# Why I listen to music: Emotion regulation and identity construction through music in mid-adolescence

Por qué escucho música: Regulación emocional y construcción de la identidad a través de la música en la adolescencia media

# CARMEN LOUREIRO

Universidad Autónoma de Madrid carmen.loureiro@estudiante.uam.es (ESPAÑA)

# KEVIN VAN DER MEULEN

Universidad Autónoma de Madrid kevin.vandermeulen@uam.es (ESPAÑA)

# CRISTINA DEL BARRIO

Universidad Autónoma de Madrid cristina.delbarrio@uam.es (ESPAÑA)

**Recibido:** 12.05.2022 **Aceptado:** 11.08.2023

# **ABSTRACT**

This study explores functions of music listening in relation to emotion regulation and identity development in mid-adolescence. Semi-structured interviews were conducted with 17 adolescents (15-16 years old), using a personally selected piece of music as a starting point. Analysis of the interviews focused on descriptions of emotional and identity related functions of their self-chosen music, complexity level of meaning making in participants' autobiographical narratives that emerged in relation to the music they had chosen, and the relation between functions and meaning making level. The results revealed two types of engagement with music entailing a connection between emotional and identity-related functions. The first type involves a more basic form of interaction which is focused on influencing one's mood, and related to feelings of identification with the lively rhythm of the upbeat music they had selected. The second

encompasses a more complex emotional regulation, as well as a reflection about the self and their personal history, facilitated by the lyrics or the melody. Adolescents with higher levels of narrative meaning making showed this more complex use of music listening. It is suggested that music listening plays an important role in the interplay between emotional regulation and identity development in mid-adolescence.

# **KEY WORDS**

Music, mid- adolescence, identity development, emotion regulation, narratives.

# RESUMEN

Este estudio explora las funciones de escuchar música relacionados con la regulación emocional y el desarrollo de la identidad en la adolescencia media. Se realizaron entrevistas semi-estructuradas con 17 adolescentes (15-16 años) a partir de una pieza de música elegida por cada participante. El análisis de las entrevistas se centró en las descripciones de las funciones, tanto emocionales como relacionadas con la identidad, el nivel de complejidad del significado que muestran los relatos autobiográficos de los participantes que surgieron relacionados con su música elegida, y la relación entre funciones y el nivel de elaboración de significado. Los resultados mostraron dos perfiles de uso de la música que suponen una conexión entre las funciones emocionales y de identidad. El primero es una forma más básica de interacción orientada a influir en el ánimo de uno mismo, ligada al hecho de sentirse identificado con el ritmo alegre de la música animada elegida. El segundo engloba una regulación emocional más compleja, además de una reflexión sobre uno/a mismo/a y su historia personal, facilitada por el contenido o la melodía. Los adolescentes con niveles superiores de elaboración de significado en sus relatos ligados a la música elegida, mostraron este uso más complejo de escuchar música. Se sugiere que escuchar música juega un papel importante en la interacción entre la regulación emocional y la construcción de la identidad en la adolescencia media.

#### PALABRAS CLAVE

Música, adolescencia media, desarrollo de la identidad, regulación emocional, relatos.

# 1. INTRODUCTION

Adolescence is a period of important psychological transformations, including emotional (Coe-Odess et al., 2019), cognitive (Keating et al., 2023) and identity-related changes (Erikson, 1965). Although emotional processes and the development of the self in adolescence have been the focus of much research. little is known about the links between these two aspects. Music may be an ideal context for the study of such interconnection, as young people and adolescents spend a lot of time listening to music, either at home or at concerts (Fine et al., 1990). They choose to do so at emotionally very diverse times, e.g., when feeling excited or when needing to face a problem, which gives proof of it as a resource for adolescent development (Hargreaves, 1986, Miranda, 2013), However, while the consideration of the importance of music for adolescents is shared by various social sciences, only since the 1990s and especially since 2000 has it been the subject of more research in psychology. While the emotional influence of music on youth and adults has been widely recognised (e.g., Juslin et al., 2008; Juslin & Sloboda, 2010), the study of the different uses that adolescents make of music to regulate their emotions is relatively limited (e.g., Saarikallio & Erkillä, 2007). On the other hand, uses of music related to social identity have been approached from the perspectives of social psychology, social anthropology, and sociology. For example, in studies on the relationships between musical preferences and self-image, personality and cognitive abilities (Rentfrow & Gosling, 2003, 2006); musical affinities as a feature of urban tribes which were characteristic of youth subcultures during the 1980s and 1990s (Feixa, 1989, 2012): the role of music in the development of ethnic or national identity (Phinney, 1990); or the interconnections between music and feminist movements (James, 2015). However, we know little about the processes of self-reflection when adolescents listen to music. Moreover, there is little knowledge about the links between these metacognitive processes related to the self and the different uses of music to influence mood or emotions in adolescence.

# 2. IDENTITY IN MIDDLE ADOLESCENCE

Increasing abstract thinking allows the adolescent to manage hypothetical reasoning about natural and social worlds (Inhelder & Piaget, 1955), to relate past and future with the present (McAdams, 1985, 1996), and to increase one's understanding of emotions and their triggers (Coe-Odess et al., 2019; Thompson, 2011; Zimmerman, 1999). In addition, all these new skills favour the individual's identity development. Identity construction is an essential developmental task in adolescence and early adulthood (Erikson, 1968). Everything that sheds light on the self becomes an object of interest for the adolescent, in order to discover and define who one truly is and wants to be.

Whereas in early adolescence the capacity for abstraction already makes it possible for the adolescent to recognise different personal attributes in oneself

and others, in middle adolescence their increasing cognitive development enables "abstract mapping" (Fischer et al. 1990). This new ability makes it easier to compare opposing attributes, evaluate self-theories and check their consistency, which may raise concerns about not being able to behave as they really think they are (Harter, 1990). According to Blasi's model of identity development (Blasi, 2005; Blasi & Milton, 1991), typically, adolescents between 15 and 20 years of age are able to talk about their true self as something which has the quality of a psychological matter: stable, solid and real. For them, the true self belongs to one's internal life and consists of feelings and thoughts that are being experienced in an immediate way, in contrast to their actions, which they rather perceive as adjustments to social demands, and not always fitting with their true self.

In addition, adolescence seems to be an important life period for the start of creating one's "life story," a story in which single memories and stories are integrated into a larger whole, connected to the self (McAdams, 1985). This means that the adolescent needs to adapt to personal changes, and at the same time find and establish a sense of sameness over time so that they can commit to adult life (McLean & Syed, 2018).

