Maija Salokivi

Developing a Music Therapy Assessment Tool to Evaluate Emotional Skills in Early Adolescence

UNIVERSITY OF JYVÄSKYLÄ

FACULTY OF HUMANITIES AND
SOCIAL SCIENCES

Maija Salokivi

Developing a Music Therapy Assessment Tool to Evaluate Emotional Skills in Early Adolescence

JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

Emotional science?
Air in an enclosed space.
Intangible to tangible.

Tunteista tiedettä?
Ilmaa suljettuun tilaan.
Aineetonta aineelliseen.

-Helena Anhava, Käyn Siellä Vain Unessa [I only go there in my dream]

ABSTRACT

Salokivi, Maija
Developing a music therapy assessment tool to evaluate emotional skills
in early adolescence
Jyväskylä: University of Jyväskylä, 2023, 74 p. + original articles
(JYU Dissertations
ISSN 2489-9003; 694)
ISBN 978-951-39-9735-9 (PDF)

The purpose of this study was to develop a scientific foundation for a tool for assessing emotional skills in early adolescence for use by music therapists. The study included three sub-studies. In the first sub-study, a scoping review and conceptual analysis were used to define early adolescents' emotional skills and how they are described in the research literature. The second sub-study used focus group interviews and deductive-inductive content analysis to explore how music therapists work to promote emotional skills in early adolescence and what methods they use in their work. Finally, the third sub-study identified items that could be used to assess emotional skills in early adolescence. The content validity of the developed item pool was assessed using psychometric measures.

Based on the study's results, early adolescents' emotional skills are divided into six components: 1) expressing emotions, 2) monitoring emotions, 3) identifying emotions, 4) understanding emotions, 5) regulating emotions, and 6) the ability to use emotional knowledge at the individual level to develop and establish positive self-management and the ability to use emotional knowledge at the social level to develop and establish positive relationships. The work of music therapists to promote emotional skills was seen as multi-method and the process of developing emotional skills as a holistic one, encompassing the mental, physical and cognitive levels. The content validity of the item pool developed proved to be of high quality and can be used for further research.

The study provides new insights into emotional skills in early adolescence and music therapy work on emotional skills, and an item pool that could be used to assess emotional skills development in music therapy. The study results offer a solid basis for further developing a music therapy tool for assessing emotional skills.

Keywords: emotional skills, assessment development, music therapy, early adolescents, content validity

TIIVISTELMÄ (ABSTRACT IN FINNISH)

Salokivi, Maija
Varhaisnuorten tunnetaitojen arviointimenetelmän kehittäminen
musiikkiterapiassa
Jyväskylä: Jyväskylän yliopisto, 2023, 74 s. + alkuperäiset julkaisut
(JYU Dissertations
ISSN 2489-9003; 694)
ISBN 978-951-39-9735-9 (PDF)

Tässä tutkimuksessa kehitettiin varhaisnuorten tunnetaitojen arviointimenetelmää musiikkiterapeuttien käyttöön. Tutkimus sisälsi kolme osatutkimusta. Ensimmäisessä osatutkimuksessa määriteltiin kartoittavan kirjallisuuskatsauksen ja käsiteanalyysin avulla mitä varhaisnuorten tunnetaidoilla tarkoitetaan ja miten ne määritellään tutkimuskirjallisuudessa. Toisessa osatutkimuksessa hyödynnettiin fokusryhmähaastatteluja ja deduktiivis-induktiivista sisällönanalyysiä ja selvitettiin, miten musiikkiterapeutit työskentelevät varhaisnuorten tunnetaitojen edistämiseksi. Lisäksi tutkittiin millaisia metodeja he käyttävät työssään. Kolmannessa osatutkimuksessa määriteltiin, kahden edeltävän tutkimuksen tulosten perusteella, väittämäjoukko, jota olisi mahdollista käyttää varhaisnuorten tunnetaitojen arvioinnissa. Kehitetyn väittämäjoukon sisällön validiteettia arvioitiin psykometristen menetelmien avulla.

Tutkimuksen tulosten perusteella varhaisnuorten tunnetaidot voidaan jakaa kuuteen eri komponenttiin. Komponentit ovat: 1) tunteiden ilmaiseminen, 2) tunteiden havaitseminen, 3) tunteiden tunnistaminen, 4) tunteiden ymmärtäminen ja 5) tunteiden sääteleminen sekä 6) kyky käyttää tunnetietoa yksilötasolla myönteisen itsehallinnan kehittämiseksi ja vakiinnuttamiseksi, sekä kyky käyttää tunnetietoa sosiaalisella tasolla myönteisten ihmissuhteiden kehittämiseksi ja vakiinnuttamiseksi. Musiikkiterapeuttien työ tunnetaitojen edistämiseksi näyttäytyi monimenetelmäisenä ja tunnetaitojen kehittymisen prosessi kokonaisvaltaisena, kattaen henkisen, fyysisen ja kognitiivisen tason. Kehitetty väittämäjoukko osoittautui sisällön validiteetiltaan laadukkaaksi ja se on hyödynnettävissä jatkotutkimuksia varten.

Tutkimus tuotti uutta tietoa varhaisnuorten tunnetaidoista, musiikkiterapeuttisesta tunnetaitotyöskentelystä sekä väittämäjoukosta, jolla taitojen kehittämistä voitaisiin musiikkiterapiassa arvioida. Tutkimuksen tulokset tarjoavat hyvän pohjan musiikkiterapeuttisen tunnetaitojen arviointimenetelmän jatkokehitykselle.

Avainsanat: tunnetaidot, arvioinnin kehittäminen, musiikkiterapia, varhaisnuoret, sisällön validiteetti

Author   Maija Salokivi
                Department of Music, Art and Culture Studies
                University of Jyväskylä, Finland
                maija.salokivi@gmail.com
                ORCID 0000-0003-0886-3532

Supervisors   Associate Professor Esa Ala-Ruona
                Department of Music, Art and Culture Studies
                University of Jyväskylä

                Professor Sanna Salanterä
                Department of Nursing Science
                University of Turku

                Professor Suvi Saarikallio
                Department of Music, Art and Culture Studies
                University of Jyväskylä

Reviewers   Professor Wendy L. Magee
                Boyer College of Music and Dance
                Temple University, Philadelphia, PA, USA

                Professor Dorothee von Moreau
                Institute of Music Therapy
                University of Music and Drama Hamburg, Germany

Opponent   Professor Wendy L. Magee
                Boyer College of Music and Dance
                Temple University, Philadelphia, PA, USA

ACKNOWLEDGEMENTS

patience and encouragement have been invaluable. You have been by my side through the joys and challenges, offering support and a lot of humour when needed. Thank you for making this research journey possible for me.

I also extend my heartfelt thanks to our wonderful three sons. Thank you for your patience and understanding when I have been absent-minded and immersed in research. Your existence has been a great resource and I am grateful for each and every one of you. You have supported me in your own unique way and given me much to smile and laugh about.

Turku 29.8.2023
Maija Salokivi

LIST OF ORIGINAL PUBLICATIONS

This thesis is based on the following publications.

1. Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2021). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. Nordic Journal of Music Therapy, 31(1), 63–88.
https://doi.org/10.1080/08098131.2021.1903977

2. Salokivi, M., Salanterä, S., Saarikallio, S. & Ala-Ruona, E. (2023). Promoting emotional skills in early adolescents with mental health conditions in music therapy – a content analysis of focus group interviews. Nordic Journal of Music Therapy, 32(5), 423–444.
https://doi.org/10.1080/08098131.2023.2169336

3. Salokivi, M., Salanterä, S., Saarikallio, S. & Ala-Ruona, E. (2023). Validation of item pool for early adolescents' emotional skills assessment in music therapy. Nordic Journal of Music Therapy.
http://dx.doi.org/10.1080/08098131.2023.2245433 (Online publication)

Author's contribution to the articles

1. The first author designed the study, collected the data, analysed and interpreted the data and wrote the article with the support of the co-authors. Both co-authors supported the design of the study, the overall research process, data analysis and the preparation of the manuscript for publication.

2. The first author designed the study, submitted the required ethics committee documents with the assistance of her primary supervisor, collected the data, analysed and interpreted the data and wrote the article with the support of the co-authors. All the co-authors supported the design of the study, the overall research process, data analysis and the preparation of the manuscript for publication.

3. The first author designed the study, collected the data, analysed and interpreted the data, and wrote the article with the support of the co-authors. All the co-authors supported the design of the study, the overall research process, data analysis and the preparation of the manuscript for publication.

ABBREVIATIONS

CASEL   Collaborative for Academic, Social and Emotional Learning

COREQ   Consolidated Criteria for Reporting Qualitative Research

I-CVI   Item Content Validity Index

EBP   Evidence-based practice

EPICURE   Engagement, Processing, Interpretation, Critique, Usefulness, Relevance and Ethics (Guidelines for qualitative research)

MRC   Medical Research Council

OECD   Organization for Economic Co-operation and Development

PRISMA   Preferred Reporting Items for Systematic Reviews and Meta-Analyses

PsycINFO   Database covering the behavioural and social sciences

RIOT   Reviewing, Interviewing, Observing and Testing (Four methods of music therapy assessment)

S-CVI   Scale Content Validity Index

SEL   Social and emotional learning

WHO   World Health Organization

FIGURES

TABLES

CONTENTS

1   INTRODUCTION

Many professionals in health, education, psychology, therapy, and social work widely agree on the significance of emotional skills. The absence of emotional skills has been pinpointed as a contributing factor to numerous problems, affecting both individuals and communities. This deficiency is frequently linked to mental and social challenges (World Health Organization, 2021). Emotional skills hold importance at both global and national levels. As an illustration, the Organization for Economic Co-operation and Development (OECD) underscores the significance of emotional skills in its recommendation "Future of Education and Skills 2030." These skills are projected to play a pivotal role in future work environments. The OECD emphasizes the global necessity for education and training that empower individuals to appreciate differing viewpoints, manage setbacks, nurture relationships, and exhibit environmental responsibility. The OECD stresses that individual well-being is more than just material resources. Well-being is a sufficiently good quality of life, and mental well-being is part of the overall well-being of individuals and communities (Organization for Economic Co-operation and Development, 2018).

Finland has also acknowledged the significance of emotional skills, now incorporating them into the primary and upper secondary school curricula (National Core Curriculum for Basic Education 2014; National Core Curriculum for Upper Secondary Education 2019). These curricula underline the importance of emotional skills in the overall well-being of children and young people, particularly their role in fostering robust interpersonal skills and social relationships. In a similar vein, the Collaborative for Academic, Social and Emotional Learning (CASEL) in the US endeavours to integrate evidence-based social and emotional learning (SEL) as a fundamental component of education from preschool to high school levels (CASEL, 2013). The pedagogically oriented CASEL defines SEL skills quite broadly. These skills encompass acquiring and applying knowledge, skills and attitudes to achieve a healthy identity, managing emotions and goals, knowing and demonstrating empathy, building and maintaining relationships, and making responsible decisions (CASEL, 2013).

Emotional skills are part of an individual's mentalisation capacity. Haugaard and Mortenson (2013) define mentalisation as the ability to feel and recognize one's own emotions. It also involves the capacity to regulate and reflect on one's emotions, and experience empathy towards others. Mentalisation encompasses cognitive functions like the ability to think symbolically. It also involves the ability to distinguish between internal and external reality, differentiate other people's emotions from one's own, and discern between internal and interpersonal processes in the psyche. Through mentalisation, a person can feel like an individual who acts in a meaningful and purposeful way (Haugaard and Mortenson, 2013). Much like CASEL's SEL definition, the concept of mentalisation also underscores both internal and external emotional skills. But what exactly are these internal and external emotional skills? And what needs to be in place before emotional skills become evident in successful social interaction? Furthermore, what definitions would be most practical, especially in contexts like music therapy, where the goal is to comprehensively develop emotional skills in early adolescents? Interestingly, there is no standardized definition of emotional skills within the scientific literature. The inconsistency in terms and descriptions related to emotional skills has been acknowledged as a challenge. Similarly, there's a recognized need to establish definitions of emotional skills that adhere to scientific standards (Humphrey et al., 2007; Matthews et al., 2002; Wigelsworth et al., 2010).

1.1 Early adolescence and the development of emotional skills

Early adolescence starts around the age of 10–13 years (Santrock, 2008), most often between 11–13 years (Levesque, 2012; Salmela-Aro, 2011). Early adolescence is a time when childhood is gradually left behind, and the child grows through biological, cognitive, and socio-emotional changes, first to puberty and then towards adolescence and adulthood. These many changes challenge the balance of body and mind that previously existed in childhood (Impiö, 2005). Typical early adolescent struggles include discomfort with self and body image, concerns about normality, increased conflict with parents, increased peer influence, increased desire for independence, return to child-like behaviour in stressful situations, a tendency to mood swings, testing of rules and boundaries, increased need for privacy and increased interest in sex (Sawyer et al., 2012). There are many changes, but they are all part of the typical development of early adolescence.

Developmental psychology looks at early adolescence through the theories of Piaget and Bandura, among others. In his theory of cognitive development, Piaget calls early adolescence a "formal operational period". The child begins to use more logic to solve abstract problems and can develop hypotheses, plan how to test these hypotheses and consider the possible consequences of the hypotheses (Carr, 2016). By the end of early adolescence,

children are capable of relativistic thinking and can reflect on their behaviour (Carr, 2016). Bandura's (2018) theory of social cognition describes these same skills in terms of three main features: 1) proactivity, whereby the early adolescent can motivate and direct themself through the visualisation of action plans, goals, and outcomes; 2) self-reactivity, which refers to the early adolescent's ability to self-regulate, and 3) self-reflexivity, whereby the early adolescent can reflect on their actions (Bandura, 2018).

During typical early adolescence, the development of emotional and interpersonal skills becomes evident through various indicators. These include heightened emotional reactivity, an enhanced ability to reflect on emotions and assess their acceptability, legitimacy, and regulation. Additionally, early adolescents acquire skills to manage emotions and navigate stressful situations in more advanced ways (Carr, 2016; Davey et al., 2008: Steinberg, 2005). Furthermore, they demonstrate improved comprehension of distinct social roles. They also display flexibility in their emotional expression with peers and adults and are more adept at regulating emotions to initiate and sustain friendships compared to their previous capabilities (Carr, 2016).

Sufficiently smooth emotional development in early adolescence is based on adequately completing the earlier developmental stages. If some of the psychological developmental stages of childhood are not completed as desired, this can lead to difficulties in the transition from childhood to early adolescence: the biological and psychological ages are no longer in balance (Brummer, 2005). Successful attachment relationship with parents or caregivers is the basis for smooth psychological development and sufficient emotional skills. Developmental psychologist and psychiatrist John Bowlby, the father of attachment theory, found in his 1930s studies that children who were considered maladjusted had difficulty forming close relationships with other people (Holmes, 1993). When the family history of these children was examined in more detail, it was found that their home life had been disrupted from an early age. Bowlby concluded that early emotional attachment between parent and child is the key to healthy psychological development and that the quality of the early attachment influences an individual's later life. When the caring adult is sensitive and consistent in meeting the child's needs, it protects the child's developing central nervous system from overly stressful experiences and lays the foundation for a secure attachment relationship with the adult. Where the attachment relationship has been significantly insecure, the developing psyche's opportunities for flexibility are reduced (Holmes, 1993).

According to Freud's theory of psychosexual development, a successful transition from middle childhood (6–12 years) to early adolescence requires a successful latency phase (Knight, 2014). The latency phase is a stage of psychosexual development in which sexual energy is relatively low. The latency phase is characterised by increased relationships with peers and non-family adults, growth in ego functioning (the ego is the part of the personality that deals with the external world and its practical demands; American Psychological Association, 2018), skills, activities, and interests, and adaptation

to family and community rules (Furman, 1991). A crucial developmental task during the latency phase is strengthening the "self". The concept of the "self" is based on the theory of psychiatrist and psychoanalyst Heinz Kohut and relates to the idea of psychic structures within the individual that can reliably regulate and reassure the person when necessary (Baker & Baker, 1987). In practice, this means that a person with a sufficiently strong "self" does not need to express their internal conflicts as aggressive behaviour towards other people but can deal with them internally (Brummer, 2005). A sufficiently strong self is flexible, tolerant, and empathic; it tolerates anxiety, fear, shame, guilt and conflicts and can also protect itself from these feelings. At the end of the latency phase, childhood dependency and needs are no longer goals; the child wants to grow and move towards adolescence (Brummer, 2005).

1.2 Promoting emotional skills in early adolescents with mental health conditions in music therapy

Unfortunately, various mental health conditions often affect the typical development of early adolescence. According to the World Health Organization (WHO), 20% of all children and adolescents have mental health conditions, such as developmental disabilities, depression, anxiety, and behavioural disorders. Mental health conditions are major causes of illness and disability among young people (aged 10–19 years) worldwide (World Health Organization, 2021). The WHO (2021) also estimates that half of these mental health conditions begin by age 14. This situation highlights that early childhood, middle childhood and early adolescence are critical times to support children's mental health to intervene in good time if problems arise. Mental health conditions cause a wide range of challenges for children and young people, affecting their well-being and having consequences for their later lives. They are at risk of poor school performance, poor subjective emotional well-being, behavioural problems, and other adverse life events such as dropping out of school (Aviles et al., 2006; McLeod et al., 2012; Tempelaar et al., 2014). Emotional skills deficits are often associated with mental health conditions and form part of early adolescents' psychological and social problems (Gonçalves et al., 2019; Parker et al., 2006; Zins & Elias, 2006).

Early adolescents (10–14 years) are the largest client group for music therapy in Finland, accounting for 60% of all children (0–15 years) in music therapy. Most of these early adolescents (85%) have mental health conditions (Social Insurance Institution, 2017). In general, many early adolescents in music therapy have deficits in emotional skills (Lindahl Jacobsen, 2019). When early adolescent starts music therapy, they often have complex life situations, fears, concentration problems, low self-esteem, or obsessive-compulsive symptoms (Finnish Society of Music Therapy, 2021). Music therapy offers the opportunity to deal with emotions in a non-verbal way. It is, therefore, particularly suitable

for clients who need a more versatile approach to dealing with their emotions than verbal discussion (Finnish Society of Music Therapy, 2021).

In Finland, the theoretical framework of music therapy is mostly psychodynamic. The Finnish and European psychodynamic music therapy framework integrates several theoretical frameworks, such as psychoanalysis, developmental psychology, music psychology, therapeutic framework, pedagogy, musicology, and medicine (Nygaard Pedersen, 2019). In psychodynamic music therapy, the music therapist aims to help clients to communicate their inner world through musical expression. The therapy considers the existence of the unconscious and conscious mind and their influence on both the internal processes of the mind and the individual's external behaviour (Metzner, 2016; Kim, 2016).

Nygaard Pedersen (2019) describes how the interaction between the therapist and the client is an essential part of the therapeutic process. Therapy is thought to reactivate the client's core self and how the client's core self has or has not been strengthened. The core self is initially formed in relation to other people, and early interactional experiences have been critical. When the core self is in balance, mentalisation is well-developed and internal and external realities can be experienced as interrelated rather than identical or separate (Nygaard Pedersen, 2019). The therapeutic relationship in psychodynamic therapy is an interpersonal relationship in which both client and therapist participate in forming the relationship and seek to understand and give meaning to the issues that arise in therapy. The therapeutic process is seen as a process of reflection and development with the aim of reactivating the client's abilities and resources (Nygaard Pedersen, 2019).

Previous research has supported using music therapy with early adolescents with emotional problems (Belski et al., 2022; Gold et al., 2004, 2007). Studies have shown that music therapy with early adolescents can, for example, reduce anxiety (Hendricks et al., 1999), affect mood (Shuman et al., 2016), increase emotional responsiveness (Wasserman, 1972), reduce impulsivity, and increase self-regulation (Archambault et al., 2019; Layman et al., 2002; Uhlig et al., 2018), and help young people to develop their self-image (Friedlander, 1994). A meta-analysis of the effects of music therapy in the treatment of children and adolescents with psychopathological problems published by Gold et al. (2004) found that music therapy had a significant, moderate or large effect on well-being. However, studies with larger sample sizes, better methodological quality and conducted in different research settings are still needed to validate the findings of previous studies (Belski et al., 2022; Geipel et al., 2018; Porter et al., 2017). In addition, the analysis did not examine the effects of music therapy by age group, so the results show the effects of music therapy on young people with mental health conditions in general. Focusing the study on early adolescents would be justified because the age range of adolescents is generally broad, from 10 to 19 years (WHO, 2021), and studies have found differences in, for example, emotion regulation between different age groups (Zimmermann & Iwanski, 2014). Focusing the study specifically on early adolescents is also

justified because early adolescents are the largest client group for music therapy in Finland.

