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Musical identities in action: Embodied, situated, and dynamic

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Abstract

This article provides a critical overview of musical identities as a research topic. A broad distinction between *identities in music* (IIM) and *music in identities* (MII) highlights how musical engagement is central to identity construction. These concepts are integrated with recent advances in psychological theory derived from enactive cognition (4E cognition) to propose a new framework for understanding musical identities, *Musical Identities in Action* (MIIA). This framework foregrounds musical identities as dynamic (constantly evolving, dialogical, and actively performed), embodied (shaped by how music is physically expressed and experienced) and situated (emergent from interaction with social contexts, technologies, and culture). Musical identities are presented as fluid and constructed through embodied and situated action. Interdisciplinary research on music and adolescence is utilized to show how the MIIA framework can be applied to specific contexts, and how musical identities interact with other aspects of life. Examples of the embodied nature of musical identities are provided from early interactions to professional performance and everyday informal

engagement. Technology is highlighted as one topical and situated context, using digital playlists and a recent online improvisation project as examples. Implications of the MIIA framework for education and health are also presented, proposing that a key goal of music education is the development of positive musical identities. Recent advances in humanities research such as post-qualitative inquiry (PQI) and metamodern philosophical theory are proposed as useful multidisciplinary approaches for developing new knowledge related to musical identities.

Keywords: Personality, self-concept, musicality, musical tastes, musical embodiment

Since the first edition of *Musical Identities* (MacDonald et al., 2002), issues of identity and identity politics are two of the most topical issues across the Western world. Who we are, and how we express gender, sexuality, nationhood, political views, etc., are fundamental aspects of modern life. Giddens (1991) highlighted the importance of identity by suggesting that, within post-industrial late modernity as opposed to previous times, people had many more choices to make about how their life would proceed. Socioeconomic factors notwithstanding, questions regarding where to live and how to live have numerous possibilities attached to them. These issues have become even more important in recent years, and concepts such as gender fluidity are researched in academia, and discussed in popular media, schools, and homes around the world. There is no disputing that identity is a crucial feature of modern life.

The last 50 years have also seen an exponential rise in research on the psychology of music indicating that music is inextricably woven into the fabric of daily living. The assertion that we are all musical and that every human being has a biological guarantee of musicianship is not a glib generalisation, but a logical conclusion drawn from an analysis of academic research investigating the foundations of human social behavior (MacDonald, 2020). Since we are all musical, we also all have a musical identity, and our musical preferences, and how we view our own musicality, are important aspects of our personality. Musical identities play an important role in how we relate to the world around us (Baker and MacDonald, 2017).

Writing an overview of music and identities is a challenge, not least because there is considerable interest in identities, both in academic research and popular culture. Being music psychologists ourselves we acknowledge that our perspective is grounded in our

discipline, yet this article is in dialogue with other disciplines and perspectives, all of which have a significant interest in identity research. The article seeks to advance a scientific conversation about how musical identities can be conceptualized, characterized, and studied. Ideas for capturing some of the key features of the nature of musical identities are presented, and adolescence is used as an exemplar to illustrate these points. It further discusses how these features are manifested in daily life, including novel technological platforms for music engagement, and practices such as music education, and how they intersect with broader research on musical identities.

How should musical identities be defined?

While it is hard to delineate a conclusive definition of musical identities, the term incorporates a number of key themes. First, a range of identity issues arise when we consider our own musicality. In other words, we have a sense of our own musicality. Whether the sense is “I am tone deaf” or “I play cello for the Chicago Symphony Orchestra,” both these self-assessments involve psychological features related to identity. These types of processes have been termed *identities in music* (Hargreaves et al., 2002). By contrast, there are psychological processes that are related to how music is utilized in other aspects of identities. For example, music preferences can be part of how we view ourselves or relate to the world around us. Thus, music tastes are used as a psychological resource to negotiate and construct identities. These features are termed *music in identities*. These two aspects are not mutually exclusive and can therefore overlap, and they demonstrate the range of situations in which music can be utilized in constructing identities.

The distinction between identities in music and music in identities serves as a starting point for approaching the concept of musical identities and, in the current article, we further

elaborate on the nature and character of both of these aspects. First, the use of the word “action” in the title of this article refers to the observation that, while certain features of our personality have some consistency, identity is not a static construct but is dynamic and constantly evolving. The article thus emphasizes the dynamic nature of identities insofar as its negotiated and socially constructed features are always evolving. Second, the word “action” further highlights the performative aspect of identity; it is something we *do* rather than something we *have*. Talking about music, playing music, writing about music, and even thinking about music, are all examples of how musical identities are *performed*.

Furthermore, this action, this performance, is fundamentally embodied and situated. In other words, musical identities are constantly negotiated as actions that involve bodily levels of experience and occur in a given moment and space. A saxophonist’s musical identity includes an awareness of moving hands and mouth, and other bodily sensations, and is therefore embodied. The playing of the saxophone will take place in a situation such as a rehearsal room, a recording studio or a club, and these situations also affect evolving musical identities; in this way all musical identities are situated. Musical identities, in their many forms, are also grounded in the fundamental non-verbal levels of communication that are already present in the early interactions of infants (Stern, 1999; Trevarthen & Aitken, 2001). In this article the concept of musical identities is further brought into dialogue with recent philosophical conceptions of the situated nature of human cognition. This includes the enactive cognition perspective deriving from the 4E framework – embodied, embedded, enactive, extended (Newen et al., 2018) – that posits that cognitive processes are not just neurological but involve bodily and environmental factors in dynamic interaction (Ward & Stapleton, 2012). As a synthesis of these perspectives, a *Musical Identities in Action* (MIIA) framework is presented as an approach to addressing the nature of musical identities. This approach is illustrated in Figure 1 and elaborated in the following sections.

Insert Figure 1. Musical Identities in Action (MIIA) framework about here

Prior knowledge of music and identities

MacDonald et al. (2002) proposed that music was an ideal site for the negotiation of psychological and social processes relating to identity, not least because music plays a key role in numerous aspects of life: caregiver-child bonding (Trevvarthen, 2002), family dynamics (Borthwick & Davidson, 2002), schooling (Lamont, 2002), national identity (Folkestaad, 2002), health and wellbeing (MacDonald & Miell, 2002; MacGlone et al, 2020). A more recent text, *The Handbook of Musical Identities* (MacDonald et al., 2017), presented an updated and significantly expanded view of the musical identities landscape, highlighting the extent to which the topic had blossomed in the intervening 15 years. This edition included new chapters on topics such as music and adolescent identity (Evans & McPherson, 2017; Karkou & Joseph 2017); musical identity and everyday life (DeNora, 2000), performer identity (Davidson, 2017), and ethnomusicology and identity (Cook, 2017). Five years on since the publication of that book, and looking into the future, interest in musical identities continues to flourish as evidenced by the current Special Issue.