From the narrative identity perspective, autobiographical reasoning is essential for identity development. According to Habermas and Bluck (2000), autobiographical reasoning is a process of talking or thinking in a self-reflective way about one's life events, establishing a unity between these events and the self, trying to tell one's personal past and present. In other words, it is the process through which the life story is created. This creative process undergoes important development over adolescence and early adulthood. The ability to reflect about past events and construct a coherent life story, making sense of experiences and changes, has been related to more advanced identity development (Habermas & Bluck, 2000; McLean & Pratt, 2006). This process of meaning making refers to the degree to which the protagonist of the story gains insight or learns something from an event (McAdams & McLean, 2013). Especially, more meaning making is related to conflicting or more negative life events (McLean & Thorne, 2003), resolving the negativity by narrating the experience and making sense of it (Habermas, 2018). Meaning making skills increase during adolescence, especially in mid-adolescence when youths are improving their management of contradictions and paradox in personal stories (McLean & Breen, 2009).

# 2.1. Music listening in middle adolescence

Already at the start of adolescence, girls and boys become increasingly interested in music (Larson et al., 1989). They listen to music at all hours, either alone or with others (Arnett, 1995; Christenson & Roberts, 1990), in particular from mid-adolescence (Fine et al., 1990). It has been hypothesized that this attraction, dedication to and consumption of music is related to the developmental tasks of adolescence (Arnett, 2007; Laiho, 2004). Hence, listening to music has

different psychological functions, that have been grouped together by several authors in various and overlapping ways (see Saarikallio, 2019a), including two particular main fields: one concerning emotion regulation, and one related to self-exploration and identity building.

# 2.2. Music listening functions related to identity

Various researchers have explored the function of music listening in relation to identity. From a social psychological perspective, in terms of social identity, the adolescent's music preferences (e.g., punk or salsa) show other people to which social group or category she or he belongs, using it as a badge of identity (Frith, 1981), as well as to differentiate themselves from others (e.g., not jazz). Listening to a specific style of music, or particular singers or bands, tells others about the values, opinions and preferences the adolescent has, in agreement with those of the social group associated with that music (Fine et al., 1990; North & Hargreaves, 1999; North et al., 2000). The association between musical tastes and personal impressions affects intergroup dynamics and the formation of in- and out-groups (Tarrant et al., 2001, 2002; Bakagiannis & Tarrant, 2006). Listening to music is like a soundtrack accompanying the adolescents through life, helping them to fantasize about social interactions, which reinforces social scripts and the development of social skills (Miranda et al., 2012). Music can also influence the adolescent's self-concept through the transmission of social norms, as well as the evaluation of their physical attractiveness and self-esteem by comparing themselves to popular musicians (Kistler et al., 2010).

Among the studies conducted from a psychological perspective with young people and adults, the pioneering research of Even Ruud and Tia DeNora relating identity, emotion and music is especially noteworthy. Ruud (1997a) argued that it is possible to study identity construction by looking at "the local discourses that take place around musical practice" (p. 4). In his study, he asked music therapy students to bring 10 to 15 pieces of music that were significant in their lives, musical experiences that they had remembered for some reason. He interviewed them in relation to the chosen music or asked them to write down a personal reflection. Based on this data, he established different categories of experiences related to identity, e.g., "personal space," references to self-awareness, including emotional awareness, bodily reactions, as well as self-conceptualization. "Social space" implies a sense of being part of a larger social and cultural group as well as experiencing individuality. Ruud (1997a), emphasising the agency of young people when they listen to music, proposes that identity formation occurs through music as a performance, expressing internally and externally both "who they want to be" and "who they really are". Likewise, music enhances quality of life by increasing vitality, self-awareness, agency, a sense of belonging to a community and a sense of meaning and coherence in life (Ruud, 1997).

DeNora's (1999) work on music and identity elaborates on subjective experience, on how individuals make music their own when listening in different

settings of their daily life. She completed in-depth interviews with women aged between 18 and 78 years, reflecting on their musical practices. Music was used as a resource to alter their energy levels, to carry out emotional work, but also to reconstruct past experiences and people who had been important in their lives, converting it into a resource to "literally 'find themselves" (p. 49). Therefore, DeNora views music as an available technology of the self, a tool for the reflexive process of constructing and remembering the person who one is. Music helps us to become aware of emotions, to understand what we feel and how to express it (DeNora, 2003; Batt-Rawden & DeNora, 2005). DeNora (2000, 2003) conceives listeners as active agents and not as passive receivers, deciding how they want to be affected by music. Music does not act on the individual; it is rather the individual who takes over the various possibilities it offers, according to their needs at any particular moment. As a technology of the Self, based on Foucault's (1997) concept, listening to music allows one to act on the body or the mind and to continuously self-construct and reconstruct oneself. However, the subjective functions of music cannot be understood without the social context, as it works as a social mold or template, as a source of rich social meanings or "emblems" that one can associate with, according to the needs of one's identity (DeNora, 1999).

Following Ruud and DeNora, it is worth asking which processes adolescents follow to take ownership of the music, which meanings are most relevant to them and which connections are established between uses for emotion regulation and identity building. In short, how their 'personal spaces' are structured.

# 2.3. Emotional music listening functions

Research with participants from adolescence to older adulthood has shown that especially the younger participants use listening to music as a mood regulation method (Thayer et al., 1994). Moreover, music listening could be grouped together with several other strategies as a "pleasurable activity and distraction", addressed to changing one's bad mood.

For adolescents, music is an easy available tool to manage their moods (e.g. Arnett, 1991; Saarikallio & Erkkilä, 2007). Emotional regulation encompasses the automatic and deliberate processes that enable a person to influence which emotional experiences they have, as well as how and when they experience and express them (Gross, 1999). Adolescents can choose songs or melodies that are in accordance with their feelings at a given moment, allowing for consolation and relief (Arnett, 1991; ter Bogt et al., 2017; Saarikallio & Erkkilä, 2007; Schäfer et al., 2020) as well as finding sensations of relaxation, passion and power (Saarikallio et al., 2019). Saarikallio (2007) showed this is in line with Gross's process model of emotion regulation (Gross, 2015; Gross & Thompson, 2007). According to this model, in early stages of the process an individual might select a situation with the goal to experience particular emotions (e.g., by

listening to a particular song), or show a certain type of attentional deployment to influence one's emotional response.

In a qualitative study using group interviews and follow-up forms with adolescents aged between 14 and 17 years, Saarikallio and Erkillä (2007) found music to be used to obtain two main goals: mood controlling and "feeling good". The adolescents gave descriptions of their musical activities and related affective experiences, in which seven regulatory strategies to satisfy these goals were identified: entertainment, revival (relaxing and getting new energy), strong sensation, diversion (to forget about one's current negative mood), discharge of negative emotions (anger, sadness), mental work (imaginary, insights, clarification and reappraisal of experiences) and solace. These strategies can be classified into two broad categories: repair and pleasure strategies, aiming at regulating arousal and obtaining well-being; and analytical and change strategies, which involve more complex mental processing, both emotionally and cognitively (Baltazar & Saarikallio, 2017).

