning environment and musicians' attitudes to learning. *Music Education Research*, 12(2), 151–178.  
<https://doi.org/10.1080/14613801003746550>
- Reese, E., Yan, C., Jack, F., & Hayne, H. (2010). Emerging identities: Narrative and self from early childhood to early adolescence. In K. C. McLean & M. Pasupathi (Eds.), *Narrative development in adolescence* (pp. 23–43). Springer.  
[https://doi.org/10.1007/978-0-387-89825-4\\_2](https://doi.org/10.1007/978-0-387-89825-4_2)
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Saarikallio, S. (2019). Music as a resource for agency and empowerment in identity construction. In K. McFerran, P. Derrington, & S. Saarikallio (Eds.), *Handbook of music, adolescents, and wellbeing* (pp. 89–98). Oxford University Press.  
<https://doi.org/10.1093/oso/9780198808992.003.0008>
- Schoon, I., & Parsons, S. (2002). Teenage aspirations for future careers and occupational outcomes. *Journal of Vocational Behavior*, 60(2), 262–288.  
<https://doi.org/10.1006/jvbe.2001.1867>

- Small, C. (1998). *Musicking: The meanings of performing and listening*. Wesleyan University Press.
- Sternberg, R. J. (2021). Toward a triangular theory of love for one's musical instrument. *Psychology of Music*, 49(6), 1747–1757.  
<https://doi.org/10.1177/0305735620961143>
- Upitis, R., Abrami, P. C., Varela, W., King, M., & Brook, J. (2017). Student experiences with studio instruction. *Music Education Research*, 19(4), 410–437.  
<https://doi.org/10.1080/14613808.2016.1202221>
- Väkevä, L., Westerlund, H., & Ilmola-Sheppard, L. (2017). Social innovations in music education: Creating institutional resilience for increasing social justice. *Action, Criticism, and Theory for Music Education*, 16(3), 129–147.  
<https://doi.org/10.22176/act16.3.129>
- Wagner, I. (2015). *Producing excellence: The making of virtuosos*. Rutgers University Press.
- Welch, G. (2007). Addressing the multifaceted nature of music education: An activity theory research perspective. *Research Studies in Music Education*, 28(1), 28–37.
- Welch, G., & Ockelford, A. (2016). The role of institution and teachers in supporting learning. In S. Hallam, I. Cross, & M. Thaut (Eds.), *The Oxford handbook of music psychology* (2nd ed., pp. 509–526). Oxford University Press.  
<https://doi.org/10.1093/oxfordhb/9780198722946.013.30>
- Wenger, E. (1998). *Communities of practice. Learning, meaning and identity*. Cambridge University Press.
- Westvall, M. (2007). *Webs of musical significance: A study of student-teachers' musical socialisation in Ireland and Sweden* [Doctoral dissertation]. Dublin City University.
- Wiggins, J. (2016). Musical agency. In G. E. McPherson (Ed.), *The child as musician: A handbook of musical development* (2nd ed., pp. 102–121). Oxford University Press.
- Woody, R. H. (2021). Music education students' intrinsic and extrinsic motivation: A quantitative analysis of personal narratives. *Psychology of Music*, 49(5), 1321–1343.  
<https://doi.org/10.1177/0305735620944224>
- Zhukov, K., & Rowley, J. (2021). Crafting successful music careers: Insights from the professional lives of Australian pianists. *Research Studies in Music Education*, 44(1), 158–174. <https://doi.org/10.1177/1321103X211034647>

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