Adolescence as an exemplar of the embodied, situated, and dynamic nature of musical identities

The topic of music and identity is particularly resonant with youth development. While identity evolves over the whole lifespan, it is especially during the years of adolescence when identity-relevant aspects from sexual orientation to career aspirations are actively negotiated, and music plays a fundamental role in all this. Popular music has long

been a central topic of youth culture research (e.g., Bennett, 2000; Frith, 1978) and music psychology-oriented work has also shown an interest in the ways in which music functions, for example, as a badge of youth identity (North & Hargreaves, 1999), a reflection of social statuses (Tekman & Hortacsu, 2002), and a symbol of value attachments (Ruud, 2009; 2020). These are all critical aspects of youth identity construction. Musical activities have been argued to play a significant role in the identity processes of different youth minorities, for exploring, negotiating, and expressing sexual identities (Aronoff & Gilboa, 2015; Scrine, 2019), and supporting identity formation and social engagement in young people who have experienced forced migration (Smith, 2018).

The three corners of the MIIA model are clearly visible in youth. Musicians from Hildegard of Bingen to Elvis Presley and Madonna have embraced the capacity of music to allow sexuality and sexual identity as bodily expression to be performed to young audiences in a socially acceptable way. This resonates with the findings of the music psychology literature, which addresses musical pleasure not only as cognitive-reflective, but essentially also physiological-experiential behavior (Tiihonen et al., 2017). The embeddedness of musical identities in social dynamics, such as peer-group affiliation, is also vividly present in adolescence. Music has been argued to serve socioemotional and interpersonal functions, including group bonding, coalition signalling, and courtship (Christensen et al., 2017; Hagen & Bryant, 2003), thus serving as a resource to construct social identity, particularly in relation to adolescent peer groups (Lamont & Hargreaves, 2019). Music preferences play a role in becoming acquainted with strangers (Rentfrow & Gosling, 2007) and forming friendships (Selfhout et al., 2009), and music and dance serve as pleasurable and natural forms of interaction at adolescent parties (Demant & Østergaard, 2007). Young people are also early adopters of technological platforms for social media and music sharing, and therefore form a crucial age group for understanding how these platforms change the

situatedness of constructing personal and social identity (Papachariss, 2011). Finally, adolescence is a good example of a time when musical identities function as a dynamic and transformative act of personal growth. Music can function as a mirror for reconstructing one's self-conception (DeNora, 1999), and adolescents often turn to music as a tool for their affective self-regulation, for gaining self-reflective insight, management, and acceptance of personal experiences (Saarikallio & Erkkilä, 2007). Music can also be a space in which adolescents can manifest personal agency, supporting growth towards independence and taking ownership of choices and actions (Saarikallio, 2019a). Finally, when used as a clinical tool for working with adolescents who are facing trouble and vulnerability, music can function as a therapeutic act of reconstructing identity and restoring one's capacity for both self-reconnection (Oosthuizen, 2019) and social participation (Krüger, 2019).

Dynamic interaction with other aspects of human functioning

When considering how young people construct, negotiate, and maintain their identities in music it is evident that musical identity construction is intrinsically intertwined with other areas of their psychological development and aspects of their everyday life (Laiho, 2004; McFerran et al., 2019a; Miranda, 2013; North et al., 2000). For adolescents, music is an attractive emotional aid to identity construction during a time when many of their cognitive-emotional skills are still developing (Beauchaine, 2015; Burnett et al., 2009; Cracco et al., 2017; Fuhrmann et al., 2015; Lawrence et al., 2015; Zeman et al., 2006). Similarly, music offers a powerful tool for creating peer-group affiliation and for constructing social identity during a period when the quality of peer interactions in particular has a major effect on well-being (Guyer et al., 2016) and mental health (Lamblin et al., 2017) in both the short and long term (Arseneault, 2017). The attraction of music for adolescents is also linked to the growing need for independent, personal choice-making in a world of increasing options for identity

construction (Schwartz et al., 2005). Capacities to demonstrate personal choice, skill, and competence in music can help to build self-esteem and agentic ownership over identity development more broadly (Arnett, 2007; Laiho, 2004; Parker, 2020, Saarikallio, 2019a). The linkage of identity construction with other fundamental aspects of human behavior remains essential across the lifespan. Adult identities are also constructed through the multifaceted fabric of emotions and social connections of daily situations (DeNora, 2013), and both intra- and interpersonal aspects of identity-relevant processes are present in all musical action from everyday life (Schäfer et al., 2013) to health musicking (Bonde, 2011; Ruud, 2020) and across cultures (Saarikallio, 2011). Identity itself is thus an action that is intrinsically intertwined with all other areas of human existence. This places a demand for research on music and identities to hold a dialogue with the broader theoretical frames of human functioning that embrace music as a connection to self, to others, and to the world.

Addressing the embodied nature of music and identities

Scientific understanding of musical identities should integrate the definition of music as social behavior. This article is grounded on a conceptualization of music as a non-verbal, emotional-embodied social experience. Musical interaction resembles the ways in which infants interact, as fundamental affective nuances from agitation to calmness are communicated through sound, touch, and vision (Stern, 1999; Trevarthen & Aitken, 2001). This links to the evolutionary roots of music as a form of non-verbal, participatory, and interactive communication (Cross, 2014; Laland et al., 2016). As an example of how music operates as a form of social action, we can think of embodied entrainment or the act of moving in synchrony with others, which has been considered to explain why music promotes social connectedness (Hari et al., 2013; Hove & Risen, 2009; Sebanz et al., 2006). The embodied nature of our musical identities begins at birth. Trevarthen (2002) shows how the

earliest communication between a baby and caregiver musical and improvisatory. Music plays an important role in identity development within the earliest and most important bonding relationship of our lives (MacDonald, 2020). Crucially, these early interactions are embodied. The rhythmic movement of a baby's hands and their vocalising can synchronise with body movements and vocalisations from a caregiver. Thus, the way in which a baby's body moves, and how these movements are part of an ongoing musical improvisation, demonstrate how this aspect of identity development is fundamentally embodied within a dynamically evolving relationship. These patterns of interaction, the earliest manifestations of musical identity, have an influence across the lifespan. Thus music, improvisation, and musical identities play a crucial role the most influential relationship of life. This is one example of how musical identities are embodied within dynamic action. However, our contention is that all musical identities are embodied. For example, for adolescents, music (whether listening, playing, or dancing) offers a space in which strong bodily sensations are acceptable and musical identities can be experienced and expressed in all of their embodied immersiveness, yet with the safety of the action being "just" musical (Laiho, 2004). From the expressive body movements of a cellist performing with a string quartet to the rhythmic gestures of a percussionist in a samba band, these social actions are influential aspects of the musical communication process and key features of a performer's musical identity. Jimi Hendrix setting fire to his guitar and Joan Sutherland's swaying body during an operatic aria are signifiers of the embodied nature of musical identities, particularly identities in music. These expressive gestures are part of the performer's personality and of the musical communication process, illustrating the nature of musical identities as being inherently embodied, dynamic, and part of social action. Importantly, these features are dynamic, embodied, and situated; they are summarised in the Musical Identities in Action (MIIA) framework.