# 3. PRESENT STUDY

The purpose of this study is to investigate music listening in mid-adolescence, in relation to emotion regulation and identity development by means of in-depth interviews with 15 and 16-year-old adolescents. Three specific aims are pursued in the present research: 1. To explore perceived functions of listening to music that is self-chosen. Based on the literature, it is to be expected that these functions are both emotion and identity related, and our aim is to analyze in detail both types of functions in this particular age group. 2. To study the adolescents' level of meaning making in emerging autobiographical narratives related to their self-chosen music. 3. To investigate the relationship between the achieved meaning making level and the perceived functions of music listening.

#### 4. METHOD

# 4.1. Participants

A total of 17 adolescents (11 girls, 6 boys), aged 15 and 16 years (M=15 years; 9 months), participated in the study, all 4<sup>th</sup> grade Secondary Education students of a private school in a city of more than 170,000 inhabitants located in the southern metropolitan area of Madrid (grade according to Spanish education system, equivalent to 10<sup>th</sup> grade in US, Year 11 in UK). All students were originally from Spain. The majority of residents in this area are middle-class families. The students were given information about the nature of the study and invited to participate; all students who volunteered were included in the sample, once parental consent had been obtained.

# 4.2. Instrument and data collection procedure

A semi-structured interview was performed with each adolescent. Previous to the interviews, all volunteering students were approached and asked to think of a song or melody that they could identify with, or otherwise "just liked a lot". Similar to Saarikallio & Erkkilä (2007), who requested their participants to bring along a recording of personal importance, in the present study the adolescents were asked to bring the music with them on their cell phone on the day of the interview, or at least to remember the title, name of the musician or similar. This would allow to search on the Internet and listen to the music at the start of the interview. An interview script was used that included various sets of questions related to music listening. For the purpose of the present study, this involved the following questions: A. In relation to their music selection: Why did you choose this piece of music? Do you think this song/melody has something to do with you? In which sense? What do you feel when you hear this piece? When do you usually listen to it? B. In general: Do you usually listen to music? How important do you consider music in your life? When necessary, questions were added in order to ask the adolescent for further explanation following Piaget's clinical method (e.g., Piaget, 1926). An effort was made by the interviewer to create a positive emotional atmosphere enabling the participants to talk freely about themselves and their feelings, and always showing a positive response to music references.

The University Ethics Review Board approved the research design and the protocol for the study. Parental consent, as well as written informed consent from the volunteering students was obtained prior to enrollment. Individual interviews were scheduled during school hours by the school staff. The first author conducted all interviews in a quiet room inside the school on four separate days over a two week-period. The interviews, which had an average duration of 30 minutes, were audio-recorded and transcribed verbatim.

# 5. DATA ANALYSIS

The analysis of music listening functions was performed on the basis of participants' answers to questions related to their selected piece of music. It was expected that observations in relation to one's personally chosen music would allow to evoke more descriptions including emotional and identification aspects than observations about music listening uses in general.

Initially, the first author familiarized herself with the data. On the basis of the full set of data, she generated initial thematic categories. Although this was done within the pre-established main categories of emotion and identity related functions, it involved summarizing and describing the main features of the functions in a data-driven way, for which this particular analysis can be labeled as an inductive thematic analysis (Braun & Clarke, 2022). In order to test the resulting thematic categories for reliability, each answer of the participants was

independently coded by two researchers. Disagreements were resolved after an exchange of interpretations, and if needed, category definitions were further clarified. Intercoder reliability was satisfying, reaching 79% of agreement.

Spontaneous autobiographical narratives were identified in participants' replies to questions on how they identified themselves with their chosen musical piece. Degree of meaning making in these narratives was measured through a lineal codification system similar to McLean & Pratt (2006), with scores ranging between 0 and 3. A score of 0 indicates no meaning making in narratives that are highly general and superficial. A score of 1 corresponds to answers showing that a lesson has been learned. However, it is not accompanied by further reasoning beyond this sort of conclusion. Narratives with slightly more sophisticated meanings about the self, although not as explicit as insights (typical of level 3), correspond with a score of 2. On this level, some sort of change of the self can be described, but the specifics of this change then remain unclear. Finally, a score of 3 corresponds to meanings or insights that go beyond the particular events being described, implying an explicit transformation in the understanding of the self, of relations with others, or of worldly issues. Intercoder reliability was high, agreement between coders was 91%.

#### 6. RESULTS

All but one of the 17 adolescents reported that overall, music played an important role in their life, listening to it on a daily or nearly daily basis. Participants described both emotional and identity functions of music listening in relation to their personally chosen songs or melodies.

# **6.1.** Emotional functions

When participants described the effects of listening to their chosen piece of music, they referred in several ways to the emotional impact it produces (see Table 1 for examples of the emotional functions).

Mood lifting. Thirteen adolescents expressed that the chosen song encouraged them tremendously. They had the song in their playlist, and whenever they listened to it, it would give them a special feeling. The music provided them with energy or positive arousal. It also motivated them before carrying out a particular task. The attention of the adolescent was mainly focused on the lively rhythm of the song and their own body sensations of positive arousal.

Accompaniment. Four participants indicated using their chosen music for accompaniment when performing another activity, e.g., while studying, doing sports or spending time with friends. This helped them to concentrate and carry out tasks, creating a positive atmosphere or simply feeling supported while car-

rying out the activity. The adolescent's attention was mainly focused on the ongoing activity.

Emotional relief. Eight participants reported hearing the song or melody during a low mood, feeling sad (e.g., because of the loss of a grandparent, or breaking up with their girlfriend or boyfriend), or when they needed to feel more secure in a difficult situation, for example when they thought they had betrayed themselves behaving differently from how they actually felt. The aim is to find emotional relief when listening to music. The adolescent's attention is on the melody and the message of the song, as well as one's own emotions and what follows from experiencing these emotions.

Empowerment. When conversing about their chosen song or melody, various adolescents came up with an additional emotional function. There were seven participants who all had reported their use of music for mood lifting and referred to an emotional impact such as empowering the self or increasing one's self-esteem. They mentioned self-conscious emotions of personal worth or capacity such as pride, as well as very deeply felt emotions about the self which sometimes made them cry. These participants used both vocabulary and expressions which reflected a more complex emotional reasoning. They also talked specifically about emotions that were related to the self.

Table 1.Examples of emotional functions of music listening (adolescent's age in years;months).