1.3 Music therapy assessment in the assessing of emotional skills in early adolescents with mental health conditions

Assessment in music therapy can be described as a data collection process through which the therapist builds knowledge about the client's strengths and needs (Hanser, 1999; Waldon & Gattino, 2018). The nature of the information-gathering process is continuous from referral to the end of therapy. Waldon and Gattino (2018) describe how the assessment takes place at all stages of the music therapy process: when the music therapy referral is received, during the initial assessment, during the planning of the therapy, during the implementation of the therapy and at the termination of the therapy. The assessment may consist of, for example, client documents, client interviews, measurements (e.g. test results) and observations made by the therapist during the therapy process (Waldon & Gattino, 2018).

In European music therapy terminology, music therapy assessment is used broadly to describe concepts such as clinical assessment, clinical evaluation and measurement. The term assessment is not usually distinguished from the words evaluation or measurement (Waldon & Gattino, 2018). Evaluation refers to collecting data at the end of a particular process to decide whether to initiate treatment or whether treatment has been successful (Frey, 2015). On the other hand, measurement means quantifying a property or characteristic, and can usually be done with the help of an instrument (Waldon & Gattino, 2018). Measurement can be carried out utilising a test, for example. According to Sattler (2019), a test can be defined as a specific procedure used to assess a clearly defined ability or characteristic which produces a score. This score can be used to describe current levels, it can be used to compare performance over time, or it can help to identify strengths or needs (Sattler, 2001).

At the practical level, music therapy assessment involves four methods, which may be collectively referred to by the acronym RIOT. They include: 1) reviewing, 2) interviewing, 3) observing and 4) testing. In reviewing, the music therapist will familiarise themselves with the client's records and relevant information. In interviewing, the therapist gathers clinically relevant information by interviewing the client. The interview may be informal or more structured. (Waldon & Gattino, 2018). In observing, the therapist collects information relevant to the assessment by seeing and listening (Sattler, 2001). Video and audio recordings can be used. Observing focuses on clinically relevant responses, interactions and behaviours. Finally, in testing, the therapist uses a procedure that produces interpretable quantitative results that describe a client's level of some characteristic (Waldon & Gattino, 2018).

Currently, other aspects of the RIOT framework than tests and measurements are more actively used in music therapy assessment. This is because there are relatively few standardised tests and measurements (Waldon & Gattino, 2018), and existing instruments do not cover, for example, the development of emotional skills in early adolescents with mental health conditions. The current situation also affects the terminology used in music therapy assessment. The term assessment tool is often used when referring to music therapy assessment methods. This is probably due to the diverse nature of existing assessment methods. Many of these methods need to be standardised, and it is more appropriate to use a more general term covering a wide range of procedures.

The music therapy profession operates in a rehabilitation and healthcare field that emphasises evidence-based practice (EBP) thinking. This is likely to have a gradual impact on music therapy practice and will increase the use of standardised tests and measures. However, it is worth remembering that evidence-based practice has several elements; it is not just about tests and measurements. Evidence-based practice means combining the best scientific evidence with clinical expertise and considering the client's values and preferences in the treatment (Houser, 2011). From this definition of EBP, the four components of RIOT (review, interview, observation, testing) previously mentioned in the assessment of music therapy stand their ground. The RIOT approach provides a wide range of information about the therapy client from many perspectives.

Music therapy assessment tools that can assess some aspects of children's and young people's emotional skills have been developed for different purposes, settings and contexts. Based on Cripps, Tsiris and Spiro (2016), such assessment tools are, for example, Individualized Music Therapy Assessment Profile by Baxter et al. (2007), Individual Music-Centered Assessment Profile for Neurodevelopmental Disorders by Carpente (2013), Music Therapy Special Education Assessment Tool by Langan (2009), The Music Therapy Star by MacKeith (2011), Beech Brook Music Therapy Assessment by Layman et al. (2002), Pediatric Inpatient Music Therapy Assessment Form by Douglass (2006), Music Therapy Assessment for Emotionally Disturbed Children by Goodman (1989), 13 Areas of Inquiry by Loewy (2000) and Music Therapy Assessment for Disturbed Adolescents by Wells (1988). These assessment are aimed at both children and adolescents or all age groups, not specifically at early adolescents. In addition, the mentioned assessment tools tend to focus on a particular aspect of emotional skills rather than emotional skills from many aspects. For example, they focus on such areas as differentiation, expression, regulation and self-awareness (Baxter et al., 2007) or attentiveness, affect, adjustment, engagement and interaction (Carpente, 2013), emotional expression (Langan, 2009; MacKeith, 2011), emotional reactivity (Layman et al., 2002) and emotion suppression (Wells, 1988). Others assess social-emotional functioning or behaviour (Douglass, 2006; Goodman, 1989) and the extent of affect (Loewy, 2000) (Cripps et al., 2016).

Although systematic research-based theory building of assessment instruments is generally increasing in music therapy research, it still needs to be improved (Cripps et al., 2016; Waldon & Gattino, 2018; Wheeler, 2018). To systematically assess the development of emotional skills in early adolescents with a target group and context-specific assessment tool, the assessment tool should be validated and reliable. The validity of an assessment tool refers to the extent to which the tool measures what it is intended to measure (Standards for Educational and Psychological Testing, 2014), while reliability refers to the reproducibility of the results obtained from an assessment instrument; the results obtained should be consistent across time, settings and contexts (Johnson & Morgan, 2016). In addition, before an assessment tool can be developed and validated, the phenomenon to be evaluated must be clearly defined based on scientific research (DeVellis, 2017).

To develop a validated assessment method for early adolescent music therapy and their emotional skills, it is essential to understand music therapists' methods for improving these skills. Although no systematic research focuses on methods to promote emotional skills in early adolescents, possible approaches can be inferred from studies that show positive effects of music therapy on this age group (11–14-year-olds). These studies mention methods such as listening to music (Chen et al., 2019; Gold et al., 2017; Layman et al., 2002; Shuman et al., 2016), improvisation (Gold et al., 2017; Shuman et al., 2016), singing and rapping (Chen et al., 2019; Uhlig et al., 2018) and playing different instruments (Layman et al., 2002; Shuman et al., 2016). These methods are broadly in line with those used with young people in general. McFerran (2010) has examined music therapy methods used with young people (not specifically just early adolescents). Methods can be categorised into the following areas: live songs (selection, singing, playing and writing), improvisation (instrumental and singing), pre-recorded music (listening, discussion and relaxation) and music games (McFerran, 2010). Methods can also be divided into receptive or active methods. In receptive methods, clients listen to pre-recorded or live music. In active methods, clients create music with their voice, instruments or song writing (Geipel et al., 2018). The methods used vary depending on the therapist's orientation and the client's interests.

Developing the assessment tool would also need information on the types of issues that music therapists perceive when emotional skills are being progressed. This information could potentially provide an opportunity to detect changes in emotional skills at the level of music before changes can be seen in the client's other behaviours.

1.4 Aim of the study

Music therapy offers many opportunities to work with emotional skills in early adolescents, but how can emotional skills be best defined in a way that is relevant to therapy, which interventions work best, and how can progress in

emotional skills be assessed? Such information is not available in the music therapy research literature, although it is needed in practical music therapy work to help children in need of support in the best possible way. The aim of this study is to explore these questions and to provide a scientific basis for a music therapy assessment tool to evaluate the progress of emotional skills in early adolescents in a music therapy context.

Sub-study I aims to define the concept of emotional skills in early adolescents through a scoping review to gain a more specific idea of what an emotional skills assessment tool should assess. The outcome of the sub-study, the components of emotional skills in early adolescents, helps to provide a theoretical framework for Sub-studies II and III.

Sub-study II explores music therapists' experiences and perceptions of promoting emotional skills when working with early adolescents with mental health conditions. The study also examines the therapeutic methods used by therapists with this target group. In addition, the applicability of the conceptual model of emotional skills, developed in Sub-study I, to music therapy practice is explored. Finally, the information generated by Sub-study II is used to develop the items pool of a future assessment tool in Sub-study III.

Sub-study III investigates the content validity of the item pool based on the psychometric scores obtained for the items. Content validity refers to how well a sample of items describe the operational definition of a particular concept and to what extent the items adequately represent the content area (DeVellis, 2017; Polit & Beck, 2006). Content validity is a prerequisite for other types of validity (construct and criterion validity) and should be a priority in the development of an assessment method (Zamanzadeh et al., 2015). Therefore, Sub-study III reveals which items, developed based on previous studies, are valid for inclusion in a future assessment tool for early adolescents' emotional skills in the music therapy context.

1.5 Epistemological perspective of the study

The study's starting point and primary purpose is to solve a problem observed in practice: how could the development of emotional skills in early adolescents be assessed measurably in a music therapy context? From a philosophy of science perspective, the research's point of view can be seen as pragmatic. According to Hammersley (2003), pragmatism emphasises the practical consequences of ideas and actions, and the value of the study is based on its ability to solve a real problem and thus improve people's lives. Research findings are not taken as absolute truths but as something that will evolve and be corrected with further research (Hammersley, 2003). This study emphasises the practical benefits of emotional skills for early adolescents, such as their impact on mental health, general well-being and social relationships. It also highlights the applicability and reliability of the findings for practical music therapy work and music therapy assessment research.

The research question contains both qualitative and quantitative elements. Emotional skills are subjective individual skills that emerge in different social and cultural contexts. On the other hand, demonstrating the development of emotional skills in a measurable form tends towards an objective and standardised procedure. The combination of qualitative and quantitative perspectives in research allows one to consider both individual experiences and empirical evidence.

The qualitative side of the study can be seen as constructive interpretivism (Blaikie, 2004a; Burr, 2004). Emotional skills are seen as skills that develop as an active process of knowledge construction based on an individual's experiences, prior knowledge and interactions with the social and cultural environment. In addition, emotional skills are influenced by an individual's interpretation of situations and how they subjectively understand them. These same aspects are also present when the music therapist assesses the client's emotional skills and their development based on the therapist's observations during the therapy process. The therapist's knowledge of the client's emotional skills has also been constructively built during the therapy process. The therapist reflects on and interprets this knowledge, based both on professional expertise and subjectively from their own perspective. In the same way as the client, the therapist is part of the social and cultural environment and has learned what emotional skills are necessary. The constructivist-interpretative approach is reflected in the methodological choices of the study, in that a deeper understanding and experiential perspective have been sought through the conceptual analysis, focus group interviews and content analysis of the interviews.

The quantitative side of the research can be seen as positivistic (Blaikie, 2004b). The study assumes that it is possible to measure the development of emotional skills based on observations, and therefore focuses on developing a reliable and valid measure for the music therapy context. In the methodology of the study, the positivistic aspect is reflected in the quantitative questionnaires related to the development of the measure and in the psychometric means of assessing the reliability of the measure.

2 METHODS

The study can be seen as a mixed-methods study, as both qualitative and quantitative methods were used to achieve the research objective: to create a scientific foundation for a tool for assessing emotional skills in early adolescence. The Medical Research Council (MRC) Framework for Complex Interventions (Craig et al., 2008) served as the general theoretical overarching framework for the study. The framework helped to outline the steps required in the process of developing the assessment method. The framework consists of four distinct phases: 1) development, 2) feasibility and piloting, 3) evaluation and 4) implementation (Craig et al., 2008). This study focuses on the first phase of the MRC framework and partly on the second phase, covering the development and feasibility phases.

The practice-level framework for the study was the five-step operationalisation framework: (1) developing a theoretical definition, (2) specifying variables derived from the theoretical definition, (3) identifying observable indicators, (4) selecting a means of measuring the indicators, and (5) evaluating the adequacy of the resulting operational definition (Waltz et al., 2016). This chapter presents the methods used in the study based on the operationalisation process and the study's ethical aspects. Table 1 shows an overview of the study's frameworks, sub-studies, research design, samples, data collection and analysis methods, and the articles reporting the results.

TABLE 1   Development of the assessment tool utilising the MRC framework   and five-step operationalisation process

DEVELOPMENT OF THE FOUNDATION FOR AN ASSESSMENT TOOL UTILISING MRC-FRAMEWORK AND A FIVE-STEP OPERATIONALISATION PROCESS								
CONTENT VALIDITY IN ASSESSMENT DEVELOPMENT	MRC-framework	Five-step operationalisation process	Study	Design	Sample	Data collection	Analysis method	Reported in
	PHASE I: Development	STEP 1: Developing a theoretical definition	I	Review and qualitative descriptive	Articles that include a description of the emotional skills of early adolescents	Systematic literature search	Scoping review and concept analysis	Article I
		STEP 2: Specifying variables derived from the theoretical definition	II	Qualitative descriptive	Music therapists who work with early adolescents with mental health problems (n=13)	Focus group interviews	Deductive-inductive content analysis	Article II
	PHASE II: Feasibility	STEP 3: Identifying observable indicators	III	Qualitative descriptive	Results from Study I and II	Completing Study I and II	Compilation of indicators into an item pool	Article III
		STEP 4: Selecting means for measuring the indicators		Quantitative descriptive	Music therapists who work with early adolescents with mental health problems (n=8), health researchers with training in the development of assessment tools (n=8)	Expert panels, semi-structured quantitave questionnaire	Psycho-metric scores: CVI, modified kappa, understandability, and coverage	
		STEP 5: Evaluating the adequacy of the resulting operational definition						

2.1   Methods and participants in Phase I: Development

2.1.1   A qualitative scoping review and concept analysis for developing a theoretical definition (Step 1)

In Step 1 of operationalisation, a qualitative scoping review and concept analysis were chosen as research methods for studying many different emotion skills-related concepts and developing a theoretical definition of early adolescents' emotional skills. The scoping review (Salokivi et al., 2022) combined the descriptions of early adolescent emotional skills used in the research, highlighting what is known about the concept (Tricco et al., 2018). The scoping review used a systematic search, selection and synthesis to map the literature and identify and highlight gaps in the research (Arksey & O'Malley, 2005; Colquhoun et al., 2014, Daudt et al., 2013).

The concept analysis examined the different definitions of emotional skills in early adolescents that emerged from the scoping review. These definitions identified in the scoping review and the conceptual analysis created a conceptual model of early adolescent emotional skills, combining the existing definitions into a single entity. This conceptual model was the theoretical basis for the following Sub-studies II and III.

The scoping review was chosen as the type of literature review because it allowed for a broad examination of the topic among studies of different designs and quality (Arksey & O'Malley, 2005). For this sub-study, the inclusion criteria for the scoping review were the right age group (early adolescence) and the fact that the study defined emotional skills in written form. The five-step model of Arksey and O'Malley (2005) was used to conduct the scoping review. The steps of the model are: (1) identify the research question; (2) identify relevant studies; (3) define a relevant study selection; (4) chart the data; and (5) collect, summarise, and report the results (Arksey & O'Malley, 2005).

The selection of literature for the scoping review was described using the PRISMA flow diagram (PRISMA = Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The flow diagram was created following the PRISMA for Scoping Review Checklist (Tricco et al., 2018). The PRISMA flow diagram illustrated the flow of information seeking through the different stages of the scoping review. In addition, the chart highlighted the number of studies identified, included and excluded and the reasons for exclusion (PRISMA, 2015). Figure 1 presents the PRISMA flow diagram.

Identification

A Emotional clarity ($n = 14$)	**B** Emotional competence ($n = 143$)	**C** Emotional control ($n = 91$)
D Emotional differentiation ($n = 17$)	**E** Emotional functioning ($n = 172$)	**F** Social-emotional functioning ($n = 38$)
G Emotional intelligence ($n = 428$)	**H** Emotional learning ($n = 141$)	**I** Social-emotional learning ($n = 71$)
J Emotional maturity ($n = 20$)	**K** Emotional regulation ($n = 488$)	**L** Emotional responses ($n = 214$)
M Emotional self-efficacy ($n = 25$)	**N** Emotional skills ($n = 93$)	**O** Emotional states ($n = 251$)

Records identified through PsycInfo database searching ($N = 2206$)

Screening

Titles and abstracts screened ($n = 2206$) → Articles excluded after screening title and abstract ($n = 1565$)

Eligibility

Full-text articles assessed for eligibility ($n = 641$) → Articles excluded, with reasons: age, special group with diagnosis or not age group specific study, duplicates, not applicable definitions ($n = 618$)

A $n = 6$	**B** $n = 58$	**C** $n = 11$
D $n = 2$	**E** $n = 35$	**F** $n = 9$
G $n = 205$	**H** $n = 56$	**I** $n = 29$
J $n = 7$	**K** $n = 123$	**L** $n = 44$
M $n = 14$	**N** $n = 27$	**O** $n = 15$

Included

Articles included in qualitative synthesis and concept analysis ($n = 23$)

Articles included after looking at the references of the selected studies ($n = 2$) →

A $n = 4$	**B** $n = 0$	**C** $n = 1$
D $n = 0$	**E** $n = 2$	**F** $n = 0$
G $n = 5$	**H** $n = 2$	**I** $n = 6$
J $n = 0$	**K** $n = 3$	**L** $n = 0$
M $n = 1$	**N** $n = 1$	**O** $n = 0$

Total articles included in qualitative synthesis and concept analysis ($N = 25$)
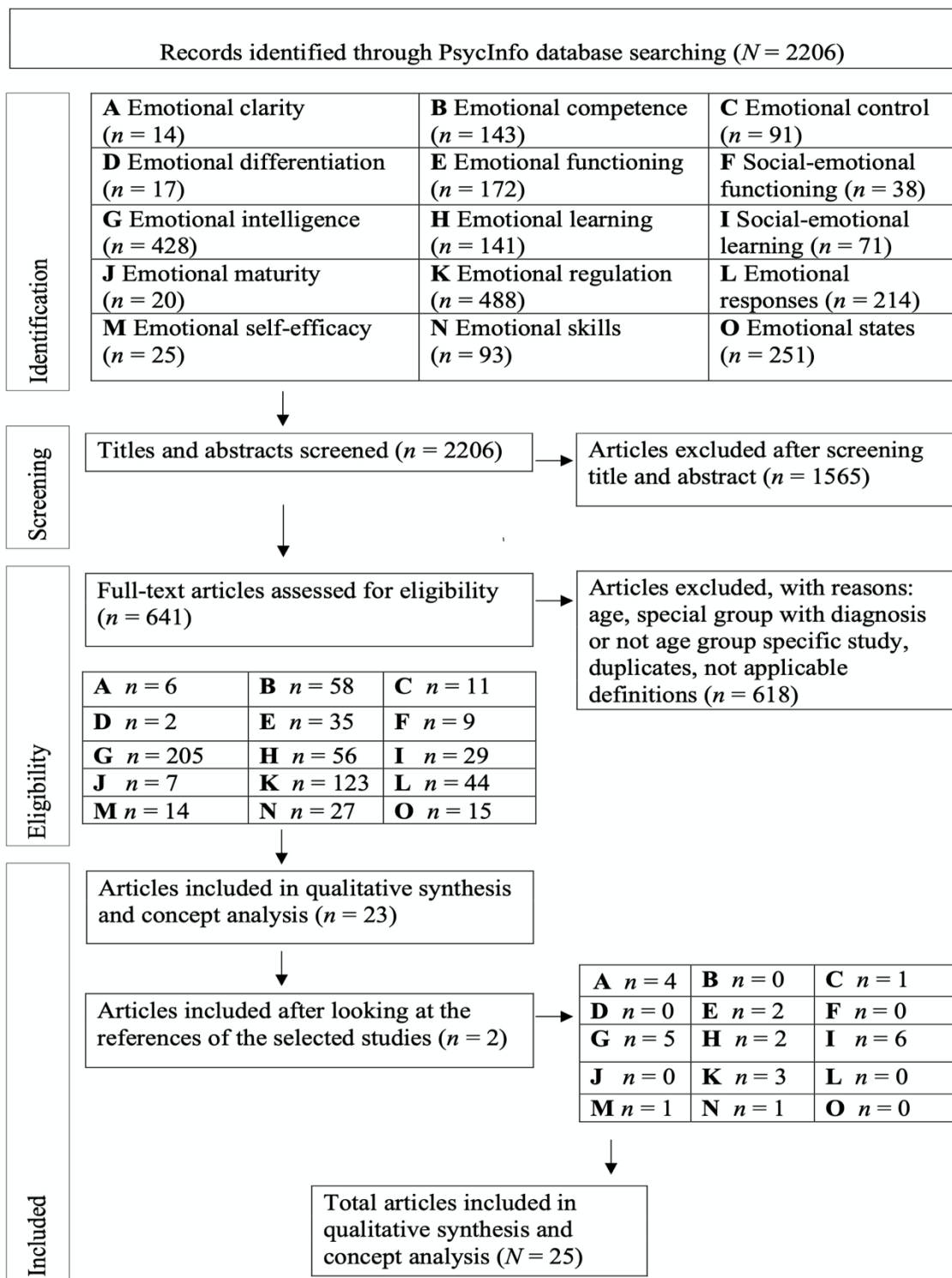
FIGURE 1   PRISMA flow diagram of the process of selecting studies

Note: From Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2022). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. Copyright 2021 by Taylor and Francis.