An example of a discipline and practice that actively utilizes the non-verbal nature of music is music therapy. The kind of music therapy that takes a psychodynamic approach, in particular, uses music as a tool to access the symbolic and non-verbal levels of experience and intersubjectivity (Bonde, 2011; Trondalen & Bonde, 2012; MacDonald & Wilson, 2014; 2020). In this context, music serves as a tool for externalizing the internal. In essence, music can give form to the unspoken experiences of ourselves, providing an external sound-manifestation of those aspects of our identities that we find hard to verbalize. This capacity of music to express emotions and experiences sonically is relevant to everyday musical engagement, helping explain why musical experiences may advance a self-reflective understanding of ourselves and our identities (Frijda & Sundararajan, 2007, MacDonald & Wilson, 2020; Saarikallio, 2017; 2019b). These experiences are particularly relevant for understanding how music serves as a tool and material for our broader self-construction, that is, music in identities. Yet, while non-verbal, bodily-affective aspects of musical communication are an inherent aspect of how music expresses, negotiates, and helps to access and manifest feelings of who we are and how we relate to others, these levels of experience have not been at the centre of research on music and identities. Investigating them in further detail is a clear priority for future research.

Addressing the situated nature of music and identities

It has been noted that the gratifications of music are contextually situated and always mediated by both the user and the music, and also the interaction between them. (Shevy, 2013). Musicking is a diverse behavior, personalized and embedded in a multitude of contexts, cultural diversity, and novel technological platforms. This places a critical demand on researchers to approach music and identity from situated perspectives. The embeddedness

of music engagement in daily moments, behaviors, and contexts resonates well with the state-of-the-art philosophical conceptions of 4E cognition, which propose that cognitive processes emerge from the interaction between the organism and the world (Newen et al., 2018; Ward & Stapleton, 2012). In essence, cognition is not a separate, closed system, but fundamentally constructed as cycles of action and perception, in dynamic interaction with the environment. The 4E perspective has been used to describe emerging musicality in infancy; for example, Schiavio et al. (2020), and Timmers (2017) argue that infant musicality develops in the course of creative, dynamic, and sound-oriented action-as-perception cycles that lead to enriched repertoires of goal-directed acts. Such a dynamic construction of the first sonic discoveries can be considered as a starting point for the formation of identities in music. Meanwhile, yet again in line with 4E cognition, Krueger (2014) argues that music serves as an external resource onto which individuals can off-load some of their emotional and cognitive processes. This is closer to the concept of music in identities, as it refers to a process in which musical engagement serves broader self-construction and self-maintenance. The 4E cognition perspective offers an interesting avenue for approaching music and identities, and resonates with the need to better understand the embodied-emotional-situated aspects of human cognition that are stressed by researchers in many related fields, including developmental psychology (Johnson, 2008; Thelen, 2008), ecological psychology (Lobo et al., 2018), social psychology (Marsh, 2017), critical pedagogy (Shapiro, 1999), music (Lesaffre et al., 2017), dance (Bläsing, 2017), and creativity (van der Schyff et al., 2018).

The situatedness of musical identities relates to a variety of aspects of our lives from social settings to institutional contexts and cultural diversity. The very question of what type of experiences define a desirable musical identity is culturally dependent. A recent study (Saarikallio et al., 2020) observed that both Finnish and Indian informants appreciated music

for connecting them with childhood identity and related happy memories but, while Finnish informants found music empowering because it served a self-referential processing of personal values and overcoming of the hardships of life, Indian informants emphasized the importance of music in helping them to motivate their activities and regulate their moods towards positive and socially acceptable states in the present. This is just one example of how the nature of musical identities is crucially linked to the social-situational-cultural contexts in which they are being performed. Listening to music on a train via earbuds, singing in a community choir, playing French horn in a symphony orchestra, all these examples of musical identities are crucially influenced by the situation in which they occur, and different situations produce quite different features of identities. This further links to how musical identities are maintained via the process of *reciprocal determinism* as outlined by Bandura (1986), whereby personality, behaviors, and social situations are all in a reciprocal relationship with another.

New platforms for embodied-situated musical identities

Perhaps the most critical state-of-the art perspective for addressing the situatedness of music and identities relates to understanding the rapid technological development and its relevance in shaping the contexts in which musical identities are constructed. Music is available everywhere, with new audio and video platforms and streaming services being actively adopted particularly by 13-to-25-year-olds (International Federation of the Phonographic Industry (IFPI)/ Teosto 2020). Mobile technology and online environments have become the day-to-day medium of communication for young people, and also their new playground for identity construction (Papachariss, 2011). The constantly evolving nature of musical engagement means that our relationship with music listening and even with music making has changed and, again, this is particularly relevant for young people. The

relationship with an object – the vinyl record, the cassette, or the CD – has changed, and the virtual playlist, a curated selection of specific tracks to meet particular psychological and social needs has, in many ways, replaced this relationship and become a fundamental way of engaging with music. This change in how music is consumed may have a resultant effect upon how musical tastes develop. It may no longer be affiliated with a band's recorded oeuvre via their LPs and is perhaps more linked to personally created playlists that can also be shared socially (Savage, 2016). Technology is changing the acts of performing and disseminating music, and posting a performance, self-recorded at home, on online platforms such as YouTube is now commonplace. Young people may no longer have a relationship with a physical object, no longer have music collections at home, and no longer have to go to a venue to perform; rather, their evolving relationship with music and their musical identities is crucially mediated by technology. Accessing a virtual music collection of unlimited size, with the possibility of sharing identity-relevant playlists, has become a quotidian aspect of listening. The virtual world containing an unlimited number of listeners may serve as the audience for anyone's musical identity. A clear example of the changing nature of music listening is the utilisation of music videos; according to the IFPI (2019) report, 47% of all music streaming occurs on video platforms such as YouTube, which is making the materials of the modern musical identity construction through music listening increasingly audio-visual. Zillman and Gan (1997) claimed that musical tastes may be the most important aspect of a young person's identity. While this still may be the case, a revolution has taken place in how we consume music and how we use music as an expression of our identities. This suggests that a reimagining of the nature of young people's musical identities is warranted, and new methods are required to try and gain purchase upon how a young person's musical identity evolves.

At the time of writing (March, 2022) the world is still in the midst of the global COVID-19 pandemic, and technology has played an important role in how people around the world have been able to maintain contact with each other. There are numerous examples of how music and technology have combined to facilitate people staying connected and negotiating change in their identities. One recent example of how musicians have used technology to positively enhance identities via music has been reported (MacDonald & Birrell, 2020; MacDonald et al., 2021). Here musicians used Zoom software to engage in weekly improvisation sessions from the beginning of globalised physical distancing requirements. MacDonald et al. (2021) report that these sessions had a significantly positive effect upon participants' sense of self, enhancing mood and reducing feelings of isolation. Importantly, participants also reported important musical, artistic, and conceptual breakthroughs as a result of the sessions. They highlighted the specific technical affordances of the software, termed *Zoomesphere*, describing them as essential in making these developments since they facilitated ways of staying connected socially and artistically during long periods of physical isolation. The unique situational aspects of the online session also had a very specific type of impact upon the nature of the interactions and the observed positive social and artistic outcomes. This social context was termed *The Theatre of Home* and highlighted the influence of aspects of domestic environments such as pets, household objects, flatmates, and family members, which often appeared on the screen. These online sessions are an excellent example of how technological advances interact with situational and embodied aspects to produce important developments in musical identities and also have positive health benefits during times of crisis.