Function	Example
Mood lifting	It lifts me up, I usually listen to it before games and at times when I need to concentrate. (Boy, age 16;4)
Accompaniment	For example, today I had an exam, I get up with this [music] so I'm not sleepy. (Boy, 15;8)  After we have lunch, I go out on the street with my friends, and we always play it because we all love it. And then later at home, maybe while doing homework or after doing homework. (Girl, 15;11)
Emotional relief	Sometimes I put this on when I'm studying, I play it in the background. (Boy, 16;4) When my granddad died, I listened to it at night. [] It relaxed me and then I could sleep better [] It's because of the song's message. [] It says he loves her just as she is. (Girl, 15;8)
Empowerment	It gives me strength, above all. When I'm a little depressed, I play this song and well, it gives me strength to face challenges. (Girl, 16;2)  This music, it makes me feel something. I don't know how to put it, but it's like something heroic. I don't know, it makes me feel proud. I love to play it when I go to class, because it lifts me up, like that I will be able to. (Girl, 15;6)
	I put this [song] on when I need to cheer myself up, because many times we forget about who we are and the things we don't [] [starts crying]. I'm sorry, I just get very emotional. And I feel I really identify with it. When I put this on, I feel like myself again, and then I forget about everything, and I'm back being myself again. (Girl, 15;6)

# **6.2.** Identity functions

Five different functions of the adolescents' use of their chosen music in connection to the self were identified in their answers.

Self-description. The melody or lyrics of the song describe an emotion or mood associated with the self, or a trait (value, attitude) of the self. Eight adolescents said the song or melody described them in some way, reminding them who they were. More specifically, three of these participants explained that the music's dynamics or rhythm was in tune with their usual mood, which defined themselves.

I identify with the music, not so much with the lyrics, but with the music, because it conveys good vibes and all. I see myself like that, the truth is that I like being happy, to have a good time with my friends. [...] It really reminds me how I am. (Boy, 16;0)

On the other hand, five interviewees explained the connection rather in terms of attitudes, traits or values they recognized in themselves, or referred to issues they considered important (love, family) and that were reflected in the lyrics of the song.

> It's not sexist at all, I like it. It seems romantic to me and very natural. Very simple. I feel identified because I am very romantic, I like everything related to love. (Girl, 15;10)

Imagined future self. The adolescent connects with the chosen music, seeing themselves in the future converted into the person they want to be, acting in a proficient way, feeling happy and capable. Five participants referred to this: two of them imagining themselves being the main character of the song or the singer, or being successful, while the other three imagined showing off their skills as well as feeling self-confident. Two participants used the images of the video that went with the song for this purpose.

> This is the one I like most. Also because of what he sings, the lyrics... that he believes he's on top of the world and all that. That encourages you and so, and that's what I like. I imagine, imagine myself doing those things. (Boy, 15;8)

Memories. Six adolescents reported that the chosen music reminded them of a specific moment or a period in life in which the song or melody played a central role. The memories often reveal events from childhood, such as in the following example:

> I was three years old, we went in my father's car, and he played it in the car. When I was little it was my favorite song and I still listen to it. (Boy, 16;5)

Reflection and exploring meanings. The song, especially its lyrics, works as a starting point for thinking about the self for the adolescent, thinking about their actions or feelings, reexamining their concerns, etc. They reflect on the song's message and what it has to do with their lives. This function was found for six adolescents.

> When I had a girlfriend and we broke up, I always played this song. Because of what the lyrics say. Because of how I am, because of everything. This singer makes it possible for you to turn the lyrics into something that is yours. Even if not everything what it says fits, you know? When we broke up, I would listen to it, pissed off; but it made me see: 'easy, everything will come'. (Boy, 16;5)

Autonomy. Asserting one's rights to make decisions on one's own or to be able to behave differently from what others expect. Five participants showed this type of function.

Because of what the song aims to say, that she gets tired of others deciding for her. It's like a 'crash on the table': 'And now YOU have to listen to me, and now I will tell you who I really am'. Sometimes, I let myself get carried away a little and then, I realize that it wasn't what I wanted to do, so then I react. 'Well now YOU listen to ME, I will make things clear'. (Girl, 16:2)

# **6.3.** Meaning making in autobiographical narratives

The participating adolescents produced autobiographical narratives in their explanations on why they identified with their chosen song. Differences were found between participants in their degree of meaning making of the narrated events for the self. Five adolescents did not show any significant meaning making (= level 0). Their explanations did not seem to evolve in true life narratives but were rather mere descriptions of their mainly positive feelings, traits or qualities.

I have been listening to this song since I was little. The title is "Just the way you are", and so, I don't know, I feel like that. I'm a very happy person really and, well [laughs]. It has a rhythm that lifts me up. (Girl, 15;9)

Eight participants showed they had learned some type of lesson for the future and were given a meaning making score of 1.

It has this thing, I don't know how to explain it, I love it. It has to do with me, it has to do with what's happening now. What they tell you is 'if you do this, then maybe this and that can happen to you', but actually what happens is what you want. It really depends on you. It makes me feel like when the time comes [...] not just one single path you can take will appear, there will be several. I will have to make several decisions and it will be those that I want, and it will be the right ones and that's it. (Boy, 15;9)

The remaining participants -three girls and one boy-, were given a score of 2. Although their reflections could be somewhat vague, these adolescents were able to show more sophisticated meaning making.

The thing is that many times, what people see of you, at first sight, or what the people want to see of you is not exactly who you are. So that's very meaningful. Everybody expects something of me, of what I should be in the future [...]. Maybe in the future I am not the one they believe I will be, or who I believe, or the other way around? I don't know. I put this [song] on when I need to cheer myself up, because many times we forget about who we are and the things we don't, you say 'I shouldn't have done this because I am not like this' [starts crying]. I'm sorry, I just get very emotional. And I feel I really identify with it. When I put this on, I feel like myself again, and then I forget about everything, and I'm back being myself again. Sometimes, I end up doing things to please others, and afterwards I feel bad [...] and I play this song and I say to myself: it doesn't matter, next time you don't do it and that's it. (Girl, 15;6)

None of the participants obtained a meaning making score of 3.

# 6.4. Relations between meaning making level, and music listening functions

The four adolescents who did not show any meaning making in relation to the self, would play their special song with the aim of mood lifting (n = 4) and to accompany (n = 2) them during activities on their own or with friends. Their identification was based on the connection between the features of the melody, the lively rhythm, and their usual emotional state (happy, animated), in addition to their desire to feel happy (n = 3). Their narratives were set in the present (the rhythm reminded them of the current moment), except for two adolescents who also described how the melody helped them to imagine themselves in the future, successful and with a positive attitude.

The adolescents  $(\hat{n} = 8)$  who showed their special music helped them learn a lesson for the future (meaning making level = 1), mainly used the message of the song to make a connection with the self. They explicitly referred to the functions of mood lifting (n = 6), accompaniment (n = 3) and emotional relief (n = 4), when listening to their chosen song at

moments they felt sad or vulnerable, and feeling the need to regulate their feelings (n = 4). The music also worked to remember family scenes from childhood (n = 4), to reflect on and explore feelings or values or to reconsider their worries (n = 3), to imagine their future self (n = 3), or asserting their autonomy, reminding them of their right to make decisions on their own (n = 3).