Finally, the result of the scoping review was presented as a comprehensive table that brought together all the included studies and their definitions of emotional skills in early adolescents (Salokivi et al., 2022). The result of the scoping review provided an opportunity to explore different definitions of emotional skills through concept analysis. Nuopponen (2010) describes concept analysis as crucial in establishing clarity about a poorly defined concept. A completed concept analysis helps the researcher to identify the concept in all its aspects. As a result of concept analysis, an abstract idea takes on a more concrete form. Furthermore, based on the concept analysis, the researcher can proceed to the next step: operationalising the concept (Nuopponen, 2020).

A conceptual analysis of the terms related to emotional skills was conducted using Walker and Avant's (2014) conceptual analysis method. Concept analysis aims to explore the characteristics and properties of a concept and systematically outline the essential elements of a concept and a phenomenon (Walker & Avant, 2014). The steps applied in the analysis method were (a) selecting a concept: early adolescent emotional skills, (b) defining the objective of the analysis: how the research literature defines early adolescent emotional skills, (c) identifying all uses of the concept: written descriptions of emotional skills found in the scoping review, and (d) identifying defining characteristics: written descriptions of emotional skills were decomposed into their components and categorised under a grouping heading based on their meanings. To facilitate the analysis process, the Atlas.ti software (version 8.4.5; ATLAS.ti Scientific Software Development GmbH, 2019) was utilised.

2.1.2 Deductive-inductive content analysis of focus group interviews for specifying variables derived from the theoretical definition (Step 2)

Step 2 of operationalisation process explored the music therapist's working methods in promoting emotional skills in early adolescents and their perceptions of what changes they noticed in the client's emotional skills during therapy (Salokivi et al., 2023a). The research methods for specifying variables were focus group interviews and deductive-inductive content analysis of those interviews. Focus group interviews were chosen because they bring out what and how people think about the topic, and the interaction between interviewees helps to bring out various perspectives and experiences (Barbour, 2007; Kitzinger, 2005; Liamputtong, 2011). Four focus groups were conducted with 13 experienced music therapists working with early adolescents with mental health conditions. The number of groups was considered sufficient because studies show that 80% of new knowledge is obtained after two or three focus groups (Guest et al., 2017).

Focus group interview participants were recruited using a Webropol questionnaire sent via the Finnish Music Therapy Association (version 31.07.2020 MPO; Webropol, 2020). The questionnaire was distributed to all professional members of the Finnish Music Therapy Association (227). One reminder of the questionnaire was sent. In the end, 33 music therapists responded to the questionnaire and 13 of them expressed their willingness to

participate in interviews. All participants were required to have at least five years of working experience to have an experiential understanding of the development of emotional skills during the therapy process.

The focus group interviews were semi-structured, allowing for a focus on specific pre-defined questions but also allowing for new insights if the focus group produced any (Brinkmann, 2013). The interview was divided into four main questions based on the research questions: (a) Where do you see the progress of emotional skills in music-based functioning? (b) Where do you see improvement in emotional skills in non-music-based functioning? (c) What music-based methods do you use when working on emotional skills? (d) What non-music-based methods do you use when working on emotional skills? All four questions contained five sub-questions based on the components of emotional skills identified in the first study. The study's first author acted as moderator/interviewer for all interviews. At the beginning of the focus groups, the components of the emotional skills were presented to the interviewees, and the interviewees had the opportunity to ask questions. Table 2 presents the questions in the focus group interview.

TABLE 2   Focus group interview questions

1.Where do you see the progress of emotional skills in music-based functioning?	3.What music-based methods do you use when you are working for emotional skills?
• In emotional expressing • In emotional monitoring • In emotional identifying • In emotional understanding • In emotional regulating	• In emotional expressing • In emotional monitoring • In emotional identifying • In emotional understanding • In emotional regulating
2.Where do you see the progress of emotional skills in non-music-based functioning?	4.What non-music-based methods do you use when you are working for emotional skills?
• In emotional expressing • In emotional monitoring • In emotional identifying • In emotional understanding • In emotional regulating	• In emotional expressing • In emotional monitoring • In emotional identifying • In emotional understanding • In emotional regulating

Note: From Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Promoting Emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews. Copyright 2023 by Taylor and Francis.

Qualitative content analysis of the focus group interviews was carried out using deductive and inductive approaches. Deductive-inductive analysis is a predetermined theoretical framework based on which the themes of the analysis are formed in advance (deductive) and, in addition, themes are also

created from the data (inductive) (Proudfoot, 2022; Elo & Kyngäs, 2008). The analysis combines these themes. The result of the first study, components of emotional skills, were used as the conceptual starting point and theoretical framework for the analysis (deductive). Still, it was also intended to enable the participants to describe their experiences of the therapy methods and the progress of the development of emotional skills as they wished to express it (inductivity) without limiting it to the given framework. According to Fereday and Muir-Cochrane (2006), deductive-inductive analysis can produce more accurate information at best than using these modes of analysis in isolation. In deductive-inductive analysis, both theory and the voice of the participants are strongly present (Proudfoot, 2022).

There are no systematic rules for the actual analysis, and it is not linear in form (Elo & Kyngäs, 2008; Polit & Beck, 2004), which makes the analysis both challenging and interesting. Each study is unique, and the results depend on the researcher's skills, insights, analytical abilities and style (Hoskins & Mariano, 2004). The qualitative deductive-inductive analysis process proceeded in three main stages: preparation, organisation and reporting (Elo & Kyngäs, 2008). Briefly, the analysis process of this sub-study can be described as follows: in the preparatory phase, the theory created in the first sub-study was chosen as the unit of analysis (the components of emotional skills) and, in addition, new themes or units of analysis may have emerged from the interviews. The content was then further organised, and the text of the focus group interviews was further categorised into smaller content categories or codes. Finally, in the reporting phase, an attempt was made to describe the analysis process as precisely as possible. The progress of the process was also presented in graphical form.

The coding was based on the research questions, which formed four main domains and 20 sub-domains, as well as openness to new insight. Atlas.ti, version 8.4.5 (Atlas.ti, 2019), was used as a coding tool. Atlas.ti made it possible to structure and organise the data into domains, create codes and extract citations. After two rounds of coding and review, the data were categorised into five main domains, consisting of 27 sub-domains and 132 codes. The presentation of the data categorisation in this order, with the main domains first, reflects the deductive aspect of the analysis at this point. The existing theoretical model served as the framework for the analysis, and the data were categorised according to it. Table 5 presents examples of data, analysis and presented results.

TABLE 3   Examples of data, analysis and presented results

Focus group interview question	Example quotation in transcription	Main domain	Sub-domain	Code	Presented result
Where do you see the progress of emotional skills in music-based functioning in emotional regulating?	"Structural playing, when it becomes more possible. In the beginning, you can't keep any structures. Then it is possible slowly introduce a beginning and an end to the song and chord changes, and even an A and B part and a common rhythm."	Progress of emotional skills in music-based functioning	Progress of emotional skills in music-based functioning in regulating	Musical structures	Increased structural musical expression and activity
Where do you see the progress of emotional skills in non-music-based functioning in emotional expression?	"Quite often it's encouragement. For example, that it (expression) expands, becomes more encouraged, becomes more diversified. The courage to make choices more boldly, if that has been a problem. To dare to have an opinion."	Progress of emotional skills in non-music-based functioning	Progress of emotional skills in non-music-based functioning in expression	Bolder expression	Increased courage of expression

In addition, a new main domain was added to the original ones. This domain was: useful perspectives for working on emotional skills in early adolescents with mental health conditions. To increase the reliability of the analysis, members of the research team reviewed all the main domains, sub-domains and coding results and how the results were reported. During the analysis, there was an ongoing dialogue between the research team, and the progress of the analysis was monitored (Elo et al., 2014). In addition, notes were also taken on the analysis process steps. Table 3 presents the deductive-inductive content analysis process.

TABLE 4   Deductive-inductive content analysis process

1. Verbatim transcriptions of the four focus interviews
2. Listening to interviews again and making needed corrections to the transcriptions
3. Reading through transcriptions three times before starting coding
4. Coding in Atlas.ti-program based on 4 beforehand set main themes, 20 sub-themes and openness for new themes: At the end 4 main themes, 36 sub-themes and 194 codes
5. Analyzing the gathered information
6. Revision of the themes and codes
7. One new main theme and seven sub-themes under the new theme. New theme: usable viewpoints when working for emotional skills among early adolescents with mental health conditions. At the end: 5 main themes, 27 sub-themes and 132 codes
8. Another researcher examines the result of the coding
9. Analyzing the gathered information
10. Focusing again on the main research questions so that the goal is clear in mind before starting to report results
11. Starting to delineate an article's result section based on gathered information
12. Inspecting the content of the results by going back to focus group data both on code and citation level and reading through transcriptions of the interviews again
13. Revision of the result section in the manuscript and adding descriptive citations from the focus group interviews
14. Reflecting on this study's results in the article's discussion section of the article based on earlier research and theories.
15. Writing and publishing process of the article
16. Theory construction continues in dialogue with the community of inquiry

Note: From Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Promoting Emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews. Copyright 2023 by Taylor and Francis.

2.2   Methods and participants in Phase II: Feasibility

2.2.1   Developing an item pool by identifying observable indicators (Step 3)

The process of developing the item pool was guided by a description of what the assessment tool was intended to do. The item pool for assessing emotional skills in early adolescents was formulated based on the Development phase results (Steps 1 and 2 of operationalisation) that are reported in Salokivi et al. 2022 and 2023a. The items were categorised according to the definition of the components of emotional skills (Step 1) and generated based on the results of focus group interviews with music therapists (Step 2).

        At the item pool formation stage, it is typical that there are many more items than will be included in the final assessment tool. This is generally a good thing, as it reinforces internal consistency among items and allows only those

items that best fulfil the purpose of the scale to be selected in the end (DeVellis, 2017). The original set of 62 items included six main components of the conceptual model of emotional skills: expressing emotions, monitoring emotions, identifying emotions, understanding emotions, regulating emotions and the ability to use emotional knowledge for self-management and social relationships. Each component included several items. The number of items in the main components ranged from four to 14. A doctoral researcher prepared the first version of the item pool. The research team then reviewed the items and suggested changes where necessary. After revision, an item pool was formed, still comprising 62 items, whose content validity was next examined.

2.2.2 Psychometric means for measuring the indicators (Step 4)

In Step 4 of operationalisation, the relevance of the items was examined using a content validity index (CVI) at the item level (I-CVI) and scale level (S-CVI); a modified kappa index was also examined. Furthermore, psychometric scores were calculated for item understandability and scale coverage. In addition, qualitative written comments were collected to help further develop the questions if necessary (Salokivi et al., 2023b). These methodological choices were made after a thorough review of the research literature and discussions with the research team.

Two expert groups participated in the first round of the evaluation of the relevance, understandability and coverage of the items. One group consisted of health researchers (n= 8), and the other of music therapy clinicians (n= 8). The health researchers represented theoretical expertise, and the music therapists represented clinical expertise. A second round was also organised with the research team (n=3). They assessed the understandability of the reformulated items that the previous panellists indicated needed clarification. The research team consisted of three senior researchers with expertise in instrument development and music therapy. The items were reformulated in this second round for as long as was needed to reach a universal agreement among the panellists in understandability.

In the evaluation of the I-CVI and S-CVI, the expert panels rated the items on a four-point ordinal scale for their relevance (1 = not relevant, 2 = somewhat relevant, 3 = quite relevant and 4 = very relevant) (Lynn, 1986; Waltz & Bausell, 1981). The I-CVI value was obtained by dividing the number of experts who gave the item a score of 3 or 4 by the total number of experts (Polit & Beck, 2006). For the final set of items to be accepted, the I-CVI value of the item had to be at least 0.78. This is the recommended cut-off value when the expert panel has six to ten members (Lynn, 1986). The S-CVI in this study was S-CVI/Ave (mean), which is the average of the I-CVI values of the items and is the recommended cut-off for calculating the S-CVI when an expert panel has multiple members (Polit & Beck, 2006; Waltz & Bausell, 1981). The S-CVI/Ave was calculated by summing the I-CVI values of all relevant 3 and 4-rated items and dividing them by the total number of items. The score had to be at least .90 for the scale to be valid (Polit & Beck, 2006).

Modified kappa (k*) refers to the agreement of the experts evaluating the relevant items. It also considers the possibility of chance (Polit et al., 2007). Modified kappa values were evaluated to determine whether items were satisfactory, good or excellent (Cicchetti & Sparrow, 1981; Fleiss, 1971). The formula for the k* value is:

$$p_c = \left[\frac{N!}{A!(N-A)!} \right].5^N$$

The expert panels also assessed the clarity of each item. The scale used was a four-point ordinal scale (1 = not clear, 2 = somewhat clear, 3 = fairly clear and 4 = very clear). If the clarity of an item was below 0.78, the item was reformulated, and its clarity was re-evaluated with a smaller group of experts (n=3) until all panellists gave the item a score of 3 or 4 (universal agreement).

The expert panels also assessed how the items covered the concept of emotional skills in early adolescence. The rating scale was a four-point ordinal scale (1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, and 4 = strongly agree) (David, 1992). In addition, panellists could comment if they wished to add or delete items or comment on anything else related to the item in question. In addition, panellists could write an open comment under each item if they wanted to clarify why they found the item challenging to understand or to give their recommendations for rewording the item. These comments could be about a particular choice of words or if the respondent found the item ambiguous, for example. These open-ended qualitative comments were used to improve items that did not score sufficiently high in the first round.

2.2.3 Evaluating the adequacy of the resulting operational definition (Step 5)

The operationalisation process resulted in 60 items that were deemed to have sufficient content validity (Salokivi et al., 2023b). These items can be used as a basis for a reliable assessment tool that can evaluate the development of emotional skills in early adolescents in music therapy. An intention is that the assessment tool can be used at different stages of the music therapy process: at the beginning, during the therapy process and at the end of the therapy.

The study process followed the steps pre-defined for the operationalisation process. Each stage was carried out using appropriate research methods and the methodological choices were justified. The methodological decisions, the detailed conduct of the research and the results were reported carefully and transparently in a peer-reviewed scientific publication. The reports also included a discussion of each study's strengths and limitations.

The items' reliability in assessing the development of emotional skills in music therapy has yet to be demonstrated. The number of items also needs to be developed to make the items suitable for practical music therapy work. The

set of 60 items is still long for clinical work, where a more concise and time-efficient assessment method is needed.

2.3 Ethical aspects

The research team followed good research practices based on the principles of research integration (Finnish Advisory Board on Research Integrity TENK 2019; ALLEA 2017) throughout the research in the following aspects:

Autonomy, informed consent and voluntariness: Participants in the study have been able to make informed choices about their participation in the study and to ask questions about the study. Participants have been asked to give their consent to participate and the purpose of the study. They have been explained the procedures involved and how their data will be processed and stored. Participants have been informed of the possibility to withdraw from the study at any time without penalty. Participation in the study has been voluntary.

Confidentiality and anonymity: Participants have been assured that their identity and responses will be kept confidential and anonymous. Participants were informed that their identity will be protected by secure storage and by preventing identification in published survey reports.

Qualifications of the researcher: Researchers conducting the research will have the appropriate qualifications, training and expertise to carry out the research. The research team had a solid understanding of music therapy, research methods and ethical guidelines.

Data protection and privacy: Data were collected, stored and analysed in accordance with the applicable data protection regulations and guidelines. Participants' data were not passed on or used inappropriately.

Research ethics approval: The ethics committee of Human Sciences Ethics of the University of Jyväskylä approved the data collection and ethical protocol for this study (Number: 746/13.00.04.00/2020).

Openness and honesty: The study was conducted with honesty, transparency and integrity. The findings were accurately reported, including any limitations of the study.

3   OVERVIEW OF THE ORIGINAL STUDIES

This chapter summarises each study, describing the background and objectives, methods, results and findings. The chosen research methods are justified, and each article's relevance to the work's goals is explained.

3.1   Sub-study I: A scoping review and concept analysis of early adolescents' emotional skills: Towards the development of a music therapy assessment tool

The first sub-study presented the concept and content of emotional skills in early adolescents among the general population (Salokivi et al., 2022). This information was needed because there was no scientifically based, ready-made definition of emotional skills in early adolescents that could be a reliable starting point for developing an assessment tool. Therefore, before developing an assessment tool, the first phase of the development process is to describe clearly what the tool is intended to assess (DeVellis, 2017).

Although the term "emotional skills" is familiar in everyday language, a scientifically valid definition and a more detailed description of "emotional skills" was needed. There are multiple terms related to emotional skills in the existing research literature, but many of them have overlapping meanings. Therefore, the sub-study investigated what definitions and theoretical frameworks for terms related to emotional skills exist in the current research literature. In addition, this sub-study examined what kind of practical general definition of the concept could be suitable as a theoretical framework for a tool to assess the development of the emotional skills of early adolescents in music therapy. The scoping review included 15 different emotional skills-related terms. Nine of these terms had been used in studies on early adolescents. These nine terms were: emotional clarity, emotional control, emotional functioning, emotional intelligence, emotional learning, social-emotional learning, emotional regulation, emotional self-efficacy, and emotional skills.

Based on the result of the Sub-study I (Salokivi et al., 2022), the main components of early adolescents' emotional skills are (a) expressing, (b) monitoring, (c) identifying, (d) understanding, and (e) regulating emotions; along with (f) the ability to use emotional information. The last component can be seen as an implication of the five previous components. This component comprises two parts: (a) the ability to use emotional information on an individual level for developing and establishing positive self-management, and (b) the ability to use emotional information on a social level for developing and establishing positive relationships. The ability to use emotional information on an individual level includes the following skills: perspective-taking, problem-solving, change management, stress management, decision-making, responsible behaviour and motivating oneself through emotions. The ability to use emotional information on a social level includes the following skills: empathy, listening ability, appropriate interaction, respecting others' rights, sensitivity to peers' personal beliefs, and helping others to modulate their emotions. Figure 2 presents the components of emotional skills developed in this sub-study.
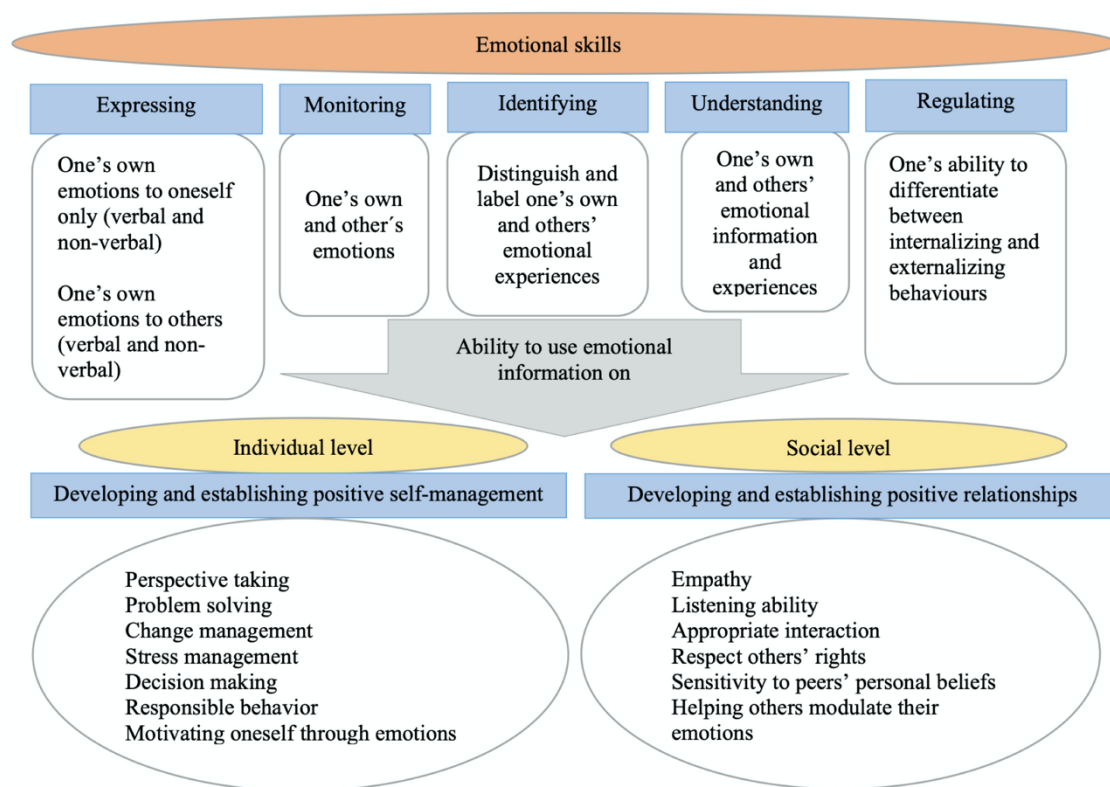
FIGURE 2   The components of early adolescents' emotional skills

Note: From Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2022). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. Copyright 2021 by Taylor and Francis.