Music education as a discipline for supporting positive musical identities

The construction of musical identities is fundamental to practices such as music education (MacPherson, 2017), which should inform and be informed by the definition and study of musical identities. One of the goals of music education could reasonably be asserted as the development of positive musical identities in students. Continued engagement with music, through listening or participation, across the lifespan, may be related to the development of a positive musical identity that could develop alongside discrete technical musical skills (Wright et al., 2021). This is important, since technical mastery by itself does not equate to lifetime engagement and people may develop advanced technical skills but stop being actively engaged after leaving formal music education. This is one of the challenges for music education, which has long seen the development of discrete musical skills as its essential goal. However, the achievement of these skills sometimes neglects important identity-related issues such as enjoyment, motivation, and musical preference, and it is possible to develop advanced technical skills while not developing a positive musical identity, which may eventually inhibit music engagement. A contrasting challenge for music education concerns individuals who, for whatever reason, feel as though they are “unmusical.” Musicality is sometimes constructed as a quality one can have or not have. Significant numbers of people report themselves to be “not musical.” This assertion could originate from beliefs about their family being unmusical or lacking “musical genes” or perhaps an early negative experience with music was pivotal in shaping this non-musical self-belief. Such musical identities will inevitably inhibit musical engagement. Opening the door to a broad conceptualization of positive musical identity, which includes all forms of music engagement from listening to dancing and song writing, is therefore critical for music education.

Recently, the relevance of hearing the voices of students (Parker, 2020) and appreciating their musical agency (Karlsen, 2011), in order to support the development of

their musical identities, has actively been stressed in music education. Another recent development has been the acknowledgement that musicians' health and wellbeing is an important aspect of music education and that musical identities clearly impact upon musicians' mental and physical health (Kegelaers et al., 2021). It is well known that students' views of their abilities in relation to audience perceptions can lead to performance anxiety and this is a challenge for the aspiring professional musicians (Cohen & Bodner, 2021). Overall, the professional life of a musician has been identified as being highly stressful yet rewarding (Araújo et al., 2017). Interestingly, music professionals seem to appreciate music not only as their profession but also as an important resource for their psychological wellbeing (Saarikallio et al., 2020). It can be argued that the development of technical skills and a broader positive musical identity should be in a mutual, reciprocal relationship. For music education, this essentially means that it is important to appreciate and foster the dialogical space between identities in music and music in identities; these two facets of musical identities should not be considered as separate entities, but rather mutually supportive of the growth of the other. This resonates with the recent proposition (Vamvakaris, 2021) that the health impacts of music are based on a virtuous cycle that is constructed by a reciprocal and dynamic relatedness between the perceived importance of music, belief in music's positive impact, and the successful use of music. The cycle is further supported by the adaptability and sophistication that allow self-reflective understanding of one's relationship with music and the taking of related action. Technical skill development will always remain as a central element of music education, but it will also always be in dynamic, embodied, and situated interaction with musical identities. Since positive musical identity may well be the critical predictor of a rewarding lifetime engagement with music, music educators should be supported as valuable co-creators of their students' positive musical identities.

Theoretical approaches to studying musical identities

Identities are studied from numerous theoretical positions and from a wide variety of disciplines. For example, phenomenological approaches emphasize unique lived experiences, and the ways in which individuals subjectively make meaning of their musical engagement is key to how musical identities are uniquely constructed. Oakland and MacDonald (2022) demonstrated how a phenomenological approach can be utilized to understand the relationship between health and musical identities within the life of a professional opera singer. Social constructionist approaches to identity emphasize social institutions, infrastructures, cultural norms, historical contexts, and so on. MacDonald and Wilson (2020) show how hegemonic power relationships are crucial for jazz musicians when negotiating their identities. Their work also demonstrates how thematic analysis can be utilized when researching musical identities in terms of the way in which professional jazz musicians discuss their practice and musical identities. Trait approaches to personality theory have also been influential in how we view musical identities. Within this approach, stable enduring features of identity are emphasized, and questionnaires are often utilized to highlight these aspects from a quantitative perspective. Rentfrow and Gosling (2017), for instance, linked specific personality traits with particular tastes in music, showing how personality and musical tastes can be linked within an overall musical identities framework. Neurological approaches, if not necessarily representing overarching approaches to personality, emphasize that brain structures and physiological components are also implicated in approaches to musical identities. For instance, Saarikallio et al. (2019) shows how specific parts of the brain are stimulated while engaged in music activities such as singing a major scale and, in this context, she demonstrates a direct link between neurological functioning and discrete musical behaviors implicated in musical identities.

As well as various broad theoretical perspectives there are many methodological approaches that can be utilized when studying identities. In addition to those mentioned above, there are numerous techniques such as video elicitation, whereby participants watch video clips and immediately engage in a discussion of related issues that forms the basis of data analysis (Paskins et al., 2017). Experience sampling techniques can be used to track the multitude of contextual factors involved in negotiating musical identities across daily life situations (Saarikallio, Randall, & Baltazar, 2020) and novel techniques whereby participants utilize mobile phone cameras can capture discrete moments that illuminate musical engagement. Creative methods involving participants drawing pictures of important moments can provide unique and valuable insights into the nature of people's musical identities (Mannay, 2015). Motion-capture techniques and gesture analyses can be used to quantify embodied aspects of musical performance and expression (Burger & Toiviainen, 2013; Camurri et al., 2004) and big-data analyses and machine learning can be used to identify behavioral patterns reflective of differing musical identities (Carlson et al., 2020; Ranjan & Foropon, 2021).

The potential list of methodologies that can be used to study musical identities is large and once again highlights music as a fundamental, dynamic, situated, and embodied part of identity processes. Whichever methodological choice is made, the nature of identities as evolving situated action requires sensitivity, incorporating the voices of those whose identities are studied, and acknowledging the embeddedness of identities in the entire fabric of our lives. John Law (2004) presented an insightful argument regarding the inadequacy of current methods to incorporate the complexity or, as he put it, the “messiness” of reality. Musical identities are messy concepts. Grounded in our prior and current embodied levels of

experience, scaffolded on our current situational affordances, and emotionally evolving as the moment unfolds, they are fluid entities that often make static measurement and fixed conceptualization difficult. This is not to say that the concepts and measures are inappropriate. Quite the contrary, they are necessary approximations and helpful tools, but the acknowledgement of their limits is vital. Consequently, musical identity holds great potential for bringing disciplines into dialogue. The various music-related research fields from psychology to education, therapy, sociology, philosophy, and cognitive neuroscience are rapidly developing and maturing, and cross-disciplinary dialogue is more important than ever. Musical identities encompass a wide range of subjects and practices and, as a topic of study, can act as a vital and illuminating link between disciplines.