The five participants who showed more sophisticated meaning making (level = 2), reported that their special song's lyrics or message helped them think about themselves by self-description (n = 3) or by reflection and meaning exploring (n = 3)= 3). Two participants who showed self-description also reported that the song made them remember important moments in their life. Of the three adolescents who mentioned reflection and exploring, one also described himself in terms of values, while the other two emphasized their autonomy. For the participants with this meaning making level, the music fulfilled the additional emotional functions of mood lifting (n = 3), emotional relief (n = 4), empowerment (n = 4) and accompaniment (n = 1). Only one girl (age 15; 6) used her special song for accompaniment (together with other uses). She used the music to keep her company while studying; her focus of attention is on the activity rather than on the self. As she explained, she paid little attention to the song because: "If I stopped and listened to it, it would remind me of all I want to achieve in the future, and that would encourage me to continue studying". In Table 2, meaning making level and music listening functions of each participant are displayed.

Table 2. Meaning making, emotional and identity functions expressed by each participant (adolescent's age in years; months).

Participant	Meaning making level	Emotional function	Identity function
Boy (15;8)	0	Mood lifting	Imagined future self (success)
Boy (16;0)	0	Mood lifting	Self-description (lively rhythm)
Girl (15;9)	0	Mood lifting Accompaniment	Self-description (lively rhythm) Imagined future self (attitude)
Girl (15;11)	0	Mood lifting Accompaniment	Self-description (lively rhythm)
Boy (15;9)	1	Accompaniment Emotional relief	Autonomy
Boy (16;4)	1	Mood lifting Accompaniment	Imagined future self (happy, capable) Reflection and exploring meanings
Boy (16;5)	1	Emotional relief	Memories Reflection and exploring meanings
Girl (15;8)	1	Mood lifting Emotional relief	Memories
Girl (15;10)	1	Mood lifting Accompaniment Emotional relief	Imagined future self Memories
Girl (15;10)	1	Mood lifting	Self-description (trait) Imagined future self Memories
Girl (16;0)	1	Mood lifting	Self-description (trait) Autonomy
Girl (16;1)	1	Mood lifting	Reflection and exploring meanings Autonomy
Boy (15;11)	2	Emotional relief	Self-description (values) Reflection and exploring meanings
Girl (15;6)	2	Mood lifting Accompaniment Empowerment	Self-description (attitude) Memories

Participant	Meaning making level	Emotional function	Identity function
Girl (15;6)	2	Emotional relief Empowerment	Reflection and exploring meanings Autonomy
Girl (15;7)	2	Mood lifting Emotional relief Empowerment	Self-description (trait) Memories
Girl (16;2)	2	Mood lifting Emotional relief Empowerment	Reflection and exploring meanings Autonomy

# 7. DISCUSSION

Listening to music is important business for girls and boys in mid-adolescence. In the present study, participants were asked about a self-chosen song or melody in order to find out which functions served this music and why it was special to them. The results showed that several aspects grabbed their attention: the rhythm or mood of the music itself, as well as the lyrics. These 15 and 16 year-olds reported emotional and identity functions of music, showing similarities with findings of earlier research (Arnett, 1991; Saarikallio & Erkkilä, 2007; Saarikallio, 2012; Saarikallio et al., 2019b; Schäfer et al., 2020; DeNora, 1999; Laiho, 2004; Ruud, 1997a). In addition, differences between participants were found in the ability of making meaning of their experiences, which were told in narratives in relation to their selected music. These differences reflect two levels of interaction with music, similar to Baltazar and Saarikallio's (2019) affective regulation approach: one more basic and focused on influencing mood; the other more complex, using music to connect with complex or difficult emotions and to think about oneself. The latter form is associated with a greater ability of meaning making, which may be seen as indicating a more developed identity.

Our first aim was to study music listening functions. Of the four emotional functions that could be inferred from the responses of our participants, similarities were found between those we labeled as mood lifting, accompaniment and emotional relief, with three of the seven mood regulation strategies found by Saarikallio & Erkillä (2007) and Saarikallio (2012), i.e., 'revival', 'entertainment' and 'solace', respectively. In addition, our study reveals the presence and importance of a fourth function: music listening as empowerment, bolstering the adolescents' self-esteem, when they empathize with a singer, a band or the positive messages of the song (Elvers, 2016; Travis, 2013). However, in addition to encountering these positive elements in the music, our findings show a different kind of empowerment or agency enhancement. It involves recognizing vulnerable aspects of oneself, e.g. being shy or being afraid of what others might say. The empowerment consists of acknowledging these issues or finding ways

to solve them. Listening to specific songs facilitates this to the adolescent, by allowing them to reevaluate themselves assertively or to accept themselves, motivated by the music's message. This could be the reason why a song becomes special to the adolescents, and why they listen to it precisely during moments they feel down. For the adolescent, music listening might well be an "arena of comfort" (Mortimer & Call, 2001; Simmons & Blyth, 1987) to help come to a feeling of ease and buffer discomfort, as well as a setting that enables practicing safely with emotional management, problem solving, storytelling and meaning making for the self.

In addition, music listening is used as a tool for observing and thinking about the self. The revealed identity functions of listening to self-chosen music are also in line with previous empirical work involving samples of various age groups (DeNora, 1999; Laiho, 2004; Ruud, 1997a; Saarikallio, 2019b; Van den Tol & Edwards, 2013), confirming their presence in mid-adolescent boys and girls. Resulting from our data, these functions seem to address adolescents' developmental needs, in particular the need for self-expression and the search for selfvalidation (self-description); to control future events (imagined future self); to experience self-efficiency and agency (autonomy); to give meaning to emotional conflicts (reflection and exploring meaning), and to go back to an emotionally safe place, such as childhood (memories). First of all, music helped the adolescents to describe themselves. For some these descriptions were based merely on a positive emotional state ("I am a happy person"), while others referred to more complex psychological traits ("I am romantic", "I am shy") or values ("I value true friendship"), which becomes more typical through adolescence. Furthermore, music facilitated time travelling, with the purpose of recalling significant experiences or imagining themselves in the future. Consequently, music is used to expand beyond the self of the here and now. It enables to go back in time and look at oneself again, or either move further into the future and see possible and desirable versions of the self. The time travelling skill is central for a perception of sameness and continuity of the changing self: recognizing the self as the same person at different moments in life. It is a prerequisite for a conscious feeling of a personal identity (Erikson, 1968), contributing to the developmental task of building and rebuilding the thread of identity (DeNora, 1999). In addition, participants pointed at their autonomy, at being in control of their lives, which shows overlap with the function of agency (Laiho, 2004; Ruud, 1997b; Saarikallio, 2019b; Saarikallio et al., 2020). They experienced self-determination by choosing and listening to the music they liked, sensing it as 'their music'.

For part of the adolescents, listening to music enabled reflection and exploration of significance, related to choosing and confirming their values, recognizing what makes them vulnerable and dependent, or identifying and making sense of what they feel. This latter sort of exploration is similar to what Saarikallio & Erkillä (2007) labeled as mental work: contemplation, clarification, reappraisal of emotional experiences.