As a result of the scoping review and conceptual analysis, the components of emotional skills in early adolescents were formulated. The identified components of emotional skills will help the researcher and the music therapy clinician to better understand the multi-dimensional nature of emotional skills. The components also served as a theoretical framework for the next phase of the study, which examined work focused on developing emotional skills in music therapy clinical practice.

3.2 Sub-study II: Promoting emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews

The second sub-study examined music therapists' views on developing emotional skills when working with early adolescents with mental health conditions (Salokivi et al., 2023a). In addition, the sub-study investigated the applicability of the conceptual model developed in the first sub-study (Salokivi et al., 2022) to the clinical practice of music therapy. The methods used were focus group interviews and deductive-inductive content analysis. It also explored the methods therapists use when working with the target group.

The main findings derived from the varied data produced by the qualitative focus group interviews are presented here. The sub-study's results describe the progression of emotional skill development in music therapy as a multi-level and holistic process that encompasses the mental, physical and cognitive levels. Holism in this context means that the music therapy process is comprehensive for the client, considering the different aspects of the human being. Figure 3 presents emotional skills development in music therapy as participants described it.
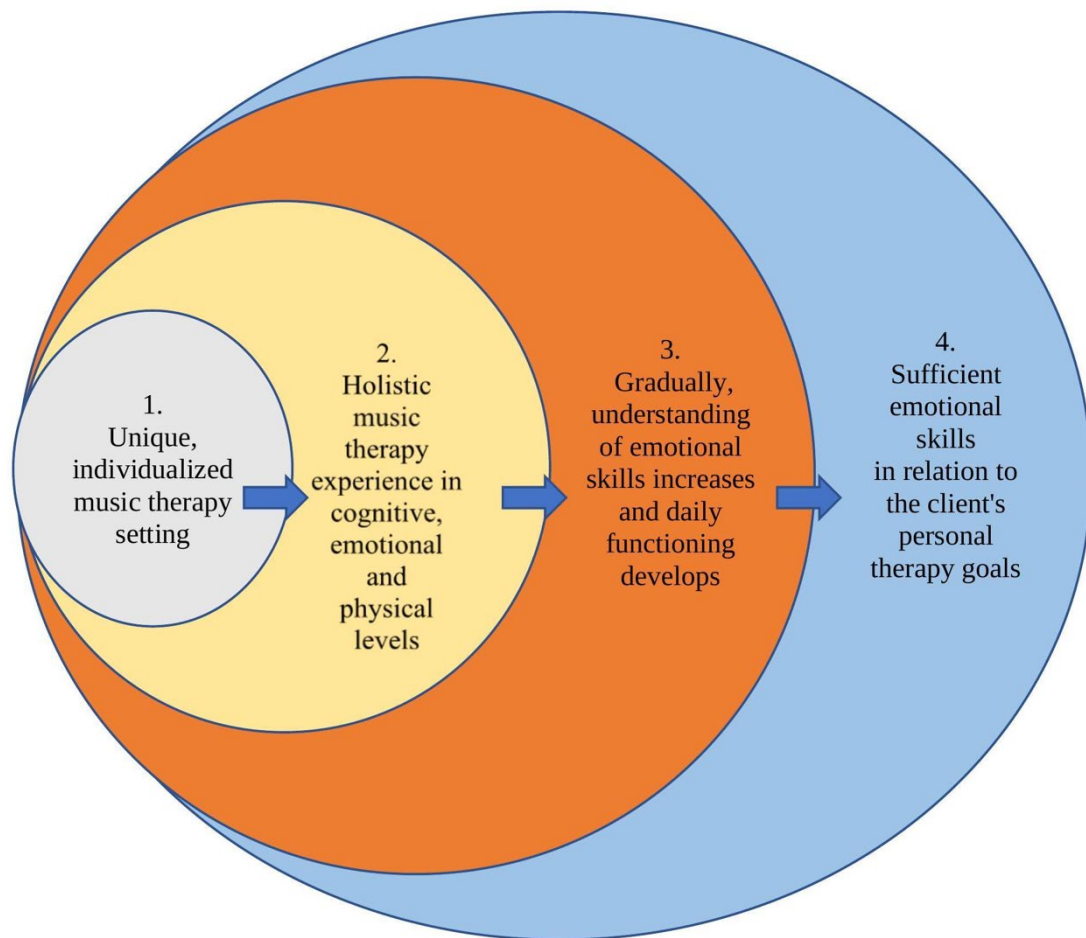
FIGURE 3   Multi-level, holistic music therapy process in emotional skills

Note: From Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Promoting emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews. Copyright 2023 by Taylor and Francis.

As the most important sign of progress in emotional skills, therapists highlighted the client's ability to function in everyday life. Music therapists described the positive effects of music therapy on emotional skills, particularly in emotional expression and regulation. The sub-study also suggested that when improvisation, song writing and composing are available as therapy methods with a client, this may be one indicator of progress in emotional skills. The opportunity to use these methods may indicate an increased sense of safety and confidence, as well as a willingness on the part of the client to delve into more personal content in their work. Figure 4 presents how the music therapists described the progress of emotional skills in music-based functioning during the therapy process. In addition, Figure 5 presents how music therapists describe the progress of emotional skills in non-music-based functioning during the therapy process.
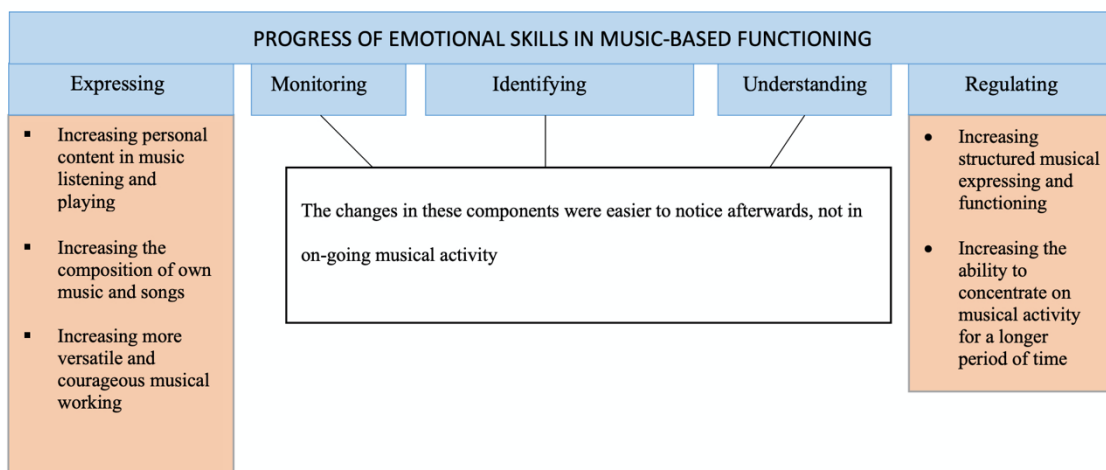
FIGURE 4   Progress of emotional skills in music-based functioning

Note: From Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Promoting emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews. Copyright 2023 by Taylor and Francis.
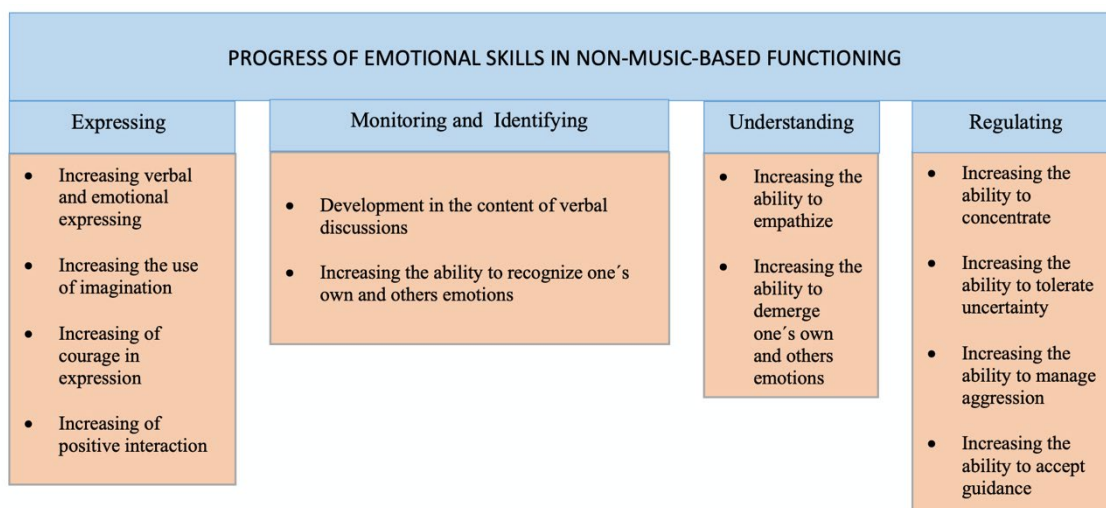
FIGURE 5   Progress of emotional skills in non-music-based functioning

Note: From Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Promoting emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews. Copyright 2023 by Taylor and Francis.

The focus group interview data from the sub-study support the idea that a multi-method approach to addressing emotional skills in early adolescents in music therapy is feasible. Among the therapeutic methods, therapists highlighted the effectiveness of modelling and mirroring when working with early adolescents with mental health conditions. In addition to modelling and mirroring, playfulness and humour were emphasised as a general way of working. The sub-study also revealed that musical and non-musical ways of

working in music therapy are perceived as necessary, and verbal work is also essential. This sub-study suggests that music therapists do not use a particular method of working on a specific area of emotional skills. However, participants emphasised using the musical structure and learning more than other working methods in the emotion regulation domain.

The sub-study emphasises some characteristics of working with early adolescents with mental health conditions. Early adolescents may often initially avoid dealing with personal emotional issues in therapy. To overcome this stage, early adolescents need a great deal of emotional support and a strong sense of safety in the therapy relationship to be ready to deal with personal emotional issues and move forward in the therapy process. Furthermore, to transfer the emotional skills learned in therapy into the everyday life of the early adolescent, the therapist also needs to consider a caregiver-centred approach. This approach emphasises to caregivers that they are the facilitators of therapeutic change in the client when the client practises the skills learned in therapy in their everyday environment.

The results of this sub-study add to the knowledge on the progression of emotional skill development in both music-based and non-music-based functioning. In addition, the results add knowledge on working methods in music therapy with the target group. Furthermore, the sub-study highlighted many insights for working with emotional skills in music therapy with early adolescents with mental health conditions. The first and second sub-study form the body of the third sub-study, providing the necessary information for developing a set of items for a forthcoming assessment tool.

3.3 Sub-study III: Validation of item pool for early adolescents' emotional skills assessment in music therapy

In the third sub-study, a valid item pool was developed that could be used in the future to assess the development of emotional skills in early adolescents during the music therapy process (Salokivi et al., 2023b). The content validity of the items was examined using psychometric measures. The content validity of items needs to be analysed if the assessment tool is to be reliable and clinically relevant. The first (Salokivi et al., 2022) and second (Salokivi et al., 2023a) studies provided the theoretical (components of emotional skills) and practical (working methods and practices of music therapy in developing emotional skills) bases for the items generated in this sub-study. The validation process of the items described in this sub-study is part of the operationalisation phase of developing the assessment tool.

Initially, the item pool consisted of 62 items, divided into six main domains according to the components of emotional skills. Each of the item pool's main domains contained several items, which were developed based on the results of the sub-studies I and II. The main domains were: expressing

emotions (nine items), monitoring emotions (four items), identifying emotions (six items), understanding emotions (four items), regulating emotions (14 items), and the ability to use emotional knowledge for both self-management (14 items) and social relationships (11 items). Each main domain included both an individual and an interactional aspect of each emotional skill. The importance of considering both aspects was reflected in the results of Sub-study I. In addition, in each domain, emotional skills were considered in both musical and non-musical activities. The importance of this aspect was highlighted by music therapists in Sub-study II.

Item validation was performed quantitatively by calculating the item content validity index (I-CVI), scale content validity index (S-CVI), and modified kappa value of items based on a quantitative survey in which two expert panels rated the items. In addition, a psychometric value was calculated for the coverage and understandability of the items. An open-ended qualitative survey was also carried out where experts had the opportunity to provide written suggestions for improving and developing the items.

As a result, 60 items were selected that were valid and acceptable for the final pool of items in terms of psychometric results, and only two items had to be excluded from the original set of items for their insufficient content validity. One item was removed from the expressing emotions –domain, and one item was removed from the social relationships –domain. The final item pool was: expressing emotions (eight items), monitoring emotions (four items), identifying emotions (six items), understanding emotions (four items), regulating emotions (14 items), and the ability to use emotional knowledge for both self-management (14 items) and social relationships (10 items) (Salokivi et al., 2023b).

The 60 accepted items received excellent scores for relevance (0.80–1.00), understandability (0.86–1.00) and scale content validity (S-CVI) (0.95). In addition, the modified kappa score for chance agreement ranged from good to excellent (0.65–1.00), and the scale coverage was rated high (1.00). Based on the results, the item set produced in this sub-study has a high level of validity, is scientifically justified and is valuable for further research. The original items were in Finnish, and the remaining items were translated into English after validation. The final item pool is shown in Table 4.

TABLE 5   Final item pool

EXPRESSING EMOTIONS
1. Expressing emotions verbally to others
2. Expressing emotions non-verbally (other than through music) to others
3. Expressing emotions by oneself (e.g. writing, making music, painting)
4. Expressing personal content in music listened to or played
5. Uses imagination in musical activities
6. Uses imagination in other activities
7. Creates own music (compose, write songs, improvise)
8. Works with music otherwise (other than creating own music) in a variety of ways

MONITORING EMOTIONS
9. Monitoring own emotions in musical activities
10. Monitoring own emotions in other activities
11. Monitoring the emotions of others in musical activities
12. Monitoring the emotions of others in other activities

IDENTIFYING EMOTIONS
13. Distinguishes one's own emotions from those of others in music
14. Distinguishes one's own emotions from those of others in other activities
15. Can name own emotions in music
16. Can name own emotions in other activities
17. Can name the emotions of others in music
18. Can name the emotions of others in other activities

UNDERSTANDING EMOTIONS
19. Can understand the content of one's own emotional experience in music
20. Understands the content of one's own emotional experience in other activities
21. Understands the content of another's emotional experience in music
22. Understands the content of another's emotional experience in other activities

REGULATING EMOTIONS
23. Can independently regulate the expression of one's internal emotional reactions
24. Can regulate the expression of one's internal emotional reactions with support
25. Can calm down independently
26. Can calm down with support
27. Can concentrate independently on musical activities
28. Can concentrate on other activities independently
29. Can concentrate with another person on a musical activity

30. Can concentrate with another person on other activities
31. Can tolerate uncertainty in musical activities
32. Can tolerate uncertainty in other activities
33. Accepts guidance in musical activities
34. Accepts guidance in other activities
35. Can play/sing in rhythm
36. Verbal expression is understandable

ABILITY TO USE EMOTIONAL INFORMATION:

DEVELOPING AND ESTABLISHING POSITIVE SELF-MANAGEMENT
37. Finds different perspectives on situations in musical activities
38. Finds different perspectives on situations in other activities
39. Possesses problem-solving skills in musical activities
40. Possesses problem-solving skills in other activities
41. Has the ability to cope with change in musical activities
42. Has the ability to cope with change in other activities
43. Is able to manage stress reactions in musical activities
44. Manages stress reactions in other activities
45. Is able to make decisions in musical activities
46. Is able to make decisions in other activities
47. Can behave responsibly in musical activities
48. Can behave responsibly in other activities
49. Can use emotions to motivate oneself in musical activities
50. Can use emotions to motivate oneself in other activities

DEVELOPING AND ESTABLISHING POSITIVE RELATIONSHIP
51. Feels empathy (expressed in the therapy situation)
52. Feels empathy (expressed outside the therapy situation)
53. Can listen to others in musical activities
54. Can listen to others in other activities
55. Interacts appropriately in musical activities
56. Interacts appropriately in other activities
57. Respects the rights of others in musical activities
58. Respects the rights of others in other activities
59. Respects the personal perspectives of others in musical activities
60. Respects the personal views of others in other activities

Note: From Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Validation of item pool for early adolescents' emotional skills assessment in music therapy. Copyright 2023 by Taylor and Francis.

This sub-study developed a set of items to be used in a future method for assessing emotional skills in early adolescents. The content validity of the item pool was judged to be high in psychometric assessment and thus useful for further research. As such, the item pool does not yet constitute a definitive assessment method. Nevertheless, it may help music therapy clinicians to reflect better on the different components of early adolescents' emotional skills and the therapeutic events that monitor progress in emotional skills during the therapy process.

4 DISCUSSION

The starting idea for this study was very pragmatic: to develop a method for assessing the emotional skills of early adolescents, which is felt to be needed in practical music therapy work. The second stage, after this study, would be to apply the research findings in practice as a concrete assessment tool. The hypothesis is that the assessment tool will, over time, enable to follow up the development of emotional skills during music therapy process. The ultimate goal is to make music therapy as a discipline more responsive to the demands of evidence-based practice in health care and to alleviate the current lack of reliable measures by developing an assessment tool. However, the development of an assessment tool is a multi-stage process, and this study can take only the first steps towards a valid and reliable emotional skills assessment tool.

In this study, the components of emotional skills in early adolescents (Salokivi et al., 2022) were defined and looked at the work of music therapists with early adolescents with mental health conditions, what methods they use and what they observe to detect the development of emotional skills (Salokivi et al., 2023a). Also, an item pool for assessing emotional skills in early adolescents was developed and the validity of its content was evaluated through psychometric measures (Salokivi et al., 2023b). The study's main findings, validity and reliability, suggestions for future research and the practical applicability of the results are discussed below. The qualitative part of the study allows for an in-depth exploration of the subjective aspects of music therapy. In contrast, the quantitative part is intended to allow for an objective assessment tool in time. By combining these perspectives, this study can provide a comprehensive understanding of the aspects needed in assessing early adolescents' emotional skills.

4.1 Discussion of the results

4.1.1 Definition of emotional skills among early adolescents

Sub-study I (Salokivi et al., 2022) showed that emotional skills in early adolescents consist of several components that consider both individual and social aspects. The social aspect of emotional skills is strongly present in several well-known definitions. Eisenberg et al.'s (1998) heuristic model of emotional socialisation describes how child characteristics, parental characteristics, the surrounding culture and situational factors interact closely to influence how children's emotional skills develop and are expressed in social interactions. In turn, the social aspect, the individual perspective and the skills application perspective are highlighted in Bar-On's definition of emotional-social intelligence. Bar-On (1997) describes emotional-social intelligence as a set of emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand and relate to others, and cope with daily demands and challenges. The diversity of emotional skills, both as skills within the individual and as socio-emotional skills, is also described by Salovey and Mayer (1990) in their definition of emotional intelligence. They define emotional intelligence as a kind of social intelligence that involves the ability to monitor one's own and others' emotions, distinguish between them and use this information to guide thinking and action. These well-known definitions of emotional intelligence are in line with the different components of emotional skills formulated in this study. They can be seen as kind of hypernyms for the definition of emotional skills presented in this study. Compared to the well-known definitions mentioned above, the definition developed in this study emphasises a more detailed description of emotional skills, from the perspective of both the individual's internal skills and external skills. The components of emotional skills aim to describe emotional skills in a concrete way, so that, for example, in music therapy work, it would be possible to structure the perceptions of the client's emotional skills and their different aspects more precisely.

Hemple (1966) describes the relationship between concepts and theories as "a network of systematic interrelationships" (p. 94). A theory can be seen as a web of interwoven conceptual threads (Penrod & Hupcey, 2005). Thus, no single concept is meaningfully separate from the other concepts contained within the body of the theory. Disentangling a single concept from the set of concepts contained in a theory leaves the specificity of the disentangled concept unrevealing about the more extensive set (Hupcey & Penrod, 2005). This description also fits well with the concept of emotional skills in early adolescents defined in this study. The different components of emotional skills are interlinked and have interdependent solid dynamics. It is difficult to say where one skill ends and another continues because the skills overlap and often co-occur. This simultaneity is essential, because processing information related

to emotional skills is rapid and occurs synchronously at the cognitive, mental, and physical levels.

The Sub-study I (Salokivi et al. 2022) confirmed the view already expressed in the literature (e.g. Wigelsworth et al., 2010) that the terminology related to emotional skills overlaps. This was seen when examining the theoretical backgrounds of the emotional skills-related terms. Some theoretical backgrounds were used as the background theory for multiple emotional skills-related terms. The diversity of terminology related to emotional skills influenced the research choices. Instead of focusing on just one term in the scoping review, it was necessary to focus on several key terms simultaneously to gain the most comprehensive picture of emotional skills based on the available terms.