Conclusion

Musical identities are complex, and universally and inextricably linked with numerous aspects of daily life. They are therefore sophisticated, both conceptually and practically and, from a theoretical perspective, messy. Mess, as a theoretical concept outlined by Law (2004), can be used to integrate some of the themes in this article. As defined by Law, mess emphasizes the cultural and psychological complexity of everyday life and a constantly evolving social milieu that in many ways describes exactly how music functions with its fully meshed and embedded presence in everyday life (DeNora, 2013; MacDonald, 2021). Rather than attempting to simplify the related elements, this article proposes to embrace the complexity of musical identities as a multifaceted, constantly evolving phenomenon.

In terms of theoretical positioning, this article can be considered as metamodern, insofar as it moves beyond a postmodern position of extreme cultural relativism to propose

that multiple truths may be evident at different times and that oscillations between these different positions are possible, helpful, and desirable (Thorpe et al., 2020). Metamodern theory has developed over the past 20 years as a way of moving past cultural relativism to engender the possibility of multiple truths and realities being available at different times (Kilicoglu & Kilicoglu, 2020). The study of identity may be an excellent way to develop metamodern theory as a way to embrace the mess and complexity of musical engagement, so that singing in the bath becomes as equally valid a way of performing musical identities as playing a violin in the Berlin Philharmonic Orchestra. Metamodern theory can be relevant to many of the themes presented in this article. Essentially, as a philosophical movement dealing with cultural theory and aesthetics, metamodernism foregrounds the idea of oscillation as a contrast to both positivist research aims of obtaining a single objective reality and the postmodern perspective of accepting static subjective relativism. Narratives and the aim of science to integrate artistic features and align with artists contributing to scientific knowledge are also central to metamodern thinking (Kilicoglu & Kilicoglu, 2020). These philosophical features can be utilized to help integrate different types of identity research and theories. Directly relevant in this regard is post-qualitative inquiry (PQI), an important recent addition to social science methodological epistemology. The methodological implication of PQI is that it robustly argues for a type of pluralism that goes beyond traditional mixed methods, allowing for multiple paths to “evidence” (Thorpe et al., 2020, p. ?).

A goal of modern research is to move beyond simple binaries such as qualitative vs. quantitative or empirical vs. theoretical, which can sometimes restrict scholarly debate, and metamodern theories as applied to musical identities may be an excellent way to take our debates forward. By embracing the multiplicity of ways in which we can study identities and by using new theory and new methods we can celebrate the multidisciplinary dynamism that

is emblematic of identities in action. Babies cooing with their parents, children playing in a school orchestra, teenagers rehearsing in a rock band, adults singing in a community choir, a businesswoman listening to music via earbuds on a train, a violin trio performing in a restaurant; all these musicians and listeners are continuously doing or performing their musical identities, and this multiplicity is to be celebrated theoretically, practically, and socially. We all have several musical identities that are constantly reformulated and reconstructed, experienced, and enacted at various levels and situations. In this article we have attempted to broaden our conceptions of musical identities to include recent technical and theoretical developments within psychology in general. This has included issues such as moving onto Zoom in the global pandemic and holding a dialogue with 4E theory. We have emphasized that all musical identities are embodied in movement and that they are situated in a specific time and place. In highlighting these concerns we have endeavored to show how musical identities remain a concern for researchers interested in the psychology of music, not least because the development of positive musical identities will help to predict rewarding engagement with music across the lifespan.

References

- Araújo, L.S., Wasley, D., Perkins, R., Atkins, L., Redding, E., Ginsborg, J. & Williamon, A. (2017). Fit to Perform: an investigation of higher education music students' perceptions, attitudes and behaviors toward health. *Frontiers in Psychology*, 8, 1558. <https://doi.org/10.3389/fpsyg.2017.01558>
- Aronoff, U., & Gilboa, A. (2015). Music and the closet: The roles music plays for gay men in the “coming out” process. *Psychology of Music*, 43(3), 423–437. <https://doi.org/10.1177/0305735613515943>
- Arseneault, L. (2017). The long-term impact of bullying victimization on mental health. *World Psychiatry*, 16(1), 27. doi: [10.1002/wps.20399](https://doi.org/10.1002/wps.20399)
- Baker, F.A., & MacDonald, R.A.R. (2017) Reauthoring the self: Therapeutic songwriting in identity work. In R.A.R. MacDonald, D.E. Miell, & D.J. Hargreaves (Eds.) *The Oxford handbook of musical identities* (pp.436-452). Oxford University Press. DOI:10.1093/acprof:oso/9780199679485.003.0024
- Beauchaine, T. P. (2015). Future directions in emotion dysregulation and youth psychopathology. *Journal of Clinical Child & Adolescent Psychology*, 44(5), 875–896. <https://doi.org/10.1080/15374416.2015.1038827>
- Bennett, A. (2000). *Popular music and youth culture: Music, identity and place*. St. Martin's Press.
- Bläsing, B. (2017). Dance in the body, the mind and the brain: Neurocognitive research inspired by dancers and their audience. In V. Karkou, S. Oliver, & S. Lycouris (Eds.), *The Oxford handbook of dance and wellbeing* (pp. 41-56). Oxford: Oxford University Press. DOI: 10.1093/oxfordhb/9780199949298.001.0001
- Bonde, L. O. (2011). Health musicing - music therapy or music and health? A model, empirical examples and personal reflections. *Music and Arts in Action*, 3(2), 120-140.

- Burger, B., & Toiviainen, P. (2013). MoCap Toolbox – A Matlab toolbox for computational analysis of movement data. In R. Bresin (Ed.), *Proceedings of the 10th Sound and Music Computing Conference* (pp. 172–178).. KTH Royal Institute of Technology, Stockholm, Sweden.
- Burnett, S., Bird, G., Moll, J., Frith, C., Blakemore, S.J. (2009). Development during adolescence of the neural processing of social emotion, *Journal of Cognitive Neuroscience*, 21, 1736-1750. DOI: 10.1162/jocn.2009.21121
- Carlson, E., Saari, P., Burger, B. & Toiviainen, P. (2020) Dance to your own drum: Identification of musical genre and individual dancer from motion capture using machine learning, *Journal of New Music Research*, 49 (2), 162-177.
<https://doi.10.1080/09298215.2020.1711778>
- Christensen, J. F., Cela-Conde, C. J., & Gomila, A. (2017). Not all about sex: Neural and biobehavioral functions of human dance. *Annals of the New York Academy of Sciences*, 1400(1), 8-32. DOI: 10.1111/nyas.13420
- Cohen S, & Bodner E. (2021). Flow and music performance anxiety: The influence of contextual and background variables. *Musicae Scientiae*, 25(1), 25-44.
[doi:10.1177/1029864919838600](https://doi.org/10.1177/1029864919838600)
- Cracco, E., Goossens, L. & Braet, C. (2017). Emotion regulation across childhood and adolescence: evidence for a maladaptive shift in adolescence. *European Child and Adolescent Psychiatry*, 26 (8), 909–921. DOI: 10.1007/s00787-017-0952-8
- Cross, I. (2014). Music and communication in music psychology. *Psychology of music*, 42(6), 809-819. <https://doi.org/10.1177/0305735614543968>
- Demant, J., & Østergaard, J. (2007). Partying as everyday life: Investigations of teenagers' leisure life. *Journal of Youth Studies*, 10(5), 517-537.
DOI:10.1080/13676260701594828