When observing adolescents' degree of meaning making, an essential element of identity development according to the narrative perspective (McAdams

& McLean, 2013), various differences were found between participants. Part of the adolescents did not show any sort of meaning making in their accounts in relation to the chosen music. They used this music only to feel good, or to accompany them in that animated state. Yet, others acknowledged having learnt lessons or showed more complex significances, even if these were not at as clear as insights. Increased ability of meaning making points at more advanced identity development (McLean & Pratt, 2006).

In the present study, those adolescents who demonstrated higher ability to extract meanings reported more complex emotional functions in the forms of empowerment or emotional relief. As commented on earlier, these functions which involve recognition of negative emotions or of a sense of vulnerability, seem to belong to the intersection of identity and emotion functions: they contain elements that in some way concern the self. In addition, these adolescents also described more complex identity functions, such as reflecting on and exploring the self, going through memories or searching for autonomy.

Overall, the results of our study reveal two main types of engagement with personally chosen music by 15-16 year-olds. The first type, a more basic form of engagement, is focused on influencing sensations and perceived mood. The adolescent lets the music influence them in order to obtain energy, feel happy and see themselves as a happy and friendly person. The second use of music listening also encompasses emotional regulation, but seems to be more complex, as at the same time, it is related to thinking about the self or about things that matter to the self. In both uses, apparently, the identity function should not be seen separately from the emotion regulation function. According to Russell (2003) "emotion regulation is the deliberate attempt at self-control based on categorizing oneself" (p. 151). Examples of this are the adolescent feeling good with a happy song, because the music describes her in a positive way; and another girl who needs to hear a song to remember "who she is" and to lift her spirits, when she realizes she lets herself be carried away by others.

This finding is similar to Baltazar and Saarikallio's (2019) model of affective regulation of music in adolescence, in terms of the articulation of strategies according to the greater or lesser mental processing involved in listening to music. They distinguish three dimensions that represent where regulation is more focused (thought, feelings, body) with two poles: at one extreme, the search for sensory pleasure; at the other, the search for analysis or change (of what one thinks, feels or perceives). Our study, by also focusing on identity, makes it possible to clarify the emotional regulation-identity links involved in one pole or the other. At one extreme, listening to music allows adolescents to revitalise or energise themselves (DeNora, 1999, 2000), lift their mood or maintain a positive state (Saarikallio & Erkilla, 2007; Baltazar & Saarikallio, 2019). This leads to a predominance of an 'agent Self', but not an object. Identification with the music is more sensory or soulful, the rhythm of the music helps to describe oneself, with the relationship to the Self being more superficial (e.g. "When I listen to this song I see myself like this, I am a very happy person"). At the other extreme, listening involves the management of self-conscious and complex emotions. The

Self, while remaining an agent, is predominantly the 'object' of reflection. Following DeNora (1999), the adolescent appropriates the lyrics and melodies, turning them into an identity message according to their needs at any given moment (affirmation of values, autonomy, self-efficacy or agency, affective bonding or returning to a safe place). Thus, the messages of the songs favour a re-evaluation or reconceptualisation of what one feels and is, helping to understand what is important to the Self. This reflects, in our view, the same process of emotion regulation and construction (Gross & Barret, 2011; Thompson, 2011), which involves the Self, aiding identity development in middle adolescence.

The relation between emotion and identity also becomes evident in the observations by some participants about their true or false self. Sometimes they directly used expressions such as "I identify with" or "my real self." Ruud (1997a, p.8) already interpreted this as an awareness of a "space within oneself". In addition, some adolescents explained that, what they were feeling at the moment of listening to a particular song, was the real them. This is in line with how boys and girls in mid-adolescence understand their inner true self (Blasi 2005; Blasi & Milton, 1991), experienced as a spontaneous expression of its nature and sometimes in contradiction with their (untrue) actions. Music seems to be a channel for this immediate manifestation, as illustrated by the 15-year-old girl who said she felt she shouldn't have done a particular thing, because "she's not like that". But when she plays her special song, she gets emotional and feels identified, she feels like herself again.

The music, including the lyrics or the song's message, produces or unties feelings, while at the same time encourages the adolescent to get in touch with these emotions. This emotional experience seems to guide the adolescent towards choosing between the "true" and the "false self". As reported by some of the participants, it involves expressing yourself just the way you feel, to stand by your own opinions and even confronting criticism of other people. Hence, the ability to recognize or to connect with how one feels seems to be an important factor for this identification with the "true" or "false self." Ruud's (1997a) category of personal space also shows a combination of identity and emotion, with references to emotional attention and expression, as well as sensations of the false and true selves.

To summarize, and in relation to the aims guiding this study, the results allow us to conclude that in middle adolescence boys and girls do not only use the music that is special to them as a tool to regulate their emotional state. They also employ it to make sense of the situations and challenges they are taking on in everyday live connecting all these experiences to whom they are. In addition, when recounting these experiences linked to their music, adolescents differ in their meaning making ability. Finally, those adolescents with a greater capacity for meaning making listen to music to connect with the past or to reflect on aspects that make them feel vulnerable, as well as to recognise and affirm their values.

Music listening stands at the intersection between emotion regulation and identity construction for 15 and 16 year-olds. Music is an important tool that

helps the adolescents in addressing their developmental needs. The present study was limited by a small sample of adolescents with whom only a one-time interview was conducted. New research including wider samples are necessary to continue exploring the interplay between music, emotion and identity. For example, how music enables opening up and connecting with emotions related to an adolescent's vulnerability such as sadness, insecurity, shame or shyness, proves an important issue and requires further examination.

#### 8. REFERENCES

- Arnett, J. (1991). Adolescents and Heavy Metal Music: From the Mouths of Metalheads. *Youth & Society*, 23(1), 76-98. <a href="https://doi.org/10.1177/0044118X91023001004">https://doi.org/10.1177/0044118X91023001004</a>
- Arnett, J. J. (1995). Adolescents' uses of media for self-socialization. *Journal of Youth and Adolescence*, 24(5), 519-533. https://doi.org/10.1007/BF01537054
- Arnett, J. J. (2007). Socialization in emerging adulthood: From the family to the wider world, from socialization to self-socialization. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 208-231). The Guilford Press.
- Bakagiannis, S., & Tarrant, M. (2006). Can music bring people together? Effects of shared musical preference on intergroup bias in adolescence. *Scandinavian Journal of Psychology*, 47(2), 129-136. https://doi.org/10.1111/j.1467-9450.2006.00500.x
- Baltazar, M., & Saarikallio, S. (2019). Strategies and mechanisms in musical affect self-regulation: A new model. *Musicae Scientiae*, 23(2), 177-195.
- https://doi.org/10.1177/1029864917715061