The Sub-study I also highlighted the need for more research on emotional skills in early adolescents and their inclusion as a separate age group as early as in the titles of studies or the age cut-offs in database searches. On the title and abstract level, the studies do not necessarily feel that early adolescents should be defined as early adolescents. Even if they were the target group of the study, the term used might very commonly be "adolescents", "young people", or "youth", leaving the image of the target group of the study is still somewhat unclear. The absence of early adolescence as an independent age group was also brought out when searching for studies from the PsychINFO database. In the database, it was impossible to limit the search directly to early adolescents: three different age groups (childhood, school age, and adolescence) had to be included to find studies dealing with early adolescents. Given that it is in early adolescence that children begin to be able to reflect more deeply on the cause-and-effect relationships of their behaviour (Carr, 2016), it is surprising that there is so little research focusing on emotional skills in this age group. In early adolescence, amidst all the emotional instability, it would be valuable to work to support the positive development of emotional skills through research, education, training, and therapy so that any future problems can be addressed in time.

To the research team's knowledge, this sub-study is the first to systematically map the different terms used in the literature to describe emotional skills in early adolescents and analyse their content. The result of the study will enable a more precise conceptual definition of emotional skills in early adolescents to support research and practical therapeutic work. The components of emotional skills can be used in research as the theoretical definition of emotional skills. In practical music therapy work, a definition of emotional skills can help the therapist to structure and analyse the therapy work focused on developing emotional skills and its content in more detail. In addition, the definition of emotional skills can help the therapist to communicate more clearly and in detail to clients, caregivers and the rehabilitation team about the therapy work.

4.1.2 Promoting emotional skills in early adolescents with mental health conditions in music therapy

In Sub-study II (Salokivi et al., 2023a), music therapy aimed at promoting emotional skills in early adolescents was seen as a multi-level and holistic process, encompassing the mental, physical and cognitive levels. Music therapists described how emotional integration occurs in therapeutic work on emotional skills. This description finds its counterpart in the psychotherapy research literature, where the concept of affect integration appears. Affect integration refers to the functional integration of affect, cognition and behaviour, and such affect integration is seen as a critical prerequisite for therapeutic progress (Solbakken et al., 2011).

Among the different areas of emotional skills, the expression and regulation of emotions were frequently mentioned in music therapists' work descriptions. These areas are the most familiar to music therapists, the areas of emotional skills they are most aware of and on which they most often focus their work in music therapy. Musical means offer many opportunities to work on these aspects. The music therapy research literature also identifies the effects of music therapy on the well-being of early adolescents in the areas of emotional expression and emotion regulation. Music therapy has been reported to facilitate, for example, the self-expression of early adolescents (e.g. Layman, 2002), reduce impulsivity and increase self-regulation (e.g. Uhlig, 2018).

Regarding working methods in music therapy, the sub-study found that music therapy for emotional skills in early adolescents uses both musical and a variety of other, non-musical, methods. In addition, all working methods can be used when working with all the components of emotional skills. Thus, certain methods are not specific to any particular aspect of emotional skills. The exception was the emotion regulation component, where therapists use the structural features of music and learning more than with other aspects of emotional skills. The structural nature of music provides an inherently multi-level (psychological, physical and cognitive) working platform for emotion regulation training. Another interesting finding from the methods was that therapists felt that one indicator of progress in emotional skills with early adolescents with mental health conditions might be the opportunity to work on improvisation, song writing or composing their own music. The opportunity to work with these methods reflects an increased sense of safety and trust in the therapy process, as well as a willingness on the part of the client to delve more deeply into personal content in therapy.

Modelling and mirroring were also mentioned as essential working approaches in music therapy. These therapeutic working approaches can also be found in the research literature. In modelling, the therapeutic interaction provides the client with new behaviours and coping strategies (Rosenthal & Bandura, 1978). In mirroring, the therapist not only communicates attentiveness to the client but also prepares the ground for more personal expression by the client and helps the client to become more aware of what is being expressed (Ferrara, 1994). Humour and playfulness are also essential elements in music

therapy for early adolescents. Such an attitude promotes and builds the therapeutic relationship between the therapist and adolescent (Amir, 2005; Haire & Macdonald, 2019).

Therapists generally use various musical and non-musical methods to work with early adolescents' emotional skills. Verbal work also plays an important role. The Sub-study II confirms the previously proposed view that a multi-method approach in which methods are used to meet the individual client's needs is an effective practice when working with early adolescents with mental health problems (Gold et al., 2004, McFerran, 2010). Gold et al. (2004) define this way of working as eclectic. This approach applies different working models and theories according to the needs of each client (Gold et al., 2004).

Music therapists described that early adolescents may often initially avoid discussing personal emotional issues in therapy. This phenomenon has also been reported in the past; for example, in the context of anxiety disorders (Mathews et al., 2014; Suveg & Zeman, 2004). Early adolescents need emotional support and a strong sense of security in the therapy relationship to overcome this stage. Another important aspect of music therapy for early adolescents is the engagement of the caregiver in supporting the adolescent's therapy process. For the emotional skills learned in therapy to transfer into the young person's daily life, caregivers need to understand their role in the possibility of applying the new skills. Carers are the enablers of change. The smooth running of everyday life was also seen as the most important sign of progress in emotional skills and integration. Therefore, therapeutic change should also be manifested outside the therapy.

The sub-study's results will add to the practical knowledge on working with emotional skills in music therapy for early adolescents with mental health conditions. The sub-study highlights the working methods used and the changes music therapists observe to notice the development of emotional skills during therapy. The information generated by the first and second sub-studies provides therapists with tools to better define, monitor, plan and analyse emotional skills and their development in therapy work with early adolescents with mental health conditions. In addition, the first and second studies provided a theoretically and practically informed understanding of what should be focused on in a future assessment tool to determine the development of emotional skills in early adolescents. This synthesis of theoretical and practical perspectives was needed to move on to the third phase of the study, the formulation of the items of the assessment tool.

4.1.3 Validation of an item pool for early adolescents' emotional skills assessment in music therapy

In the third sub-study (Salokivi et al., 2023b), a set of items was constructed based on the previous studies' results, and the formulated items' content validity was psychometrically analysed based on the responses of the expert panels. The result of the Sub-study III was an item pool of 60 items, which, after

content validation, proved to be of high quality in terms of their relevance, understandability, scale-level content validity and comprehensiveness.

The high content validity scores provided by the expert panels likely reflect the careful development process that preceded this phase of the study: the item pool was developed based on the results of the two previous sub-studies. Compared to most other music therapy assessment tools, the merit of this study is that the process of developing the item pool has been reported openly and carefully in scientific publications. So far, only some music therapy assessment tools have reported validity assessment processes (Cripps et al., 2016). This situation has made it difficult to assess the psychometric quality of the available assessment tools and the items they contain. Furthermore, to the research team's knowledge, this study is the first to examine all the components of emotional skills in a music therapy context.

Despite its merits, the item pool created in this study is not yet a final representation of the set of items needed to assess the emotional skills of early adolescents in music therapy. However, the item pool created in the study allows us to better conceptualise what we call "emotional skills" and to identify areas where the development of emotional skills may be reflected in the therapy process. Music therapy clinics can also use the generated item pool as such to better observe and analyse the many dimensions and phenomena of emotional skills in early adolescents in music therapy and use this information to improve the well-being of their young clients.

The incompleteness of the item pool should also be noted in that in the current linguistic formulation, the items may not match the formulation used in the final assessment tool. The linguistic format may change as the item pool is tested in practical music therapy work. In addition, no final decision has been made regarding who will use these items. However, it is anticipated that at this stage, this item pool will be most appropriate for use by the music therapist in assessing the client's emotional skills. However, to comprehensively assess the progress of the emotional skills of early adolescents, the perspective of the early adolescents, their caregivers and possibly the teacher is also needed. This view is supported by music therapists' recognition that a smooth everyday life is the best indicator of the development of emotional skills. It is impossible to know what a client's ability to use emotional skills is simply by assessing the therapeutic situation. Thus, the item pool developed here, used by the music therapist alone, cannot be considered a fully adequate source of information about the actual emotional skills of early adolescents. However, the result of this sub-study provides an addition to validation research on music therapy assessment in general and in the evaluation of emotional skills in early adolescents in particular. Moreover, the item pool developed in Sub-study III is the first to cover all the different domains of emotional skills in early adolescents as defined in the literature. It allows us to take a step towards the possibility of assessing the emotional skills of early adolescents with mental health conditions in music therapy in the future.

4.2   Validity and reliability of the study

The MRC framework for complex interventions (Craig et al., 2008) was followed as the theoretical framework for the study and the five-step operationalisation framework (Waltz et al., 2016). These frameworks underpinned all the sub-studies (see Table 1, p. 24).

The study consisted of three sub-studies using both qualitative and quantitative data collection and processing methods. Qualitative analysis was used to explore the underlying concepts of the phenomenon, qualitative focus group interviews were used to deepen knowledge of the topic at a practical level and quantitative psychometric content validity analysis was used to verify the quality of the claims generated. Previous studies have found that this kind of mixed-methods research works well in developing standardised measures (O´Cathain, 2010). The mixed-methods approach in this study has enabled the knowledge gained in the previous phase of the research to be complemented, confirmed, and developed (O´Cathain, 2010). According to Greene et al. (1989), complementation in mixed-methods research means using two methods to assess different aspects of the research questions and using the results of one method to refine or explain the results of another. Confirmation involves comparing the results of two methods and reaching a common understanding. In development, one method is used as an aid to another method. The use of mixed methods strengthens the validity of this study as the results of the different methods agreed (Glik et al., 1989). The research process has progressed in such a way that each new study builds on the results of previous research, and each new phase refines the results of the last stage.

The quality of a mixed-methods study is assessed by looking separately at the qualitative and quantitative components of the study (Sale & Brazil, 2004). The criteria for qualitative research address the objectives of credibility, transferability, and dependability, while the quantitative research criteria address internal and external validity and reliability (O´Cathain, 2010). Next, I discuss the validity and reliability aspects of this research in its different phases, as well as the strengths and limitations of the study.

4.2.1   Validity and reliability of the data collection

In Sub-study I, the credibility of the data collection was ensured by following Arksey and O'Malley's five-step guidelines for conducting a scoping review: (a) identify the research question, (b) identify relevant studies, (c) identify a relevant sample of studies, (d) map the data, and (e) collect, summarise, and report the results (Arksey & O'Malley, 2005). The research question for the scoping review was: How are emotional skills defined in studies of early adolescents? Relevant studies were identified by conducting a systematic literature search in two stages: preliminary and actual searches. The preparatory search was carried out under the guidance of a data search specialist. Based on this search, the keywords and databases were identified

from which the actual search was conducted. In addition, the inclusion and exclusion criteria were evaluated for the actual search.

The process of identifying the relevant sample, mapping the data, and collecting, summarising and reporting the results is described in the research paper according to the PRISMA for Scoping Review Checklist (Tricco et al., 2018). The PRISMA flowchart was used to illustrate the number of studies identified, included and excluded and the reasons for exclusion (PRISMA, 2015). The second researcher checked that the studies included after the PRISMA flow process met the pre-defined criteria for the scoping review of this sub-study. The research articles included in the scoping review, their definition of emotional skills, and other characteristics are reported in a detailed table in the research paper (Salokivi et al., 2022).

However, despite the comprehensive literature search and rigorous review process used, there might be some relevant literature on the topic that should be included in the review. It should be noted that only nine of the 14 found key terms related to emotional skills were included in the review because studies were not found on early adolescents for all key terms. Thus, only some possible descriptions of emotional skills are included in the review. However, the review does highlight the situation at the time in the early adolescence context.

In Sub-study II, focus group interviews were used to collect the data. The credibility of data collection was ensured by conducting focus group interviews per the recommendations of the research literature. A maximum group size of five members was set in advance, because studies have shown that such a group size allows participants to participate actively in the discussion and explore issues in detail (Liamputtong, 2011; Smithson et al., 2008). The interview duration was also predetermined at 1.5–2 hours, based on recommendations in the research literature (Liamputtong, 2011). At the beginning of the interviews, the purpose of the sub-study was explained, and the interviewees were allowed to ask follow-up questions before the discussions started. The focus groups were formed based on an online survey for music therapy professionals. A senior researcher from the research team reviewed the content of the online questionnaire and the focus group interview framework. Participants were given the focus group questions and conceptual framework in advance. The focus group participants were experienced music therapists and were expected to have at least five years of clinical experience. This work experience was essential for the interviewees to have an experiential understanding of developing emotional skills during therapy. The participants represented different genders and age groups and worked geographically in other parts of Finland.

The focus group interviews were semi-structured, which allowed the discussion to focus on predetermined theoretical questions and gain new insights if they emerged in the focus groups (Brinkmann, 2013). The moderator/interviewer was the undersigned doctoral researcher with previous experience in both focus group interviews and working as a music therapist.

Several steps were taken to demonstrate the validity of the data. First, the authenticity of the data was ensured by videotaping all the interviews and making verbatim transcriptions. The number of focus groups was based on previous research recommendations that 80% of new knowledge has emerged after two or three focus groups (Guest et al., 2017). In this sub-study, four focus groups were conducted. The data confirmed what was found in previous studies: the number of focus groups was sufficient, and no new information eventually emerged.

Some factors may have affected the validity and reliability of the data collection. First, the data collected in the interviews are partly incomplete about the overall domain of emotional skills, as the implicated component of emotional skills, the "ability to use emotional knowledge," was not included in the questions. This component is extensive in content, and its inclusion would have lengthened the set of questions too much and would have exceeded the time limit set for the focus group interviews. Therefore, it was decided to focus on the basic elements of emotional skills and to leave out the last component, which focuses on implementing emotional skills.

In Sub-study III, the psychometric validity of the item pool was assessed based on the responses of the expert panels. The credibility of the data collection was ensured by forming two panels of experts whose expertise covered both the theoretical aspects of the development of the assessment tool and music therapy practice. One group consisted of health researchers (n= 8), and the other music therapy clinicians (n= 8).

The set of items generated can also be considered credible because its content was based on the results of the two previous sub-studies. The studies based on theory and practice previously defined the target to be evaluated. The item pool's domains were divided into six sub-domains according to the components of emotional skills. Each domain contained several items. Before the expert panels, the credibility of the item pool was evaluated by a senior researcher who reviewed the generated items and suggested modifications.

The expert panellists also had the opportunity to submit a written comment on each item if they wanted to clarify why it was difficult to understand or to give recommendations for rewording the item. These open qualitative comments were used to develop better items. They could also comment if they wanted to add or remove items or comment on something else concerning the item. After the expert panel assessments, some items needed to be reformulated for better understanding. The expert panel, including three senior researchers with expertise in assessment development and music therapy, did this.

The credibility of the set of items was also considered when translating the items from Finnish into English. The original items were constructed in Finnish, and the expert panels scored these Finnish items. After the final set of items was formed, the items were translated into English, in the first step using an AI-based translation tool, DeepL. This translation was checked by translating the English items back into Finnish

by a person who speaks both Finnish and English as a native speaker. The items remained in almost the same format during this process. In this way, the final set of English-language items was formed.

Although the items and data collection were carefully designed, the items posed to the expert panels might only partially represent all possible items related to emotional skills. However, this limitation was minimised by conducting the two previous studies to ensure that the concept and its operationalisation were as comprehensive and scientifically sound as possible. In addition, the experts' opportunity to propose new items for the item pool helped to minimise the absence of essential items.

4.2.2 Validity and reliability of the analysis

In Sub-study I, a concept analysis of the term "emotional skills" was conducted. A concept analysis can be defined as breaking down a concept into parts and more specific elements for clarity and understanding of interdependence (Nuopponen, 2010). The chosen theoretical framework for the content analysis was Walker and Avant's (2014), followed as closely as possible to reach a reliable and justified conclusion. Walker and Avant's concept analysis was chosen as the background theory for the analysis because it defines its purpose as the development of a theory that can be used in research. The outcome of the concept analysis process captures, at best, the critical elements of the concept at any given moment (Hupcey & Penrod, 2005).

Hupcey and Penrod (2005) stress that concept analysis is, first and foremost, an integration and not a synthesis. They emphasise that an integrated perspective provides a higher understanding of the concept of interest. Such knowledge transcends contextual boundaries and reveals evidence of probable truth about the concept. The concept analysis results in a summary that shows the scientific community's best estimate of the likely truth, given the evidence in the existing literature. The result of the analysis is not an advancement of a concept but an analysis of what is known (Hupcey & Penrod, 2005). From this point of view, the result of this first sub-study, "Components of early adolescents' emotional skills", seems to have achieved the integration objective of the conceptual analysis. Indeed, at the intermediate stages of the analysis, nine different keywords of emotional skills were described by 91 concepts. These concepts may have been very similar in content, but the vocabulary used to describe them varied. In the final component of the emotional skills, these 91 different concept descriptions were integrated into a set that essentially encompasses all the descriptions. The result is a detailed but precise description of the components of emotional skills. The result of the analysis provided a higher level of understanding of the concept being analysed so that it could be used as a basis for moving on to the following stages of the study.

Limitations may be associated with the implementation of the analysis. The analysis process is always individual, depending on the subject and the researcher's choices. To reduce the impact of this limitation, the analysis process was reported in as much detail as possible in the published paper, including a

step-by-step figure about the process to help other researchers to follow the analysis process and evaluate the decisions made at different stages.

In Sub-study II, a deductive-inductive content analysis was conducted on the results of focus group interviews about music therapists' work to support emotional skills in early adolescents. The deductive approach was presented as a theoretical framework using the components of early adolescent emotional skills developed in Sub-study I. The inductive approach emerged from all the new data the focus group interview participants generated. These two perspectives were needed to gain an understanding of the ways and methods in which music therapists work to promote emotional skills in early adolescents.

The reliability of the analysis can be considered through Lincoln and Guba's (1989) quality criteria for qualitative research. Of these criteria, credibility, dependability and confirmability can be applied to the analysis. Credibility creates confidence that the results are truthful and credible for the participants. From an analysis perspective, the credibility of the analysis was enhanced by the independent review of the coding and results by another researcher, regular peer discussions with the research team and regular discussions of the research at dissertation seminars. Dependability means a logical and justified continuum of data collection, data analysis and theory generation, the quality of which can be assessed and monitored by other researchers. In this sub-study, reliability in terms of analysis has been reinforced by describing the analysis steps as precisely as possible in writing and using an illustrative table in the published research report. In addition, the dependability of the research report was reinforced by the extensive use of direct quotations from the focus interviews. Confirmability gives confidence that other researchers will confirm the results. From an analytical point of view, the confirmability of this sub-study is enhanced by revisions of the choices made in the analysis by the rest of the research team.

Limitations may relate to the implementation of the analysis. The analysis process is always, to some extent, individual, depending on the researcher's choices. To reduce the impact of this limitation, the analysis process was described in as much detail as possible in the published article, accompanied by a step-by-step diagram of the process to help other researchers to follow the analysis process and evaluate the decisions made at different stages and evaluate the results. Also, the reliability of the analysis was assessed based on Lincoln and Guba's (1989) criteria and the findings reported as part of the research report.

In Sub-study III, a quantitative psychometric analysis was conducted that focused on the content validity of the item pool. The relevance of the items in the developed item pool was analysed using a content validity index (CVI) and a modified kappa index. In addition, psychometric scores were calculated for the understandability of the items and the coverage of the scale. To increase the sub-study's validity and reliability, the chosen quantitative analysis methods were discussed among the research team and consensus was reached on the

chosen strategies. In addition, a senior researcher reviewed the results of the analysis.

While the set of items developed in this sub-study based on psychometric analysis has strong content validity, it should also be noted that it has its limitations in terms of research. As a starting point, it must be considered that the items presented to the expert panels only represent some possible issues related to emotional skills. Other relevant items may need to be included. Thus, the set of items analysed only partially describes the topic under analysis. However, this limitation was minimised by conducting the two previous studies to ensure that the concept and its operationalisation were as comprehensive and scientifically sound as possible. In addition, the experts had the opportunity to propose new items for inclusion in the set of items, which also helped to minimise the possible absence of essential items.

4.2.3 Validity and reliability of the results

In Sub-study I, the credibility of the results was examined by carefully evaluating the data collection and analysis process. In both cases, it was possible to follow the theoretical frameworks chosen. The scoping review used Arksay and O´Malley's (2005) framework for conducting the review and the PRISMA scoping review protocol (Shamseer et al., 2015) for reporting the review. Walker and Avant's (2014) framework was followed for the conceptual analysis. The sub-study's data collection and analysis have been carefully reported, as have their conclusions and results. The report allows other researchers to follow the continuum of the whole and assess its logic and scientific credibility.