- DeNora, T. (2000). *Music in everyday life.*, Cambridge Univ Pr.
<https://doi.org/10.1017/CBO9780511489433>
- DeNora, T. (2013). *Music Asylums: Wellbeing Through Music in Everyday Life.*, Ashgate.
<https://doi.org/10.1111/1467-9566.12198>
- DeNora, T. (1999). Music as a technology of the self. *Poetics*, 27(1), 31–56.
<https://doi.org/10.1177/0959353502012002008>
- Frijda, N. H., & Sundararajan, L. (2007). Emotion refinement: A theory inspired by Chinese poetics. *Perspectives on Psychological Science*, 2(3), 227-241. <https://doi.org/10.1111/j.1745-6916.2007.00042.x>
- Frith, S. (1978). *The sociology of rock.* Constable.
- Fuhrmann, D., Knoll, L. J., & Blakemore, S. J. (2015). Adolescence as a sensitive period of brain development. *Trends in Cognitive Sciences*, 19(10), 558-566. DOI: 10.1016/j.tics.2015.07.008
- Giddens, A. (1991). *Modernity and self- identity: self and society in the late modern age.* Polity Press.
- Guyer, A. E., Silk, J. S., & Nelson, E. E. (2016). The neurobiology of the emotional adolescent: From the inside out. *Neuroscience & Biobehavioral Reviews*, 70, 74-85.
- Hagen, E. H., & Bryant, G. A. (2003). Music and dance as a coalition signaling system. *Human Nature*, 14(1), 21-51.
- Hargreaves, D.J., MacDonald, R.A.R, & Miell, D.E. (2017). The changing identity of musical identities. In R.A.R. MacDonald, D.E, Miell & D.J, Hargreaves (Eds.). *The Oxford handbook of musical identities* (pp.3-23). Oxford University Press
- Hari, R., Himberg, T., Nummenmaa, L., Hämäläinen, M., & Parkkonen, L. (2013). Synchrony of brains and bodies during implicit interpersonal interaction. *Trends in Cognitive Sciences*, 17(3), 105-106. <https://doi.org/10.1016/j.tics.2013.01.003>

- Hove, M. J., and Risen, J. L. (2009). It's all in the timing: interpersonal synchrony increases affiliation. *Social Cognition*, 27, 949–960. <https://doi:10.1521/soco.2009.27.6.949>
- IFPI/Teosto (2020). Musiikinkuuntelu Suomessa 2020 [Music listening in Finland 2020], Report retrieved from: https://www.teosto.fi/app/uploads/2020/10/07123946/ifpi-teosto_musiikinkuuntelu-suomessa-2020_final.pdf
- Johnson, M. (2008). The meaning of the body. In W. F. Overton, U. Müller & J. L. Newman (Eds.), *Developmental perspectives on embodiment and consciousness* (pp. 19–43). Lawrence Erlbaum.
- Karlsen, S. (2011). Using musical agency as a lens: Researching music education from the angle of experience. *Research Studies in Music Education*, 33(2), 107-121.
<https://doi.org/10.1177/1321103X11422005>
- Kegelaers J., Schuijjer M., & Oudejans R.R. (2021) Resilience and mental health issues in classical musicians: A preliminary study. *Psychology of Music*, 49(5), 1273-1284.
<https://doi:10.1177/0305735620927789>
- Kilicoglu, G. & Kilicoglu, D. (2020). The birth of a new paradigm: Rethinking education and school leadership with a metamodern 'lens'. *Studies in Philosophy and Education*, 39, 493–514. DOI 10.1007/s11217-019-09690-z
- Krueger, J. (2014). Musical manipulations and the emotionally extended mind. *Empirical Musicology Review*, 9(3), 1-5.
- Krüger, V. (2019). Music as a structuring resource in identity formation processes by adolescents engaging in music therapy - a case story from a Norwegian child welfare wetting. 'Hey ho, let's go' (The Ramones). In K. McFerran, P. Derrington & S. Saarikallio (Eds.), *Handbook of music, adolescents, and wellbeing* (pp.127-138). Oxford University Press.

- Krueger, J. (2014). Musical manipulations and the emotionally extended mind. *Empirical Musicology Review*, 9(3), 1-5. DOI: 10.18061/emr.v9i3-4.4496
- Laland, K., Wilkins, C., & Clayton, N. (2016). The evolution of dance. *Current Biology*, 26(1), R5-R9. DOI: 10.1016/j.cub.2015.11.031
- Lamblin, M., Murawski, C., Whittle, S., & Fornito, A. (2017). Social connectedness, mental health and the adolescent brain. *Neuroscience & Biobehavioral Reviews*, 80, 57-68.
- Lamont, A., & Hargreaves, D. J. (2019). Musical preference and social identity in adolescence. In K. McFerran, P. Derrington & S. Saarikallio (Eds.), *Handbook of music, adolescents, and wellbeing* (pp.109-118). Oxford University Press.
- Lesaffre, M., Maes, P., & Leman, M. (2017). *The Routledge companion to embodied music interaction*. Taylor & Francis. <https://doi.org/10.4324/9781315621364>
- Lobo, L., Heras-Escribano, M., & Travieso, D. (2018). The history and philosophy of ecological psychology. *Frontiers in Psychology*, 9, 2228. doi: 10.3389/fpsyg.2022.916736
- Law, J. (2004). *After Method: Mess in Social Science*. Routledge.
- Lawrence, K., Campbell, R., & Skuse, D. (2015). Age, gender, and puberty influence the development of facial emotion recognition. *Frontiers in psychology*, 6, 761. <https://doi.org/10.3389/fpsyg.2015.00761>
- MacDonald, R. & Wilson, G. (2020). *The Art of Becoming: How Group Improvisation Works*. Oxford University Press. DOI:10.1093/oso/9780190840914.001.0001
- MacDonald R.A.R, Miell, D.E. & Hargreaves D.J. (Eds.) (2017). *The Oxford handbook of musical identities*. Oxford University Press
DOI:10.1093/acprof:oso/9780199679485.001.0001