  Rarrett J. F. & Russell J. A. (Eds.) (2015)
- Barrett, L. F., & Russell, J. A. (Eds.). (2015). The psychological construction of emotion. The Guilford Press.
- Batt-Rawden, K., & DeNora, T. (2005). Music and informal learning in everyday life. *Music Education Research*, 7(3), 289-304. <a href="https://doi.org/10.1080/14613800500324507">https://doi.org/10.1080/14613800500324507</a>
- Blasi, A. (2005). Moral character: A psychological approach. In D. K. Lapsley & F. C. Power (Eds.), *Character psychology and character education* (pp. 67-100). University of Notre Dame Press.
- Blasi, A., & Milton, K. (1991). The development of the sense of self in adolescence. *Journal of Personality*, 59(2), 217-242. <a href="https://doi.org/10.1111/j.14676494.1991">https://doi.org/10.1111/j.14676494.1991</a>. tb00774.x
- Braun V. & Clarke V. (2022). Thematic analysis: A practical guide. SAGE.
- Christenson, P. G., & Roberts, D. F. (1990). *Popular music in early adolescence*. Carnegie Council on Adolescent Development Working Papers. <a href="https://files.eric.ed.gov/fulltext/ED323021.pdf">https://files.eric.ed.gov/fulltext/ED323021.pdf</a>
- Coe-Odess S.J., Narr R.K., Allen J.P. (2019) Emergent emotions in adolescence. In V. LoBue, K. Pérez-Edgar & K, Buss (Eds.), *Handbook of Emotional Development* (pp. 595-625). Springer. <a href="https://doi.org/10.1007/978-3-030-17332-6">https://doi.org/10.1007/978-3-030-17332-6</a> 23
- DeNora, T. (1999). Music as a technology of the self. *Poetics*, 27(1), 31-56. <a href="https://doi.org/10.1016/S0304-422X(99)00017-0">https://doi.org/10.1016/S0304-422X(99)00017-0</a>
- DeNora, T. (2000). Music in everyday life. Cambridge University Press.

- DeNora, T. (2003). Music sociology: Getting the music into the action. *British Journal of Music Education*, 20(2), 165-177. https://doi.org/10.1017/S0265051703005369
- Elvers, P. (2016). Songs for the ego: theorizing musical self-enhancement. *Frontiers in Psychology*, 7, 2. <a href="https://doi.org/10.3389/fpsyg.2016.00002">https://doi.org/10.3389/fpsyg.2016.00002</a>
- Erikson, E. H. (1968). *Identity: Youth and crisis*. WW Norton & Co.
- Feixa, C. (1989). Pijos, progres y punks. Hacia el estudio antropológico de la juventud urbana. Revista de Estudios de Juventud, 34, 69-78.
- Feixa, C. (2012). De jóvenes, bandas y tribus. Ariel. (5ª ed. ampliada).
- Fine, G.A., Mortimer, J.T. & Roberts, D.F. (1990). Leisure, work and the mass media. In S.S. Feldman & G.R. Elliot (Eds.) *At the threshold: the developing adolescent* (pp. 225-252). Harvard University Press.
- Fischer, K. W., Kenny, S. L., & Pipp, S. L. (1990). How cognitive processes and environmental conditions organize discontinuities in the development of abstractions. In C. N. Alexander & E. J. Langer (Eds.), *Higher stages of human development: Perspectives on adult growth* (pp. 162–187). Oxford University Press.
- Foucault, Michel (1997). Technologies of the Self. In P. Rabinow (Ed.), *Ethics: Subjectivity and Truth* (Vol. 1, pp. 223-251). New Press. <a href="http://hdl.handle.net/10822/899287">http://hdl.handle.net/10822/899287</a>
- Frith, S. (1981). Sound effects: Youth, leisure, and the politics of rock'n'roll. Pantheon Books.
- Gross, J. J. (1999). Emotion regulation: Past, present, future. *Cognition & Emotion*, 13(5), 551-573. https://psycnet.apa.org/doi/10.1080/026999399379186
- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1-26. https://doi.org/10.1080/1047840X.2014.940781
- Gross, J.J., & Thompson, R.A. (2007). Emotion regulation: Conceptual foundations. In J.J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-24). The Guilford Press.
- Habermas, T. (2018). *Emotion and narrative: Perspectives in autobiographical storytelling*. Cambridge University Press.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126(5), 748-769. <a href="https://doi.apa.org/doi/10.1037/0033-2909.126.5.748">https://doi.apa.org/doi/10.1037/0033-2909.126.5.748</a>
- Hargreaves, D. J. (1986). *The developmental psychology of music*. Cambridge University Press. <a href="https://doi.org/10.1017/CBO9780511521225">https://doi.org/10.1017/CBO9780511521225</a>
- Harter, S. (1990) Self and identity development. In S.S. Feldman & G.R. Elliot (Eds.) *At the threshold: the developing adolescent* (pp. 352-387). Harvard University Press.
- Inhelder, B. & Piaget, J. (1955). *De la logique de l'enfant à la logique de l'adolescent.*Presses Universitaires de France.
- James, R. (2015). Resilience & melancholy: Pop music, feminism, neoliberalism. John Hunt Publishing.
- Juslin, P. N., & Sloboda, J. A. (2010). Music and emotion. Elsevier Academic Press.
- Juslin, P. N., & Västfjäll, D. (2008). Emotional responses to music: The need to consider underlying mechanisms. *Behavioral and Brain Sciences*, *31*(5), 559-621. <a href="https://doi.org/10.1017/S0140525X08005293">https://doi.org/10.1017/S0140525X08005293</a>
- Keating, D. P., Demidenko, M. I., & Kelly, D. P. (2023). Cognition in adolescence and the transition to adulthood. In L. J. Crockett, G. Carlo, & J. E. Schulenberg (Eds.), APA Handbook of adolescent and young adult development (pp. 75-90). American Psychological Association. https://doi.org/10.1037/0000298-005
- Kistler, M., Rodgers, K. B., Power, T., Austin, E. W., & Hill, L. G. (2010). Adolescents and music media: Toward an involvement-mediational model of consumption and