Some issues may have affected the validity and reliability of the results. Initially, there were 15 different key terms related to emotional skills that could have been included in the scoping review. However, only nine essential emotional skills key terms were found in early adolescence studies. Thus, the components of emotional skills that have been constructed only cover some of the conceptual fields of terms related to emotional skills. Therefore, the following emotional terms had to be excluded from the components: emotional competence, emotional differentiation, social-emotional functioning, emotional maturity, emotional responses and emotional states.

In Sub-study II, the credibility of the results was assessed by critically examining the original interviews and the resulting codes and themes among the research team. The authenticity and credibility of the results were supported by including direct quotes from music therapists' descriptions in reporting the results. To the best of the research team's knowledge, this was the first study to specifically describe work in music therapy to support emotional skills in early adolescents and the methods used in that work. Regarding the credibility of the results of the sub-study, the results were assessed through Lincoln and Guba's (1986) assessment of the transferability of the results, which refers to the extent to which the results can be generalised or transferred to other contexts or environments. The transferability of this sub-study will be

improved by proper sampling and by saturating the data as far as possible (complete saturation of the data will probably never be possible) in the focus groups. The discussion moved on to the next question only when the previous question did not bring up any new perspectives. After the focus group interviews, it was also possible to observe that all four interview groups brought forward somewhat similar perspectives and that no significant new aspects emerged as the group changed.

To increase the credibility and quality of the sub-study, the methodological reporting followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007) and the EPICURE guidelines for qualitative research (Stige et al., 2009). The EPICURE framework helped to evaluate the research from the perspectives of engagement, processing, interpretation, critique, usefulness, relevance and ethics. The seven points of EPICURE are also presented and illustrated in the supplementary materials of the published research report. They are available to readers to assess the quality of the results.

Despite efforts to produce high-quality and reliable research data, the results may be biased. Treating early adolescents with mental health conditions as a single group in this sub-study may bias the results. The data generated in this sub-study does not provide information specific to a particular diagnostic group or highlight features of music therapy emotional work that may be relevant to them. It should also be noted that this sub-study was conducted in a northern welfare state among white Finnish music therapists. Therefore, the results reflect their understanding of the topic and may not apply to other cultural contexts.

In Sub-study III, the credibility of the results can be partly assessed by looking at the scientific quality of the two previous sub-studies, as the item pool developed in Sub-study III builds on the results of the earlier studies. The item pool distribution was generated from Sub-study I's result (components of early adolescent emotional intelligence), and the content of the distribution was based on the results of both Sub-study I and Sub-study II. In Sub-study II, music therapists described the outcomes they observed to notice progress in emotional skills during therapy and how they work with the client group. The credibility of the results of this sub-study can also be assessed by examining the psychometric scores obtained for the item pool items and the scale's overall psychometric score. The credibility of the results in this regard was verified by checking the psychometric scores obtained by the senior researcher.

Although the study shows that the 60 remaining items after psychometric assessment have strong content validity and had been developed appropriately and carefully, the study results have limitations. In practical music therapy work, the 60-item assessment tool needs to be shorter; therefore, its practical feasibility may need to be revised. Furthermore, the items in the item pool have yet to be tested in a clinical context. It is possible that, for example, some of the items are not relevant in a therapy practice or some of them overlap. It should also be noted that the items presented to the expert panels are not

representative of all possible items related to emotional skills, and some essential additional items may need to be included.

4.3 Suggestions for future research

This study confirmed the research literature on emotional skills in early adolescents and music therapy work to support these emotional skills. However, there is still a need for future research on these topics. Therefore, the following suggestions for further research are made:

- Investigating the applicability of the components of early adolescent emotional skills identified in this study to groups with special needs. Here, emotional skills are defined as they are in the general population. However, there may be components of emotional skills that are not appropriate for all special populations.
- The scoping review and concept analysis could be repeated as research on emotional skills in early adolescents has increased. In this case, the analysis could cover the conceptual field of key terms related to emotional skills even more comprehensively. Some terms related to emotional skills were excluded from the review because no studies on them could be found for early adolescence.
- The applicability of the components of the emotional skills identified in this study could also be explored in age groups other than early adolescence. Music therapy clients include a wide range of ages with needs in terms of emotional skill development. Therefore, the components may also apply to different age groups.
- The work of music therapists on emotional skills in early adolescents should be studied in different cultural settings and with a larger sample size to make the results more generalisable.
- The progress in emotional skills in music therapy identified in this study and the therapeutic methods used may vary between mental health diagnostic client groups. Therefore, further research is needed to provide more accurate and targeted information.
- The validated item pool developed in this study is a pilot model that needs to be tested and further developed to provide a psychometrically valid, clinically relevant and valuable assessment tool for assessing emotional skills in early adolescents in the context of music therapy in the future.
- The item pool should be tested in further research in music therapy practice to provide information to determine the adequate size of the item pool and the kind of linguistic formulation that is most appropriate for the items.

4.4 Practical implications

The following practical implications for music therapy assessment research and music therapy work can be presented based on the results of this study:

Implications for music therapy research
- The conceptual model of the components of emotional skills presented in this study can help music therapy researchers to define emotional skills.
- The validity of the item pool can be further assessed by reliability assessment (through internal consistency and retesting), construct validity (through factor analysis) and criterion-related validity (an assessment of the extent to which the measure meets the gold standard) (Grant & Davis, 1997).

Implications for music therapy work
- The conceptual model of emotional skills can help music therapists to structure their thinking and reflections on working with emotional skills in early adolescence.
- The description of music therapy work on emotionality in early adolescents provides a reflection surface for music therapists to review and develop their work with this client group.
- The emotional skills item pool developed in the study provides many beneficial aspects for music therapists to consider. It helps them, for example, to specify in more detail what they can observe to monitor the progress of the client's emotional skills during therapy.

4.5 Conclusion

This study provides an overview of the different aspects of emotional skills in early adolescents by defining the components of emotional skills. In addition, the study has examined the work of music therapists to promote emotional skills, using the created components as a theoretical framework. Through this definition, first at the theoretical level and then at the practical level, the study has implemented the first step of the theory of assessment development: clearly define what you want to measure. The psychometrically valid item pool was developed for assessing emotional skills in early adolescents through a thorough definition of the theoretical and practical levels. This validated item pool can be used for the next steps in developing the assessment tool. The study also shows that when the goal is to develop a new assessment tool, extensive mixed-methods research is needed in the early stages of development to ensure that the assessment tool can become reliable and usable in time.

Although the study has not yet developed an early adolescent assessment tool into its final form, its results can be used in the clinical practice of music therapy at this stage. The created emotional skills component will be helpful for music therapists when analysing their work with early adolescents and communicating more details about their work and the phenomena related to emotional skills. In addition, the components help therapists to structure their thinking and reflections on their work with early adolescents. The research paper in Sub-study II, describing practical work and methods, will provide music therapists with tips for their work.

The results of this study are the first steps towards a validated tool for assessing emotional skills in early adolescents, which does not yet exist in music therapy. A validated assessment tool would strengthen music therapists' ability to assess emotional skill development more accurately and to better articulate music therapy's impact on clients, their caregivers and therapy funders.

YHTEENVETO (SUMMARY IN FINNISH)

Emotionaalisen hyvinvoinnin ja tunnetaitojen merkitys keskeisenä osana ihmisen yleistä hyvinvointia on tunnustettu laajasti. Tunnetaitojen puute puolestaan liittyy usein psyykkisiin ja sosiaalisiin ongelmiin (World Health Organization, 2021). Tunnetaidoilla on merkitystä niin yksilötasolla kuin yhteiskunnallisella tasolla. Taloudellisen yhteistyön ja kehityksen järjestö (OECD) määrittelee tunnetaidot yhdeksi tulevaisuuden keskeisimmistä työelämätaidoista (Organization for Economic Co-operation and Development, 2018). Myös kouluissa on alettu kiinnittämään huomiota tunnetaitoihin. Yhdysvalloissa Collaborative for Academic, Social and Emotional Learning (CASEL) pyrkii tekemään näyttöön perustuvasta sosiaalisesta ja emotionaalisesta oppimisesta olennaisen osan esikoulusta lukioon ulottuvaa koulutusta. Suomessakin tunnetaitojen opetus on otettu mukaan sekä peruskoulun että lukion opetussuunnitelmiin (National Core Curriculum for Basic Education 2014; National Core Curriculum for Upper Secondary Education). Opetussuunnitelmissa korostetaan tunnetaitoja osana lasten ja nuorten kokonaisvaltaista hyvinvointia, erityisesti niiden merkitystä hyvien ihmissuhdetaitojen ja sosiaalisten suhteiden perustana.

Tunteet ovat keskeisessä asemassa kaikessa siinä, miten ihmiset kokevat asioita, ja millaisia päätöksiä he näihin kokemuksiinsa perustuen tekevät. Mitä nämä tunnetaidot tarkemmin ottaen ovat? Tämä on tuttu kysymys monille musiikkiterapeuteille, jotka työskentelevät lasten ja varhaisnuorten kanssa. Tunnetaitojen kuvauksissa keskitytään usein työelämän tai koulumaailman keskeisimpiin tunnetaitotarpeisiin eli hyvään vuorovaikutukseen ja kykyyn säädellä tunteita. Nämä kuvaukset palvelevat kuitenkin vain osittain psykodynaamisen musiikkiterapiatyön tarpeita. Ennen kuin tunnetaidot ilmenevät hyvänä vuorovaikutuksena ja sosiaalisina suhteina, on oltava monia sisäisiä tunnetaitoja, jotka mahdollistavat sujuvan kanssakäymisen ihmisten välillä.

Terapia-alaan kohdistuu yhä enemmän samoja näyttään perustuvan toiminnan vaatimuksia (Evidence-Based Practice), kuin mitä terveydenhuoltoalaan. Terapiatyön tulisi pystyä osoittamaan tuloksellisuutensa niin lähettävälle taholle kuin terapian maksajalle. Tunnetaidot ja niiden kehittyminen on kuitenkin monitahoinen ilmiö, jota ei voida mitata samalla tavoin kuin sydämensykettä tai verenpainetta. Tunnetaitojen kehitystä musiikkiterapiassa arvioivaa arviointivälinettä ei ole ollut saatavilla, vaan asiakkaan edistymisen arviointi tapahtuu terapiassa yleensä observoinnin, terapeutin muistiinpanojen sekä asiakkaan päivittäisen toimintakyvyn arvioinnin perusteella.

Tämän tutkimuksen tavoitteena on määritellä mitä tunnetaidot ovat ja kehittää tieteellinen perusta musiikkiterapiaan soveltuvalle väittämäjoukolle. Tulevaisuudessa tätä väittämäjoukkoa voidaan jatkossa kehittää eteenpäin ja testata sen soveltuvuutta varhaisnuorten tunnetaitojen kehittymisen arviointiin musiikkiterapiaprosessin aikana. Tutkimuksen aihe on saanut inspiraationsa tutkijan omasta kokemuksesta mielenterveyden ongelmista kärsivien lasten ja nuorten musiikkiterapeuttina.

Tutkimuskokonaisuus muodostuu kolmesta eri osatutkimuksesta. Ensimmäinen osatutkimus määrittelee scoping-katsauksen sekä konseptianalyysin perusteella varhaisnuorten tunnetaitojen käsitteen tutkimuskirjallisuuteen perustuen. Tunnetaitojen käsitekenttä on pirstaloitunut eikä tieteellisessä kirjallisuudessa vallitse konsensusta käsitteen sisällöstä. Ensimmäisen osatutkimuksen tulos auttaa saamaan tarkemman ymmärryksen siitä, mitä tunnetaidoilla tarkoitetaan ja mitä arviointityökalun tulisi arvioida. Tutkimuksen tuloksena syntyi kokonaiskuva varhaisnuorten tunnetaitojen osatekijöistä. Tunnetaidot jakautuvat kuuteen eri komponenttiin, joista kuudes komponentti on taitojen soveltamiskomponentti. Komponentit ovat: a) tunteiden ilmaiseminen, b) tunteiden havaitseminen, c) tunteiden tunnistaminen, d) tunteiden ymmärtäminen ja e) tunteiden sääteleminen sekä f) kyky käyttää tunnetietoa yksilötasolla myönteisen itsehallinnan kehittämiseksi ja vakiinnuttamiseksi, sekä kyky käyttää tunnetietoa sosiaalisella tasolla myönteisten suhteiden kehittämiseksi ja vakiinnuttamiseksi. Nämä tunnetaitojen komponentit luovat teoreettisen kehyksen seuraaville arviointimenetelmän kehittämisen vaiheille.

Toinen osatutkimus selvittää fokusryhmähaastattelujen ja deduktiivis-induktiivisen sisällönanalyysin avulla musiikkiterapeuttien kokemuksia ja käsityksiä tunnetaitojen edistämisestä työskenneltäessä mielenterveysongelmista kärsivien varhaisnuorten kanssa. Tutkimuksessa tarkastellaan myös millaisia menetelmiä terapeutit käyttävät terapiatyössä. Tulosten perustella musiikkiterapeuttien työ tunnetaitojen edistämiseksi näyttäytyi erittäin monimenetelmäisenä. Musiikkiterapeutit käyttävät niin musiikillisia kuin muitakin menetelmiä tavoitteiden saavuttamiseksi. Verbaalinen työskentely on myös tärkeässä roolissa. Tunnetaitojen kehittymisen prosessi kuvataan kokonaisvaltaisena, kattaen henkisen, fyysisen ja kognitiivisen tason. Tärkeimpänä merkkinä tunnetaitojen edistymisestä terapeutit korostivat asiakkaan kykyä toimia jokapäiväisessä elämässään.

Kolmas osatutkimus kuvaa tunnetaitojen arviointivälineessä käytettävän väittämäjoukon kehittämistä. Väittämien sisällön validiteettia arvioidaan psykometrisesti asiantuntijapanelistien antamien vastausten perusteella. Väittämäjoukko kehitettiin osatutkimus I ja osatutkimus II tuloksiin perustuen. Tämän viimeisen osatutkimuksen tuloksena syntyi 60 väittämän joukko, joka on sisällön validiteetiltaan korkeatasoinen.

Tutkimuksen tulokset tuovat uutta merkityksellistä tietoa varhaisnuorten tunnetaidoista, musiikkiterapian roolista tunnetaitojen kehittämisessä sekä potentiaalisesta väittämäjoukosta, joka voisi toimia tulevaisuudessa arviointivälineen pohjana musiikkiterapian yhteydessä. Tutkimuksen tulokset ovat hyödynnettävissä sekä musiikkiterapian käytännössä että alan tutkimuksessa. Tutkimus ottaa tärkeitä ensiaskelia kohti validoitua työkalua, jolla voidaan arvioida varhaisnuorten tunnetaitojen kehittymistä. Validoidun arviointivälineen käyttö vahvistaisi merkittävästi musiikkiterapeuttien kykyä tarkemmin arvioida terapian vaikutuksia. Lisäksi arviointiväline auttaisi kommunikoimaan selkeämmin terapian vaikutuksista niin asiakkaille, heidän huoltajilleen kuin tera-

pian rahoittajille. Tutkimuksen tulokset tarjoavat vankkaa ja tieteellistä pohjaa musiikkiterapeuttisen tunnetaitojen arviointimenetelmän jatkokehittämiselle.

REFERENCES

ALLEA. 2017. The European code of conduct for research integrity. Revised edition. All European Academies. https://www.allea.org/wp-content/uploads/2017/05/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). Standards for educational and psychological testing. AERA.

American Psychological Association. (2018). Dictionary of psychology. Ego. American Psychological Association. Retrieved October 2019 from https://dictionary.apa.org/ego

Amir, D. (2005). Musical humour in improvisational music therapy. Australian Journal of Music Therapy, 16(2005).

Archambault, K., Vaugon, K., Deumié, V., Brault, M., Macabena Perez, R., Peyrin, J., Vaillancourt, G., & Garel, P. (2019) MAP: A Personalized receptive music therapy intervention to improve the affective well-being of youths hospitalized in a mental health unit, Journal of Music Therapy, 56(4), 381–402, https://doi-org.ezproxy.jyu.fi/10.1093/jmt/thz013

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. International Journal of Social Research Methodology, 8(1), 19–32. https://doi.org/10.1080/1364557032000119616

Atlas.ti. (2019). ATLAS.ti scientific software development GmbH (Version 8.4.5) [Mac educational license].

Aviles, A. M., Anderson, T. R., & Davila, E. R. (2006). Child and adolescent social-emotional development within the context of school. Child and Adolescent Mental Health, 11(1), 32–39. https://doi.org/10.1111/j.1475-3588.2005.00365.x

Baker, H. S., & Baker, M. N. (1987). Heinz Kohut's self psychology: An overview. The American Journal of Psychiatry, 144(1), 1–9.

Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. Perspectives on Psychological Science, 13(2), 130–136. https://doi.org/10.1177/1745691617699280

Barbour, R. (2007). Doing focus groups. Methods, 3(1).

Bar-On, R. (1997a). The Emotional Quotient Inventory (EQ-i): A test of emotional intelligence. Multi-Health Systems, Inc.

Baxter, H., Berghofer, J., MacEwan, L., Nelson, J., Peters, K., & Roberts, P. (2007). The individualized music therapy assessment profile. Jessica Kingsley Publishers.

Belski, N., Abdul, R. Z., Youn, E., Balasundaram, V., & Diep, D. (2022). Review: The effectiveness of musical therapy in improving depression and anxiety symptoms among children and adolescents—A systematic review. Child and Adolescent Mental Health, 27(4), 369–377. https://doi-org.ezproxy.jyu.fi/10.1111/camh.12526

Blaikie, N. (2004a). Interpretivism. In M. S. Lewis-Beck, A. Bryman & T. Futing Liao (Eds.), The Sage encyclopedia of social science research methods. Sage Publications, Inc. https://doi.org/10.4135/9781412950589

Blaikie, N. (2004b). Positivism. In M. S. Lewis-Beck, A. Bryman & T. Futing Liao (Eds.), The Sage encyclopedia of social science research methods. Sage Publications, Inc. https://doi.org/10.4135/9781412950589

Brinkmann, S. (2013). Understanding qualitative research: Qualitative interviewing. Oxford University Press.

Brummer, K. (2005). Lapsuuden normaali kehitys leikki-iästä nuoruuteen. In M. Brummer & H. Enckell (Eds.), Lasten ja nuorten psykoterapia (pp. 29–43). WSOY.

Burr, V. (2004). Constructivism. In M. S. Lewis-Beck, A. Bryman & T. Futing Liao (Eds.), The Sage encyclopedia of social science research methods. Sage Publications, Inc. https://doi.org/10.4135/9781412950589

Carpente, J. A. (2013). The individual music-centered assessment profile for neurodevelopmental disorders: A clinical manual. Regina Publishers.

Carr, A. (2016). The handbook of child and adolescent clinical psychology. Routledge. https://doi.org/10.4324/9781315744230

CASEL. (2013). 2013 CASEL guide: Effective social and emotional learning programs-Preschool and elementary school edition. https://files.eric.ed.gov/fulltext/ED581699.pdf

Cicchetti, D. v., & Sparrow, S. A. (1981). Developing criteria for establishing interrater reliability of specific items: Applications to assessment of adaptive behavior. American Journal of Mental Deficiency, 86(2).

Chen, C. J., Chen, Y. C., Ho, C. S., & Lee, Y. C. (2019). Effects of preferred music therapy on peer attachment, depression, and salivary cortisol among early adolescents in Taiwan. Journal of Advanced Nursing, 75(9), 1911–1921. https://doi.org/10.1111/jan.13975

Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., Kastner, M., & Moher, D. (2014). Scoping reviews: Time for clarity in definition, methods, and reporting. Journal of Clinical Epidemiology, 67(12), 1291–1294. https://doi.org/10.1016/j.jclinepi.2014.03.013

Craig, H., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the New Medical Research Council guidance. BMJ 337, a1655. https://doi.org/10.1136/bmj.a1655

Cripps, C., Tsiris, G., & Spiro, N. (Eds.). (2016). Outcome measures in music therapy: A resource developed by the Nordoff Robbins research team. Nordoff Robbins. https://www.nordoff-robbins.org.uk/research-projects/outcome-measures-in-music-therapy/

Daudt, H. M., van Mossel, C., & Scott, S. J. (2013). Enhancing the scoping study methodology: A large, inter-professional team's experience with Arksey and O'Malley's framework. BMC Medical Research Methodology, 13(48). https://doi.org/10.1186/1471-2288-13-48

Davey, C. G., Yücel, M., & Allen, N. B. (2008). The emergence of depression in adolescence: Development of the prefrontal cortex and the representation of reward. Neuroscience and Biobehavioral Reviews, 32(1), 1–19. https://doi.org/10.1016/j.neubiorev.2007.04.016

David, L. (1992). Instrument review: Getting the most from your panel of experts. Applied Nursing Research, 5(2). https://doi.org/10.1016/S0897-1897(05)80008-4

DeepL GmbH. (2017). DeepL Translator (4.5.542015) [Computer software]. Deepl.SE. https://www.deepl.com/translator

DeVellis, R. (2017). Scale development-theory and applications (4th ed.). SAGE Publications.