- MacDonald R.A.R., Kreutz, G., & Mitchell, L.A., (Eds) (2012). *Music, health and wellbeing*. Oxford University Press.
- DOI:10.1093/acprof:oso/9780199586974.001.0001
- MacDonald R.A.R., Miell, D.E. & Hargreaves, D.J. (Eds.) (2002). *Musical identities*. Oxford University Press. DOI:10.1093/acprof:oso/9780199679485.001.0001
- MacDonald, R.A.R., Burke, R.L., De Nora, T., Sappho Donohue, M. & Birrell, R. (2021) Our virtual tribe: Sustaining and enhancing community via online music improvisation. *Frontiers in Psychology*, 11, 623640. [https://doi: 10.3389/fpsyg.2020.623640](https://doi.org/10.3389/fpsyg.2020.623640)
- MacDonald, R.A.R. & Birrell, R. (2020). Flattening the curve: Glasgow Improvisers Orchestra's use of virtual improvising to maintain community during COVID-19 pandemic. *Critical Studies in Improvisation* 14(2-3)
- <https://www.criticalimprov.com/index.php/csieci/article/view/6384>
- MacDonald R.A.R. (2021). The Social Functions of Music: Communication, Wellbeing, Art, Ritual, Identity and Social Networks (C-WARIS). In D. Hodges, A. Creech & S. Hallam (Eds.), *Routledge international handbook of music psychology in education and the community*, (pp 5-21). Routledge. <https://doi.org/10.4324/9780429295362-3>
- MacDonald R.A.R. (2022). Improvisation. In G. E. MacPherson (Ed.), *The Oxford handbook of music performance* (pp. 214-233). Oxford University Press. DOI: 10.1093/oxfordhb/9780190056285.013.28
- MacDonald, R. & Wilson, G. (2014) Improvisation, health and wellbeing: A review. *Psychology of Well-Being*, 4(20). [https://doi:10.1186/s13612-014-0020-9](https://doi.org/10.1186/s13612-014-0020-9)
- MacGlone, U. M., Vamvakaris, J., Wilson, G. B., & MacDonald, R.A.R. (2020) 'Understanding the effects of a community music programme for people with disabilities: a mixed-methods, person-centred study'. *Frontiers in Psychology*. [https://doi.10.3389/fpsyg.2020.588734](https://doi.org/10.3389/fpsyg.2020.588734)

- Mannay, D. (2015). *Visual, narrative and creative research methods: Application, reflection and ethics*. Routledge.
- Marsh, K. (2017). Dynamics of synchrony and joint action. In R. Vallacher, S. Read, & A. Nowak (Eds.), *Computational social psychology* (pp. 178-207). Routledge.
- McFerran, K., Derrington, P. & Saarikallio, S. (Eds.) (2019). *Handbook of music, adolescents, and wellbeing*. Oxford University Press.
- DOI:10.1093/oso/9780198808992.001.0001
- Miranda, D. (2013). The role of music in adolescent development: much more than the same old song, *International Journal of Adolescence and Youth*, 18(1), 5-22.
- <https://doi.org/10.1080/02673843.2011.650182>
- Newen, A., de Bruin, L., & Gallagher, S. (2018). 4E cognition: Historical roots, key concepts, and central issues. In A. Newen, L. de Bruin & S. Gallagher (Eds.), *The Oxford handbook of 4E cognition* (pp. 3-18). Oxford University Press. DOI: 10.1093/oxfordhb/9780198735410.013.1
- North, A. C. & Hargreaves, D. J., (1999). Music and adolescent identity. *Music Education Research*, 1(1), 75-92. <https://doi.org/10.1080/1461380990010107>
- North, A. C., Hargreaves, D. J., & O'Neill, S. A. (2000). The importance of music to adolescents. *British Journal of Educational Psychology*, 70, 255–272.
- <https://doi.org/10.1348/000709900158083>
- Oakland, J., & MacDonald, R.A.R. (2022). Identity and the performing musician. In G. MacPherson (E.), *The Oxford Handbook of music performance* (pp. 652-670). Oxford University Press. DOI: 10.1093/oxfordhb/9780190056285.001.0001
- Oakland, J., MacDonald, R. & Flowers, P. (2017). Who Am I?: The process of identity renegotiation for opera choristers following redundancy. In R.A.R. MacDonald, D.E.

- Miell, & D.J, Hargreaves (Eds.), *The Oxford handbook of musical identities*. Oxford University Press. DOI: 10.1093/oxfordhb/9780190056285.013.26
- Oosthuizen, H. (2019). There is a Good Spot in my Heart': A Story of a Music Therapy Group that Enables Young Sex Offenders to Reconnect with Themselves, Their Stories and Their Communities. In K. McFerran, P. Derrington & S. Saarikallio (Eds.), *Handbook of music, adolescents, and wellbeing* (pp.197-206). Oxford University Press. DOI: 10.1093/oxfordhb/9780190056285.013.26
- Parker, E. (2020). *Adolescents on Music. Why music matters to young people in our lives*. Oxford University Press. DOI:10.1093/oso/9780190671358.001.0001
- Paskins, Z., Sanders, T., Croft, P. R., Hassell, A. B. (2017). Exploring the added value of video-stimulated recall in researching the primary care doctor–patient consultation: A process evaluation. *International Journal of Qualitative Methods*.
<https://doi.org/10.1177/1609406917719623>
- Ranjan, J. & Foropon, C. (2021). Big Data Analytics in Building the Competitive Intelligence of Organizations, *International Journal of Information Management*, 56, 102512.
<https://doi.org/10.1016/j.ijinfomgt.2020.102231>
- Rentfrow, P. J., & Gosling, S. D. (2007). The content and validity of music-genre stereotypes among college students. *Psychology of Music*, 35(2), 306–326.
<https://doi.org/10.1177/0305735607070382>
- Ruud, E. (2009). Music and identity. *Nordisk Tidskrift for Musikkterapi (Nordic Journal of Music Therapy)*, 6(1), 3–13. <https://doi.org/10.1080/08098139709477889>
- Ruud, E. (2020). Toward A Sociology of Music Therapy: *Musicking as a Cultural Immunogen*. Barcelona Publishers. <https://doi.org/10.1093/jmt/thaa022>
- Saarikallio, S. (2017). Musical identity in fostering emotional health. In. R.A.R. MacDonald, D.J. Hargreaves, & D. Miell (eds). *Handbook of musical identities* (pp.602-622).

Oxford University Press.