- self-concept. Journal of Research on Adolescence, 20(3), 616-630. https://doi. org/10.1111/j.1532-7795.2010.00651.x
- Laiho, S. (2004). The psychological functions of music in adolescence. *Nordic Journal* of Music Therapy, 13(1), 47-63. https://doi.org/10.1080/08098130409478097
- Larson, R., Kubey, R., & Colletti, J. (1989). Changing channels: Early adolescent media choices and shifting investments in family and friends. Journal of Youth and Adolescence, 18(6), 583-599. https://doi.org/10.1007/BF02139075
- McAdams, D. P. (1985). Power, intimacy, and the life story: Personological inquiries into identity. Dorsey Press.
- McAdams, D. P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. Psychological Inquiry, 7(4), 295-321. https://doi. org/10.1207/s15327965pli0704\_1
- McAdams, D. P. & McLean, K. C. (2013). Narrative identity. Current Directions in Science, 22(3),233-238. Psychological https://doi. org/10.1177%2F0963721413475622
- McLean, K. C., & Breen, A. V. (2009). Processes and content of narrative identity development in adolescence: Gender and wellbeing. Developmental Psychology, 45(3), 702-710. https://doi.org/10.1037/a0015207
- McLean, K. C., & Pratt, M. W. (2006). Life's little (and big) lessons: Identity statuses and meaning making in the turning point narratives of emerging adults. Developmental Psychology, 42(4), 714-722. https://doi.org/10.1037/0012-1649.42.4.714
- McLean, K. & Syed, M. (2018). Identity development. In M. Bornstein (Ed.), *The SAGE* Encyclopedia of lifespan human development (pp. 1094-1097). SAGE. https://dx.doi. org/10.4135/9781506307633.n413
- McLean, K. C., & Thorne, A. (2003). Late adolescents' self-defining memories about relationships. Developmental Psychology, 39(4), 635-645. https://doi. org/10.1037/0012-1649.39.4.635
- 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
- Miranda, D., Blais-Rochette, C., Vaugon, K., Osman, M., & Arias-Valenzuela, M. (2015). Towards a cultural-developmental psychology of music in adolescence. Psychology of Music, 43(2), 197-218. https://doi.org/10.1177/0305735613500700
- Mortimer, J. T., & Call, K. T. (2001). Arenas of Comfort in Adolescence: A Study of Adjustment in Context. Psychology Press. https://doi.org/10.4324/9781410600226
- 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(2), 255-272. https://doi. org/10.1348/000709900158083
- Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. Psychological Bulletin, 108(3), 499-514. https://doi.org/10.1037/0033-2909.108.3.499
- Piaget, J. (1926). La représentation du monde chez l'enfant. Introduction. Alcan.
- Rentfrow, P. J., & Gosling, S. D. (2003). The do re mi's of everyday life: The structure and personality correlates of music preferences. Journal of Personality and Social Psychology, 84(6), 1236-1256. https://doi.org/10.1037/0022-3514.84.6.1236

- Rentfrow, P. J., & Gosling, S. D. (2006). Message in a Ballad: The Role of Music Preferences in Interpersonal Perception. *Psychological Science*, *17*(3), 236-242. <a href="https://doi.org/10.1111/j.1467-9280.2006.01691.x">https://doi.org/10.1111/j.1467-9280.2006.01691.x</a>
- Ruud, E. (1997a). Music and identity. *Nordic Journal of Music Therapy*, *6*(1), 3-13. https://doi.org/10.1080/08098139709477889
- Ruud (1997b). Music and the quality of life. *Nordic Journal of Music Therapy*, 6(2), 86-97. https://doi.org/10.1080/08098139709477902
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110(1), 145-172. <a href="https://doi.apa.org/doi/10.1037/0033-295X.110.1.145">https://doi.apa.org/doi/10.1037/0033-295X.110.1.145</a>
- Saarikallio, S. (2007). *Music as mood regulation in adolescence*. Doctoral thesis. University of Jyväskylä. <a href="https://jyx.jyu.fi/bitstream/han-dle/123456789/13403/9789513927318.pdf?seq">https://jyx.jyu.fi/bitstream/han-dle/123456789/13403/9789513927318.pdf?seq</a>
- Saarikallio, S. (2012). Development and Validation of the Brief Music in Mood Regulation Scale (B-MMR). *Music Perception: An Interdisciplinary Journal*, 30(1), 97-105. https://doi.org/10.1525/mp.2012.30.1.97
- Saarikallio, S. (2019a). Access-Awareness-Agency (AAA) Model of Music-Based Social-Emotional Competence (MuSEC). *Music & Science*, 2, 1-16. <a href="https://doi.org/10.1177/2059204318815421">https://doi.org/10.1177/2059204318815421</a>
- Saarikallio, S. (2019b). 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. <a href="http://doi.org/10.1093/oso/9780198808992.003.0008">http://doi.org/10.1093/oso/9780198808992.003.0008</a>
- Saarikallio, S., & Erkkilä, J. (2007). The role of music in adolescents' mood regulation. *Psychology of Music*, *35*(1), 88-109. <a href="https://doi.org/10.1177/0305735607068889">https://doi.org/10.1177/0305735607068889</a>
- Saarikallio, S. H., Maksimainen, J. P., & Randall, W. M. (2019). Relaxed and connected: Insights into the emotional-motivational constituents of musical pleasure. *Psychology of Music*, 47(5), 644-662. https://doi.org/10.1177%2F0305735618778768
- Schäfer, K., Saarikallio, S., & Eerola, T. (2020). Music may reduce loneliness and act as social surrogate for a friend: Evidence from an experimental listening study. *Music & Science*, *3*, 1-16. https://doi.org/10.1177%2F2059204320935709
- Simmons, R. G., & Blyth, D. A. (1987). *Moving into adolescence: The impact of puber-tal change and school context.* Aldine de Gruyter.
- Tarrant, M., North, A. C., & Hargreaves, D. J. (2001). Social categorization, self-esteem, and the estimated musical preferences of male adolescents. *The Journal of Social Psychology*, *141*(5), 565–581. <a href="https://doi.org/10.1080/00224540109600572">https://doi.org/10.1080/00224540109600572</a>
- Tarrant, M., North, A. C., & Hargreaves, D. J. (2002). Youth identity and music. *Musical identities*, 13, 134-150.
- Ter Bogt, T. F., Vieno, A., Doornwaard, S. M., Pastore, M., & van den Eijnden, R. J. (2017). "You're not alone": Music as a source of consolation among adolescents and young adults. *Psychology of Music*, 45(2), 155-171. <a href="https://doi.org/10.1177%2F0305735616650029">https://doi.org/10.1177%2F0305735616650029</a>
- Thayer, R. E., Newman, J. R., & McClain, T. M. (1994). Self-regulation of mood: Strategies for changing a bad mood, raising energy, and reducing tension. *Journal of Personality and Social Psychology*, 67(5), 910-925. <a href="https://doi.org/10.1037/0022-3514.67.5.910">https://doi.org/10.1037/0022-3514.67.5.910</a>
- Thompson, R. A. (2011). Emotion and emotion regulation: Two sides of the developing coin. *Emotion Review*, *3*(1), 53-61. https://doi.org/10.1177/1754073910380969

- Travis, R. (2013). Rap music and the empowerment of today's youth: evidence in every-day music listening, music therapy, and commercial rap music. *Child Adolescent Social Work Journal*, 30(2), 139-167. https://doi.org/10.1007/s10560-012-0285-x
- van den Tol, A. J. M., & Edwards, J. (2013). Exploring a rationale for choosing to listen to sad music when feeling sad. *Psychology of Music*, 41(4), 440- 465. <a href="https://doi.org/10.1177/0305735611430433">https://doi.org/10.1177/0305735611430433</a>
- Zimmermann, P. (1999). Structure and functions of internal working models of attachment and their role for emotion regulation. *Attachment & Human Development, 1*(3), 291-306. https://doi.org/10.1080/14616739900134161