Douglass, E. T. (2006). The development of a music therapy assessment tool for hospitalized children. Music Therapy Perspectives, 24(2), 73–79. https://doi.org/10.1093/mtp/24.2.73

Eisenberg, N., Spinrad, T. L., & Cumberland, A. (1998). Socialization of emotion: Reply to reviewers. Psychological Inquiry, 9, 317–333. http://dx.doi.org/10.1207/s15327965pli0904_17

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. Journal of Advanced Nursing, 62(1). https://doi.org/10.1111/j.1365-2648.2007.04569.x

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. SAGE Open, 4(1). https://doi.org/10.1177/2158244014522633

Fereday J., & Muir-Cochrane E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. International Journal of Qualitative Methods, 5(1), 80–92. https://doi.org/10.1177/160940690600500107

Finnish Advisory Board on Research Integrity TENK (2019). The ethical principles of research with human participants and ethical review in the human sciences in Finland. https://tenk.fi/sites/default/files/2021-01/Ethical_review_in_human_sciences_2020.pdf

Finnish Society for Music Therapy. (2021, April 8). Musiikkiterapiaa eri asiakasryhmille. https://www.musiikkiterapia.net/index.php/mita-musiikkiterapia/musiikkiterapia-eri-asiakasryhmille

Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. Psychological Bulletin, 76(5). https://doi.org/10.1037/h0031619

Frey, B. B. (2015). 100 questions (and answers) about tests and measures. Sage.

Friedlander, L. H. (1994). Group music psychotherapy in an inpatient psychiatric setting for children: A developmental approach. Music Therapy Perspectives, 12(2), 92–97. https://doi.org/10.1093/mtp/12.2.92

Furman, E. (1991). Early latency: Normal and pathological aspects. In S. I. Greenspan, & G. H. Pollock (Eds.), The course of life, vol.3: Middle and late childhood, (pp.161–203) International Universities Press.

Ferrara, K. W. (1994). Therapeutic ways with words. Oxford University Press.

Geipel, J., Koening, J., Hillecke, T., Resch, F., & Kaess, M. (2018). Music-based interventions to reduce internalizing symptoms in children and adolescents: A meta-analysis. Journal of Affective Disorders, 255(1), 647–656. https://doi.org/10.1016/j.jad.2017.08.035

Glik, D. C., Parker, K., Muligande, G., & Hategikamana, B. (1986). Integrating qualitative and quantitative survey techniques. International Quarterly of Community Health Education, 7(3), 181–200. https://doi.org/10.2190/B3HG-P7BW-5FA7-QCJJ

Gold, C., Voracek, M., & Wigram, T. (2004). Effects of music therapy for children and adolescents with psychopathology: a meta-analysis. Journal of Child Psychology and Psychiatry, 45(6), 1054–1063. https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x

Gold, C., Wigram, T., & Voracek, M. (2007). Effectiveness of music therapy for children and adolescents with psychopathology: A quasi-experimental study. Psychotherapy Research, 17(3), 289–296. https://doi.org/10.1080/10503300600607886

Gonçalves, S. F., Chaplin, T. M., Turpyn, C. C., Niehaus, C. E., Curby, T. W., Sinha, R., & Ansell, E. B. (2019). Difficulties in emotion regulation predict depressive symptom trajectory from early to middle adolescence. Child Psychiatry and Human Development, 50(4), 618–630. https://doi.org/10.1007/s10578-019-00867-8

Goodman, K. (1989). Music therapy assessment of emotionally disturbed children. The Arts in Psychotherapy, 16(3), 179–192. https://doi.org/10.1016/0197-4556(89)90021-X

Grant, J. S., & Davis, L. L. (1997). Focus on quantitative methods: Selection and use of content experts for instrument development. Research in Nursing and Health, 20(3), 269–274. https://doi.org/10.1002/(sici)1098-240x(199706)20:3<269::aid-nur9>3.3.co;2-3

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. Educational Evaluation and Policy Analysis, 11(3), 255–274. https://doi.org/10.2307/1163620

Guest, G., Namey, E., & McKenna, K. (2017). How many focus groups are enough? Building an evidence base for nonprobability sample sizes. Field Methods, 29(1), 3–22. https://doi-org.ezproxy.utu.fi/10.1177/1525822X16639015

Haire, N., & Macdonald, R. (2019). Humour in music therapy: A narrative literature review Humour in music therapy. Nordic Journal of Music Therapy, 28(4). https://doi.org/10.1080/08098131.2019.1577288

Hammersley, M. (2003). Pragmatism. In Lewis-Beck, M. S., Bryman, A., & Liao, T. F. (Eds.) The SAGE encyclopedia of social science research methods (pp. 843). SAGE Publications. https://doi.org/10.4135/9781412950589

Hanser, S. E. (1999) The new music therapist's handbook (2nd edition). Berklee Press

Haugaard, C., & Mortensen, K.V. (2013). Psykoterapeutisk praksis på psykodynamisk grundlag [Psychotherapeutic practice on a psychodynamic basis]. Hans Reitzel.

Hemple, C. G. (1966). Philosophy of natural science. Prentice-Hall.

Hendricks, C. B., Robinson, B., Bradley, L. J., & Davis, K. (1999). Using music techniques to treat adolescent depression. Journal of Humanistic Education and Development, 38(1), 39–46. https://doi.org/10.1002/j.2164-490X.1999.tb00160

Holmes, J. (1993). John Bowlby and attachment theory. Routledge.

Hoskins C. N., & Mariano C. (2004) Research in nursing and health: Understanding and using quantitative and qualitative methods (2nd ed), Springer Publishing Company.

Houser, J. (2011)). Evidence-based practice in health care. In J. Houser & K. S. Oman (Eds.), Evidence-based practice–An implementation guide for healthcare organizations (pp. 1–19). Jones & Bartlett Learning.

Humphrey, N., Curran, A., Morris, E., Farrell, P., & Woods, K. (2007). Emotional intelligence and education: A critical review. Educational Psychology, 27(2), 235–254. https://doi.org/10.1080/01443410601066735

Hupcey, J. E., & Penrod, J. (2005). Concept analysis: Examining the state of the science. Research and Theory for Nursing Practice, 19(2), 197–208. https://www.proquest.com/scholarly-journals/concept-analysis-examining-state-science/docview/207665211/se-2

Impiö, P. (2005). Nuoruusiän kehitys [Adolescence development]. In M. Brummer & H. Enckell (Eds.), Lasten ja nuorten psykoterapia (pp. 44–67). WSOY.

Johnson, R. L., & Morgan, G. B. (2016). Survey scales: A guide to development, analysis, and reporting. Guilford Publications.

Kim, J. (2016). Psychodynamic music therapy. Voices: A World Forum for Music Therapy, 16(2). https://doi.org/10.15845/voices.v16i2.882

Kitzinger, J. (2005). Focus group research: Using group dynamics to explore perceptions, experiences and understandings. In I. Holloway (Ed.), Qualitative Research in Health Care (pp. 56–70). Open University Press.

Knight, R. (2014). A hundred years of latency: From Freudian psychosexual theory to dynamic systems nonlinear development in middle childhood. Journal of the American Psychoanalytic Association, 62(2), 203–235. https://doi-org.ezproxy.jyu.fi/10.1177/0003065114531044

Langan, D. (2009). A music therapy assessment tool for special education: Incorporating education outcomes. Australian Journal of Music Therapy, (20), 78–98. http://search.ebscohost.com.ezproxy.jyu.fi/login.aspx?direct=true&db=psyh&AN=2009-08539-007&login.asp&site=ehostlive

Layman, D. L., Hussey, D. L., & Laing, S. J. (2002). Music therapy assessment for severely emotionally disturbed children: A pilot study. Journal of Music Therapy, 39(3), 164–187. https://doi.org/10.1093/jmt/39.3.164

Levesque, R. J. R. (2012). Developmental periods. In R.J.R. Levesque (Ed.), Encyclopedia of adolescence (pp. 687–688). Springer.

Liamputtong, P. (2011). Focus group methodology: Principles and practice. SAGE Publications Ltd. https://doi.org/10.4135/9781473957657

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. New Directions for Program Evaluation, (30), 73–84. https://doi.org/10.1002/ev.1427

Lindahl Jacobsen, S. (2019). Music therapy with children and adolescents at risk. In S. Lindahl Jacobsen, I. Nygaard Pedersen, & L.O., Bonde (Eds.), A comprehensive guide to music therapy (2nd ed., pp. 369–375). Jessica Kingsley Publishers.

Loewy, J. (2000). Music psychotherapy assessment. Music Therapy Perspectives, 18(1), 47–58. https://doi.org/10.1093/mtp/18.1.47

Lynn, M. R. (1986). Determination and quantification of content validity. Nursing Research, 35(6). https://doi.org/10.1097/00006199-198611000-00017

McFerran, K. (2010). Adolescents, music and music therapy: Methods and techniques for clinicians, educators and students. Jessica Kingsley Publishers.

MacKeith, J. (2011). The development of the outcomes star: A participatory approach to assessment and outcome measurement. Housing, Care and Support, 14(3), 98–106. https://doi.org/10.1108/14608791111199778

McLeod, J. D., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, Social Behavior, 53(4), 482–497. https://doi.org/10.1177/0022146512462888

Mathews, B. L., Kerns, K. A., & Ciesla, J. A. (2014). Specificity of emotion regulation difficulties related to anxiety in early adolescence. Journal of Adolescence, 37(7). https://doi.org/10.1016/j.adolescence.2014.08.002

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). Emotional intelligence: Science and myth. MIT Press.

Metzner, S. (2016). Psychodynamic music therapy. In J. Edwards (Ed.), The Oxford handbook of music therapy (pp. 448–471). New York, NY: Oxford University Press.

Nuopponen, A. (2010). Methods of concept analysis - a comparative study. LSP, 1(1), 4–12. https://rauli.cbs.dk/index.php/lspcog/article/view/2970

Nygaard Pedersen, I. (2019) Analytical and psychodynamic theories. In S. Lindahl Jacobsen, I. Nygaard Pedersen, & L.O., Bonde (Eds.), A comprehensive guide to music therapy (2nd ed., pp. 77–95). Jessica Kingsley Publishers.

O'Cathain, A. (2010). Mixed methods involving qualitative research. In I. Bourgeault, R.,Dingwall, & R. De Vries (Eds.), The SAGE handbook of qualitative methods in health research. (pp. 575–587). SAGE Publications Ltd, https://dx.doi.org/10.4135/9781446268247

Opetushallitus. (2016). National core curriculum for basic education 2014. Finnish National Board of Education.

Opetushallitus. (2020). National Core Curriculum for General Upper Secondary Education 2019. Finnish National Board of Education.

Organization for Economic Co-operation and Development (2023, February 9). Future of education and skills. https://www.oecd.org/education/2030-project/contact/E2030_Position_Paper_(05.04.2018).pdf

Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti, & D. J. Cohen (Eds.), Developmental psychopathology: Theory and method (2nd ed., Vol. 1, pp. 419–493). John Wiley & Sons, Inc.

Penrod, J., & Hupcey, J.E. (2005). Enhancing methodological clarity: Principle-based concept analysis. Journal of Advanced Nursing, 50(4), 403–409. https://doi.org/10.1111/j.1365-2648.2005.03405.x

Polit D. F., & Beck C. T. (2004) Nursing research. Principles and methods. Lippincott Williams & Wilkins.

Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. Research in Nursing and Health, 29(5), 489–497. https://doi.org/10.1002/nur.20147

Polit, D. F., Beck, C. T., & Owen, S. v. (2007). Focus on research methods: Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. Research in Nursing and Health, 30(4), 459–467. https://doi.org/10.1002/nur.20199

Porter, S., McConnell, T., McLaughlin, K., Lynn, F., Cardwell, C., Braiden, H., Boylan, J., & Holmes, V. (2017). Music therapy for children and adolescents with behavioural and emotional problems: A randomised controlled trial. Journal of Child Psychology and Psychiatry, 58(5), 586–594. https://doi.org/10.1111/jcpp.12656

Proudfoot, K. (2022). Inductive/deductive hybrid thematic analysis in mixed methods research. Journal of Mixed Methods Research, 0(0). https://doi.org/10.1177/15586898221126816

Rosenthal, T. L., & Bandura, A. (1978). Psychological modeling: Theory and practice. In S.L. Garfield, & A.E. Bergin (Eds.), Handbook of psychotherapy and behavior change (2nd ed.). John Wiley.

Sale, J. E., & Brazil, K. (2004). A Strategy to identify critical appraisal criteria for primary mixed-method studies. Quality & Quantity, 38(4), 351–365. https://doi.org/10.1023/b:ququ.0000043126.25329.85

Salmela-Aro, K. (2011). Stages of adolescence. In B. Bradford Brown, & M. J. Prinstein (Eds.), Encyclopedia of adolescence (pp.360–368). Academic Press. https://doi.org/10.1016/B978-0-12-373951-3.00043-0

Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2022). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. Nordic Journal of Music Therapy, 31(1), 63–88. https://doi.org/10.1080/08098131.2021.1903977

Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023a). Promoting Emotional skills in early adolescents with mental health conditions in

music therapy – A content analysis of focus group interviews. Nordic Journal of Music Therapy, 32(5), 423–444. https://doi.org/10.1080/08098131.2023.2169336

Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023b). Validation of item pool for early adolescents' emotional skills assessment in music therapy. Nordic Journal of Music Therapy. http://dx.doi.org/10.1080/08098131.2023.2245433

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, Cognition, and Personality, 9, 185-211.

Santrock, J. W. (2008). Adolescence. McGraw-Hill Higher Education.

Sattler, J. M. (2001). Assessment of children: Cognitive applications (4th ed.). Publisher Inc.

Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S.-J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). Adolescence: A foundation for future health. The Lancet, 379(9826), 1630–1640. https://doi.org/10.1016/S0140-6736(12)60072-5

Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M., …Whitlock, E. (2015, January 2) Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: Elaboration and explanation. BMJ (Online). BMJ Publishing Group. https://doi.org/10.1136/bmj.g7647

Shuman, J., Kennedy, H., DeWitt, P., Edelblute, A., & Wamboldt, M. (2016). Group music therapy impacts mood states of adolescents in a psychiatric hospital setting. The Arts in Psychotherapy, 49, 50–56. https://doi.org/10.1016/j.aip.2016.05.014

Smithson, J. (2008). Focus Groups. In P. Alasuutari, L. Bickman, & J. Brannen (Eds.), The SAGE handbook of social research methods (pp. 357–430). SAGE Publications Ltd. https://doi.org/10.4135/9781446212165

Social Insurance Institution of Finland. (2017). Kelan kuntoutustilasto. Kela. https://helda.helsinki.fi/handle/10138/234527

Solbakken, O. A., Hansen, R. S., Havik, O. E., & Monsen, J. T. (2011). Assessment of affect integration: Validation of the affect consciousness construct. Journal of Personality Assessment, 93(3), 257–265. https://doi.org/10.1080/00223891.2011.558874

Steinberg, L. (2005). Cognitive and affective development in adolescence. Trends in Cognitive Sciences 9(2), 69–74. https://doi.org/10.1016/j.tics.2004.12.005

Stige, B., Malterud, K., & Midtgarden, T. (2009). Toward an agenda for evaluation of qualitative research. Qualitative Health Research, 19(10), 1504–1516. https://doi.org/10.1177/1049732309348501

Suveg, C., & Zeman, J. (2004). Emotion regulation in children with anxiety disorders. Journal of Clinical Child and Adolescent Psychology, 33(4), 750–759. https://doi.org/10.1207/s15374424jccp3304_10

Tempelaar, W. M., Otjes, C. P., Bun, C. J., Plevier, C. M., van Gastel, W. A., MacCabe, J. H., Kahn, R. S., & Boks, M. P. M. (2014). Delayed school progression and mental health problems in adolescence: A population-

based study in 10,803 adolescents. BMC
Psychiatry, 14(244). https://doi.org/10.1186/s12888-014-0244-5

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting
qualitative research (COREQ): A 32-item checklist for interviews and focus
groups. International Journal for Quality in Health Care, 19(6), 349–357.
https://doi.org/10.1093/intqhc/mzm042

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D.,
Moher, D., Peters, M., Horsley, T., Weeks, L., Hempel, S., Akl, E. A.,
Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M.
G., Garritty, C., Lewin, S., … Straus, S. E. (2018). PRISMA extension for
scoping reviews (PRISMA-ScR): Checklist and explanation. Annals of
Internal Medicine, 169(7), 467–473. https://doi.org/10.7326/M18-0850

Uhlig, S., Janse, E., & Scherder, E. (2018). "Being a bully isn't very cool … ": Rap
& sing music therapy for enhanced emotional self-regulation in an
adolescent school setting- a randomized controlled trial. Psychology of
Music, 2018, 46(4), 568–587. https://doi.org/10.1177/0305735617719154

Waldon, E. G., & Gattino, G. (2018). Assessment in music therapy -Introductory
considerations. In S. Lindahl Jacobsen, E. G. Waldon, & G. Gattino (Eds.),
Music therapy assessment (pp. 21–73). Jessica Kingsley Publishers.

Walker, L. O., & Avant, K. C. (2014). Strategies for theory construction (5th ed.).
PEARSON.

Waltz, C. F., & Bausell, R. B. (1981). Nursing research: Design, statistics, and
computer analysis. F.A. Davis.

Waltz, C. F., Strickland, O. L., & Lenz, E. R. (2016). Measurement in Nursing
and Health Research. Springer Publishing
Company. https://doi.org/10.1891/9780826170620

Wasserman, N. M. (1972). Music therapy for the emotionally disturbed in a
private hospital. Journal of Music Therapy, 9(2), 99–104.
https://doi.org/10.1093/jmt/9.2.99

Webropol. (2020, July 31). Webropol Internet Questionnaire.
https://new.webropolsurveys.com/

Wells, N. F. (1988). An individual music therapy assessment procedure for
emotionally disturbed young adolescents. The Arts in Psychotherapy,
15(1).

Wheeler, B. (2018). Assessment in music therapy –Foreword. In S. Lindahl
Jacobsen, E. G. Waldon, & G. Gattino (Eds.), Music therapy assessment
(pp. 10–17). Jessica Kingsley Publishers

Wigelsworth, M., Humphrey, N., Kalambouka, A., & Lendrum, A. (2010). A
review of key issues in the measurement of children's social and
emotional skills. Educational Psychology in Practice, 26(2), 173–186.
https://doi.org/10.1080/02667361003768526

World Health Organization. (2021, August 9). Adolescent mental health.
https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-
health

Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A.-R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centred communication. Tabriz University of Medical Sciences, 4(2), 165–178. https://doi.org/10.15171/jcs.2015.017

Zimmermann, P., & Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. International Journal of Behavioral Development, 38(2), 182–194. https://doi.org/10.1177/0165025413515405

Zins, J. E., & Elias, M. J. (2006). Social and emotional learning. In G. G. Bear & K. M. Minke (Eds.), Children's needs III: Development, prevention, and intervention (pp. 1–13). National Association of School Psychologists.

ORIGINAL PAPERS

I

SCOPING REVIEW AND CONCEPT ANALYSIS OF EARLY ADOLESCENTS' EMOTIONAL SKILLS: TOWARDS DEVELOPMENT OF A MUSIC THERAPY ASSESSMENT TOOL

by

Maija Salokivi, Sanna Salanterä & Esa Ala-Ruona, 2022

Routledge
Taylor & Francis Group

ORIGINAL RESEARCH ARTICLE

🔓 OPEN ACCESS | Check for updates

Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool

Maija Salokivi [ID][a], Sanna Salanterä [ID][b] and Esa Ala-Ruona [ID][a]

[a]Department of Music, Art and Culture Studies, University of Jyväskylä, Jyvaskyla, Finland; [b]Department of Nursing Science, University of Turku, Turku, Finland

ABSTRACT

Introduction: This paper describes the concept and content of early adolescents' emotional skills among the general population. The research literature contains many emotional skills-related terms with overlapping meanings, and it can be challenging to determine which are applicable for example, to a music therapy assessment tool. This study comprises the first phase of developing an assessment tool for early adolescents' emotional skills, namely, determining what is to be assessed.

Method: A scoping review of the literature is presented with written definitions of emotional skills-related terms, as well as a concept analysis of the terms performed using Walker and Avant's method.

Results: The components of early adolescents' emotional skills are presented. Early adolescents' emotional skills comprise several skill components as presented in the current research literature. These components help in understanding the multifaceted entirety of emotional skills.