<https://doi.org/10.1093/acprof:oso/9780199679485.003.0033>

Saarikallio, S. (2019a). 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*. Oxford University Press. DOI: 10.1093/oso/9780198808992.001.0001

Saarikallio, S. (2019b). Access-awareness-agency (AAA) model of music-based social-emotional competence (MuSEC). *Music & Science*, 2, 2059204318815421. <https://doi.org/10.1177/2059204318815421>

Saarikallio, S. Tervaniemi, M., Yrtti A. & Huotilainen, M. (2019) Expression of emotion through musical parameters in 3- and 5-year-olds, *Music Education Research*, 21:5, 596-605, DOI: [10.1080/14613808.2019.1670150](https://doi.org/10.1080/14613808.2019.1670150)

Saarikallio, S. Alluri, V., Maksimainen, J., & Toiviainen, P. (2020). Emotions of music listening in Finland and in India: Comparison of an individualistic and a collectivistic culture. *Psychology of Music*, 49(4), 989–1005. <https://doi.org/10.1177/0305735620917730>

Saarikallio, S. Randall, W. & Baltazar, M. (2020). Music listening for supporting adolescents' sense of agency in daily life. *Frontiers in Psychology*, 10, 2911. <https://doi.org/10.3389/fpsyg.2019.02911>

Saarikallio, S., Stensæth, K., Horwitz, E., Ekholm, O. & Bonde, L. (2020). Music as a resource for psychological health for music professionals: A Nordic survey. *Nordic Journal of Arts, Culture and Health*, 2(1), 38-50. <https://doi.org/10.18261/issn.2535-7913-2020-01-04>

- Schiavio, A., van der Schyff, D., Kruse-Weber, S., & Timmers, R. (2017). When the Sound Becomes the Goal. 4E Cognition and Teleomusicality in Early Infancy. *Frontiers in Psychology*, 8, 1585. <https://doi.org/10.3389/fpsyg.2017.01585>
- Scrine, E. (2019). Reframing intervention and inclusion: The importance of exploring gender and sexuality in music therapy with all young people. In K. McFerran, P. Derrington, & S. Saarikallio (Eds.), *Handbook of music, adolescents and wellbeing* (pp151-161). Oxford University Press. DOI:10.1093/oso/9780198808992.003.0014
- Savage, M. (2016). Playlists more popular than albums. *Retrieved March 30, 2022, from* <http://www.bbc.com/news/entertainment-arts-37444038>.
- Schwartz, S. J., Côté, J. E., & Arnett, J. J. (2005). Identity and agency in emerging adulthood: Two developmental routes in the individualization process. *Youth & Society*, 37(2), 201-229. <https://doi.org/10.1177/0044118X05275965>
- Schäfer, T., Sedlmeier, P., Städtler, C., & Huron, D. (2013). The psychological functions of music listening. *Frontiers in Psychology*, 4, 511. <https://doi.org/10.3389/fpsyg.2013.00511>
- Sebanz, N., Bekkering, H. & Knoblich, G. (2006). Joint action: Bodies and minds moving together. *Trends in Cognitive Sciences*, 10, 70–76. DOI: 10.1016/j.tics.2005.12.009
- Selfhout, M. H., Branje, S. J., ter Bogt, T. F., & Meeus, W. H. (2009). The role of music preferences in early adolescents' friendship formation and stability. *Journal of adolescence*, 32(1), 95-107. DOI: 10.1016/j.adolescence.2007.11.004
- Shapiro, S. (1999). *Pedagogy and the politics of the body: A critical praxis*. Garland Publishing.
- Shevy, M. (2013). Integrating media effects research and music psychology. In S.-L. Tan, A. J. Cohen, S. D. Lipscomb, & R. A. Kendall (Eds.), *The psychology of music in*

multimedia (p. 66–88). Oxford University Press.

DOI:10.1093/acprof:oso/9780199608157.001.0001

Smith, Y. J. (2018). Traditional Dance as a vehicle for identity construction and social engagement after forced migration. *Societies*, 8(3), 67.

<https://doi.org/10.3390/soc8030067>

Stern, D. N. (1999). Vitality contours: The temporal contour of feelings as a basic unit for constructing the infant's social experience. In P. Rochat (Ed.), *Early social cognition: Understanding others in the first months of life* (pp. 67–80). Lawrence Erlbaum Associates Publishers.

Tekman, H. G. & Hortaçsu, N. (2002). Music and social identity: stylistic identification as a response to musical style. *International Journal of Psychology*, 37(5), 277-285.

<https://doi.org/10.1080/00207590244000043>

Thelen, E. (2008). Grounded in the world: Developmental origins of the embodied mind. In W. F. Overton, U. Müller & J. L. Newman (Eds.), *Developmental perspectives on embodiment and consciousness* (pp. 99–129). Lawrence Erlbaum.

<https://doi.org/10.4324/9780203809778>

Thomas, L.A., De Bellis, M.D., Graham, R., & La Bar, K.S. (2007). Development of emotional facial recognition in late childhood and adolescence. *Developmental Science*, 10, 547–558. DOI: 10.1111/j.1467-7687.2007.00614.x

Thorpe H., Brice J., & Clark M. (2020). New materialist methods and the research process. In H. Thorpe, J. Brice, & M.I. Clark (Eds.), *Feminist new materialisms, sport and fitness. New femininities in digital, physical and sporting cultures* (pp. 29-59).

Palgrave Macmillan. https://doi.org/10.1007/978-3-030-56581-7_2

- Tiihonen, M., Brattico, E., Maksimainen, J., Wikgren, J. & Saarikallio, S. (2017). The constituents of music and visual-art related pleasure – A critical integrative literature review. *Frontiers in Psychology*, 8. <https://doi.10.3389/fpsyg.2017.01218>
- Trevarthen, C., & Aitken, K. J. (2001). Infant intersubjectivity: Research, theory, and clinical applications. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(1), 3-48. <https://doi.org/10.1111/1469-7610.00701>
- Trevarthen, C. (2002). Origins of musical identity: Evidence from infancy for musical social awareness. In R. MacDonald, D. Miell, & D. Hargreaves (Eds.), *Musical identities* (pp. 21-38). Oxford University Press.
DOI:10.1093/acprof:oso/9780199679485.001.0001
- Trondalen, G., & Bonde, L. O. (2012). Music therapy: models and interventions. In R.A.R MacDonald R.A.R., G. Kreutz & L.A. Mitchell (Eds) *Music, health, and wellbeing* (pp.40-64). Oxford University Press.
DOI:10.1093/acprof:oso/9780199586974.003.0004
- van der Schyff, D., Schiavio, A., Walton, A., Velardo, V., & Chemero, A. (2018). Musical creativity and the embodied mind: Exploring the possibilities of 4E cognition and dynamical systems theory. *Music & Science*. <https://doi.org/10.1177/2059204318792319>
- Ward, D., & Stapleton, M. (2012). Es are good: Cognition as enacted, embodied, embedded, affective and extended. In F. Paglieri (Ed.), *Consciousness in Interaction: The role of the natural and social context in shaping consciousness* (pp. 86-89) [e-book].
<http://ebookcentral.proquest.com>
- Wright, R., Johansen, G., Kanellopoulos, P.A., & Schmidt, P. (Eds.) (2021). *The Routledge Handbook to Sociology of Music Education*. Routledge
<https://doi.org/10.4324/9780429504631>

Zeman, J., Cassano, M., Perry-Parrish, C., & Stegall, S., (2006). Emotion Regulation in Children and Adolescents, *Journal of Developmental and Behavioral Pediatrics*, 27(2), 155-168. <https://doi.org/10.1097/00004703-200604000-00014>