Discussion: This paper presents the term emotional skills as a practical, general term that includes the content of other emotional skills-related terms. The concept analysis' outcome, the components of early adolescents' emotional skills, is applicable to future research as a theoretical framework for developing an assessment tool for early adolescents' emotional skills. The components are also useful for music therapy clinicians to analyse their work with early adolescents and to communicate in detail the phenomenona related to emotional skills in therapy.

Introduction

A lack of interaction and emotional skills is often a part of mental and social problems for early adolescents (Gonçalves et al., 2019; Parker et al., 2006; Zins & Elias, 2006). These problems are also related to challenges in school and use of intoxicants (Zins & Elias, 2006). A lack of emotional skills is also a recognised issue in clinical music therapy practice with early adolescents (Lindahl Jacobsen, 2019). In Finland, early adolescents (10–14 years) account for 60% of all children (0–15 years) in music therapy

CONTACT Maija Salokivi ✉ Maija.salokivi@gmail.com 🖃 Department of Music, Art and Culture Studies, University of Jyväskylä

rehabilitation. Eighty-five percent of these early adolescents have mental or beha-
vioural problems (Social Insurance Institution of Finland, 2017). These various angles
indicate the justifiable reasons to focus research to develop music therapy assessment
on this age group and their needs.

In this research, the term "emotional skills" is chosen as a general term that covers at
least somewhat other emotional skills-related terms. In Finland, the term "emotional
skills" is in daily use by rehabilitation professionals and is typically used in official
rehabilitation reports and documents. The term "emotional skills" is commonly used
in everyday language, but many other terms are also used in a research context. The
terms are often overlapping, and finding a practical theory-based definition that is
applicable for helping to structure a music therapy assessment tool, for example, may
be challenging. Inconsistencies in the use of these terms dictate the need for further
exploration to develop clear definitions that fulfil scientific requirements (Humphrey
et al., 2007; Matthews et al., 2002; Wigelsworth et al., 2010).

Systematic research-based theory building of music therapy assessment tools is
increasing but still scarce in music therapy research generally (Cripps et al., 2016;
Waldon & Gattino, 2018; Wheeler, 2018). Before developing and validating an assess-
ment tool, the phenomenon should be well grounded in theories and clearly defined
(DeVellis, 2017). This article presents one possible way to define a concept and start
building a theoretical framework for a music therapy assessment tool for early adoles-
cents' emotional skills.

Early adolescence

Early adolescence is the first step in a transition period when childhood is left behind
for the biological, cognitive, and socio-emotional changes one goes through to reach
adulthood. Early adolescence begins at approximately 10 to 13 years of age (Santrock,
2008) but is usually considered as the period between 11 and 13 years of age (Levesque,
2012; Salmela-Aro, 2011). Changes in one's body and strengthening sexual awareness
challenge the balance established in childhood (Impiö, 2005). Changes also happen on
a neurobiological level, which are part of the cognitive and affective behaviour seen
during early adolescence (Yurgelun-Todd, 2007).

Typical for early adolescents are, for example, a struggle with emotional and social
development, feeling awkward about oneself and one's own body image, worrying
about being normal, having heightened conflicts with parents, becoming increasingly
influenced by peer groups, having an increased desire for independence, returning to
childish behaviour when stressed, being prone to mood swings, testing rules and limits,
becoming more private, and having a growing interest in sex (Sawyer et al., 2012).

In Piaget's cognitive development theory early adolescence is called the formal
operational period. Children begin to use logic to solve abstract problems and can
develop a hypothesis, plan how to test the hypthothesis, and also consider possible
cosequences of different hypotheses. At the end of this period, early adolescents can
perform relativistic thinking and are able to consider their own behaviour (Carr, 2016).
Bandura (2018) describes these aforementioned skills in his social cognitive theory
using three main properties. These are forethought, in which people can motivate and
guide themselves by action plans, goals, and visualizing the outcomes; self-reactiviness,
which means people's ability to perform self-regulation, and self-reflectiveness, with
which people can self-examine their functioning (Bandura, 2018).

Emotional skills of early adolescents

Brummer (2005) pointed out that the normal emotional development of early adolescence is based on the developmental periods of earlier childhood. Unfinished childhood psychological development can cause difficulties for early adolescents when moving between life phases; one's biological and psychological age may collide with each other. Carr (2016) emphasized how attachment relationships with parents or caregivers are the foundation for the rules of recognizing, understanding, and managing emotions and also interactions with peers and others through modelling and reinforcement. In early adolescence, children increase the use of multiple startegies for regulating emotions and managing stress. They differentiate between emotional expression with close friends and others, and they better understand social roles and how to regulate emotions in making and maintaining friendships (Carr, 2016).

A successful transition from middle childhood (period between 6 and 12 years) to early adolescence requires a successful latency stage. Latency occurs in middle childhood and is marked by increased numbers of relationships with peers and adults outside the family, ego function growth (the ego is the personality component that deals with the external world and its practical demands; American Psychological Association, 2018), skills, activities, and interests and by adaptation to the rules of the family and community (Furman, 1991).

A crucial developmental task during the latency stage is strengthening the self. The "self" is based on the theory of psychiatrist and psychoanalyst Heinz Kohut and relates to the individual's intrapsychic sturctures that can reliably regulate and calm the person (Baker & Baker, 1987). The essential quality of having a strong sense of self is the ability to internalise contradictions. In practice, this means that children with a strong enough self do not need to display their own internal conflicts as aggressive behaviour towards other people because they are able to internally process such conflicts. (Brummer, 2005).

An emotional life develops forward when regulatory abilities and emotional experiences are more internalised (Henderson et al., 2017). A sufficiently strong self is flexible, permissive, and empathic; can tolerate anxiety, fear, shame, guilt, and conflicts, and is also capable of protecting oneself from those emotions. Furthermore, a strong enough self is capable of playfulness. When the latency stage is closed, the childhood's dependency and needs are no longer a goal, and the child wants to grow up and change (Brummer, 2005).

Emotional skills of early adolescents in music therapy

Music therapy is a therapeutic approach used with early adolescents who have emotional difficulties. Often, these early adolescents come to music therapy because of behavioural problems and an inability to regulate their feelings. They can be either aggressive or withdrawn. Other reasons can include, for example, a challenging life situation, fears, difficulty concentrating, low self-esteem, or obsessive-compulsive symptoms. Music therapy offers the possibility to process emotions in a nonverbal way and therefore is suitable for clients who need a more practical approach to working with emotions (Finnish Society for Music Therapy, 2015).

Previous research has supported the use of music therapy with emotionally disturbed early adolescents (Gold et al., 2004, 2007). However, studies with larger sample

sizes and higher methodological quality performed in various research settings are still needed (Geipel et al., 2018; Porter et al., 2017). Based on research, music therapy for early adolescents with emotional challenges may reduce anxiety (Hendricks et al., 1999), have an influence on mood state (Shuman et al., 2016), increase emotional responsiveness (Wasserman, 1972), reduce impulsiveness and increase self-regulation (Layman et al., 2002; Uhlig et al., 2018), and help the adolescents to develop a self-image (Friedlander, 1994).

Both music and emotions are multilevel constructs that are influenced by multiple variables, processes, and interactions. The literature has examined the role of music-induced emotions in culture, music's ability to facilitate group emotions, the musical properties that contribute to emotional responses and the communicative function of music-induced emotions. However, studies are still needed to help understand the complexity of the interactions between music and emotions and how this knowledge can be used in an intentional way in music therapy among early adolecents for example (Moore, 2017).

Emotional skills of early adolescents in music therapy assessment

Music therapy assessment tools that are probably applicable to early adolescents' emotional skills have been developed for different purposes, settings, and contexts. However, most of these tools target both children and adolescents, such as Baxter et al. (2007), Carpente (2013), Langan (2009), MacKeith (2011), Layman et al. (2002), Douglass (2006), and Goodman (1989), or are applicable to all age groups, such as Loewy (2000). Based on Cripps et al.'s (2016) comprehensive overview of outcome measures in music therapy, the only assessment tool that was strictly limited to early adolescence was Wells (1988) Music Therapy Assessment for Disturbed Adolescents. Remarkably, none of these tools has been validated among early adolescents.

Additionally, none of these aforementioned assessment tools focuses comprehensively on emotional skills; mainly they highlight some particular aspect of emotional skills instead such as emotional differentiation, expression, regulation, and self-awareness (Baxter et al., 2007) or attention, affect, adaption engagement, and interrelatedness (Carpente, 2013). They also evaluate emotional expression (Langan, 2009; MacKeith, 2011), emotional responsiveness (Layman et al., 2002) and emotional constriction (Wells, 1988). Other tools assess social-emotional functioning or behaviour (Douglass, 2006; Goodman, 1989) and range of affect (Loewy, 2000).

All of these assessment tools are important steps in music therapy assessment research; however, more detailed and focused music therapy assessment tools are still needed specifically for the early adolescent target group and to cover all components of emotional skills.

Study objectives

The purpose of this study is to determine the concept of early adolescents' emotional skills based on a scoping review and concept analysis of the research literature. Through these methods, the study presents the first phase of the assessment-development process: to describe clearly what is intended to be assessed (DeVellis, 2017). We aim to answer the following questions: What are the definitions and theoretical frames of the emotional skills-related terms in the current research

literature? What kind of practical general definition of the concept could be applicable as a theoretical framework for developing a music therapy assessment tool for early adolescents' emotional skills?

Method

Scoping review

We chose to conduct a qualitative scoping review in order to create a foundation for the concept analysis of emotional skills. A scoping review addresses an exploratory research question, and its aim is to map the literature and to identify the key conceps, gaps in the research, types of evidence, and sources available to inform practice and research by systematically searching for, selecting, and synthesizing existing knowledge (Arksey & O'Malley, 2005; Colquhoun et al., 2014; Daudt et al., 2013). A scoping review is an appropriate approach for finding papers with diverse methodologies and evidence; for example, it is useful for answering the question "What is known about the concept?" (Tricco et al., 2018).

Arksey and O'Malley (2005) five-step guidelines for conducting a scoping review were used: (a) identify the research question; (b) identify relevant studies; (c) define a relevant study selection; (d) chart the data; and (e) collect, summarise, and report the results (Arksey & O'Malley, 2005). Step 1 in the scoping review focused on the following question: What are the definitions and theoretical frames of emotional skills-related terms? Steps 2 and 3 are reported by adhering to the PRISMA for Scoping Review Checklist (Tricco et al., 2018). The PRISMA flow diagram depicts the flow of information through the different phases of a scoping review (see Figure 1). It maps out the number of studies identified, included, and excluded and the reasons for the exclusions (PRISMA, 2015). Step 4 and 5 are presented in the table of study characteristics (see Table 1).

Preparation phase of the scoping review

The main search was prepared and relevant keywords were found using the Web of Science and Scopus databases. A professional information specialist searched the databases by focusing on early adolescents and emotional skills. This preparation phase determined the main search strategy. In the preparatory phase, the concept of emotional skills was found not to be solid, and the databases offered many related concepts for the search. Fourteen other terms in addition to the term "emotional skills" were identified as keywords and therefore were relevant search words for this study. The terms were "emotional clarity," "emotional competence," "emotional control," "emotional differentiation," "emotional functioning," "social-emotional functioning," "emotional intelligence," "emotional learning," "social-emotional learning," "emotional maturity," "emotional regulation," "emotional responses," "emotional self-efficacy," and "emotional states."

Search strategy for the research articles

The main electronic literature search highlighting these 15 emotional skills-related keywords was performed using the PsycINFO database. PsycINFO was chosen because it covers all of the scientific fields found to be relevant for the topic in the Web of Science and Scopus databases. The timeframe limit of the search was set to end of December 2018. The data search was conducted on 18 April 2019. The search covered

all branches of science in PsycINFO and peer-reviewed journals in the English language, and the population was limited strictly to 11- to 13 -year-old early adolescents. The search was done at a title and abstract level, in accordance with PRISMA study selection procedures (Moher et al., 2009). A total of 2,206 studies were identified and considered for this qualitative synthesis and concept analysis. The search strategy is listed in Table 2.

Inclusion and exclusion criteria

The papers that were included in the qualitative synthesis met the following criteria: written in the English language, included a written definition of the emotional skills-related terms needed in this study, and possessed a sample group including only 11- to 13-year-olds without a diagnosis or disability. This study focused primarily on the middle period of early adolescence; therefore, 10-year-olds and 14-year-olds were excluded. Usually, early adolescence is considered as the period between 11 and 13 years of age (Levesque, 2012; Salmela-Aro, 2011).

Populations with special characteristics were excluded because this study focuses on the definition of emotional skills of early adolescents in the general population, to determine which emotional skills are typical for early adolescents. In the assessment-development process, this is based on the assumption that typical development of emotional skills in early adolescents must be defined before one can determine atypical development.

If the study mentioned only the class grade of the participants, the participants' age was determined by finding the typical age of students in that class grade for that country. Studies that looked at emotional skills-related terms without mentioning any age group or without applicable written definitions of the emotional skills-related term were excluded.

Study selection

All titles and abstracts were initially examined according to the inclusion and exclusion criteria stated above. Six hundred and forty-one full-text articles were reviewed, of which 618 were excluded for not meeting the inclusion criteria. The most common reason for exclusion was an unsuitable age group or a special group with a diagnosis. Two additional studies were identified by scanning the reference lists of the included papers. All of the selected papers ($n = 25$) were examined independently by a second reviewer to reduce selection bias. There was full agreement between the two reviewers. A total of 25 papers were included in the qualitative synthesis. A detailed overview of the study selection is shown in the PRISMA flow diagram in Figure 1.

Charting the data

Information on the authors, the publication year, the title of the article, and the sample size were extracted and are presented in Table 1. The definitions of emotional skills-related terms and their theoretical background were also explored. Information regarding data collection and design of each study was excluded, though such information is usually considered essential in a scoping review. For the aims of our study, data collection strategy and study design were not relevant as our focus was not on each study's research details and results *per se* but how the investigators described the emotional skills-related terms.

Table 1. Characteristics of the studies

Term, author and publication year	Title	Definition of the term	Sample	Theoretical background of the term
Emotional clarity				
Hamilton et al., 2014	Pubertal timing and vulnerabilities to depression in early adolescence: Differential pathways to depressive symptoms by sex	Ability to identify, understand, and distinguish one's own emotions and emotional experiences.	$n = 318$ (54% girls)	Gohm & Clore, 2000
Hamilton et al., 2016	Deficits in emotional clarity and vulnerability to peer victimization and internalizing symptoms among early adolescents	Same as above	$n = 355$ (53% girls)	Gohm & Clore, 2000, Gohm & Clore, 2002
Rubenstein et al., 2015	The cyclical nature of depressed mood and future risk: Depression, rumination, and deficits in emotional clarity in adolescent girls	Understanding and awareness of one´s own emotional experiences and the ability to label them appropriately. Component of emotional intelligence. Adaptive for everyday coping, problem solving, and general mental health.	$n = 223$ (52% girls)	Gohm & Clore, 2002; Salovey & Mayer, 1990
Stange et al., 2013	Negative inferential style, emotional clarity, and life stress: Integrating vulnerabilities to depression in adolescence	Same as above	$n = 265$ (54% girls)	Gohm & Clore, 2000
Emotional control				
Li et al., 2017	Relating psychological and social factors to academic performance: A longitudinal investigation of high-poverty middle school students	Tendency to manage negative feelings and to find appropriate outlets for expression.	$n = 942$ (51% girls)	Bandura, 1986
Emotional functioning				
Kwon et al., 2018	Negative emotionality, emotion regulation, and achievement: Cross-lagged relations and mediation of academic engagement	Physiological, cognitive and behavioural processes in one´s reaction to an activated emotion.	$n = 199$ (52% girls)	Cole et al., 2004; Rydell et al. 2003
Phan, 2017	The self-systems: Facilitating personal well-being experiences at school	Individual's emotions and their affective responses. Individual's belief in his/her capabilities to organize and execute the courses of action required to produce given attainments.	$n = 258$ (41% girls)	Bandura, 1986, Bandura, 1997
Emotional intelligence				

Table 1. (Continued).

Term, author and publication year	Title	Definition of the term	Sample	Theoretical background of the term
Downey et al., 2010	Investigating the mediating effects of emotional intelligence and coping on problem behaviours in adolescents	Set of abilities concerned with the regulation, management, control and use of emotions in decision-making. Ability to identify one´s own feelings and emotional states and to express those inner feelings to others. Ability to identify and understand the emotions of others. The extent to which emotions and emotional knowledge are incorporated in decision-making and/or problem solving. Ability to manage positive and negative emotions both within oneself and others and control strong emotional states.	$n = 145$ (59% girls)	Mayer et al., 2000; Luebbers et al., 2007
Ferrando et al., 2011	Trait emotional intelligence and academic performance: Controlling for the effects of IQ, personality, and self-concept	Ability to monitor one´s own and other feelings and emotions, to discriminate among them and to use this information to guide one´s thinking and actions. Ability to recognize, process and use emotion-laden information.	$n = 290$ (47% girls)	Salovey & Mayer, 1990; Petrides & Furnham, 2001
Jordan et al., 2010	Gender differences in the role of emotional intelligence during the primary-secondary school transition	Ability to understand and express emotions, appreciation of other people´s feelings, listening ability, stress management (calmness and ability to work well under pressure) and adaptability (ability to manage change).	$n = 86$ (43% girls)	Bar-On, 1997; Bar-On & Parker, 2000
Qualter et al., 2007	Supporting the development of emotional intelligence competencies to ease the transition from primary to high school	Constellation of emotion-related self-perceptions and dispositions. Capabilities, competencies, and skills that influence one´s ability to succeed in coping with environmental demands and pressures.	$n1 = 169$ (43% girls) $n2 = 170$ (55% girls)	Petrides et al., 2004; Bar-On, 1997
Trinidad et al., 2004	The protective association of emotional intelligence with psychosocial smoking risk factors for adolescents	Ability to perceive accurately, appraise, and express emotion. Ability to access and/or generate feelings when they facilitate though. Ability to understand emotion and emotional knowledge. Ability to regulate emotions.	$n = 416$ (53% girls)	Mayer & Salovey, 1997; Mayer et al., 2000; Bar-On, 1997;Goleman, 1995
Emotional learning				
Coelho & Sousa, 2017	Comparing two low middle school social and Emotional learning program formats: A multilevel effectiveness study	Process through which individual acquire and affectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible behaviour.	$n = 982$ (47% girls)	Collaborative for Academic, Social, and Emotional Learning (CASEL),2013
Renshaw, 2017	Technical adequacy of the positive experiences at school scale with adolescents	Self-awareness, self-management, social awareness, relationship skills, and responsible decision making.	$n = 1002$ (49% girls)	CASEL, 2013
Social-emotional learning				

(*Continued*)

Table 1. (Continued).

Term, author and publication year	Title	Definition of the term	Sample	Theoretical background of the term
Chung & Moore Mcbride, 2015	Social and emotional learning in middle school curricula: A service learning model based on positive youth development	Process through which individual learn to recognize and manage emotions, care about others, make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behaviors. Self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.	7th grade, (n not mentioned)	Elias et al., 1997; Zins et al., 2004
Gueldner & Merrell, 2011	Evaluation of a social-emotional learning program in conjunction with the exploratory application of performance feedback incorporating motivational interviewing techniques	Emotional identification, challenging negative and maladaptive thoughts, relaxation strategies, goal setting, and learning to think with optimism.	n = 139 (41% girls)	Merrell et al., 2007
Reyers et al., 2012	The interaction effects of program training, dosage, and implementation quality on targeted student outcomes for the RULER approach to social and emotional learning	Self-and social awareness, emotion regulation, responsible decision making, problem solving, and relationship management. Recognizing, understanding, labelling, expressing, and regulating emotions.	n = 812 (49% girls)	Zins et al., 2004; Brackett et al., 2011
Top et al., 2017	Family and school influences on youths' behavioral and academic outcomes: cross-level interactions between parental monitoring and character development curriculum	Problem solving, perspective taking, empathy, self-regulation and emotion regulation.	n = 763 (53% girls)	Holsen et al., 2008
Waldemar et al., 2016	Impact of combined mindfulness and social-emotional learning program on fifth graders in a Brazilian public school setting	Process of acquiring the skills needed to recognize and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively. Self-awareness, self-management, social awareness.	n = 132 (48% girls)	CASEL, 2013; Durlak et al., 2011
Wigelsworth et al., 2013	Assessing differential effects of implementation quality and risk status in a whole-school social and emotional learning programme: Secondary SEAL	Self-awareness, self-regulation, motivation, empathy and social skills.	n = 3306 (gender not mentioned)	Goleman, 1996
Emotional regulation				
Modrek & Kuhn, 2017	A cognitive cost of the need to achieve?	Multidimensional process whereby individuals seek to control aspects of their cognition and/or behaviour. Ability to differentiate between internalizing and externalizing behaviors.	n = 90 (63% girls)	Zimmerman, 2000; Conway et al., 2016

Table 1. (Continued).

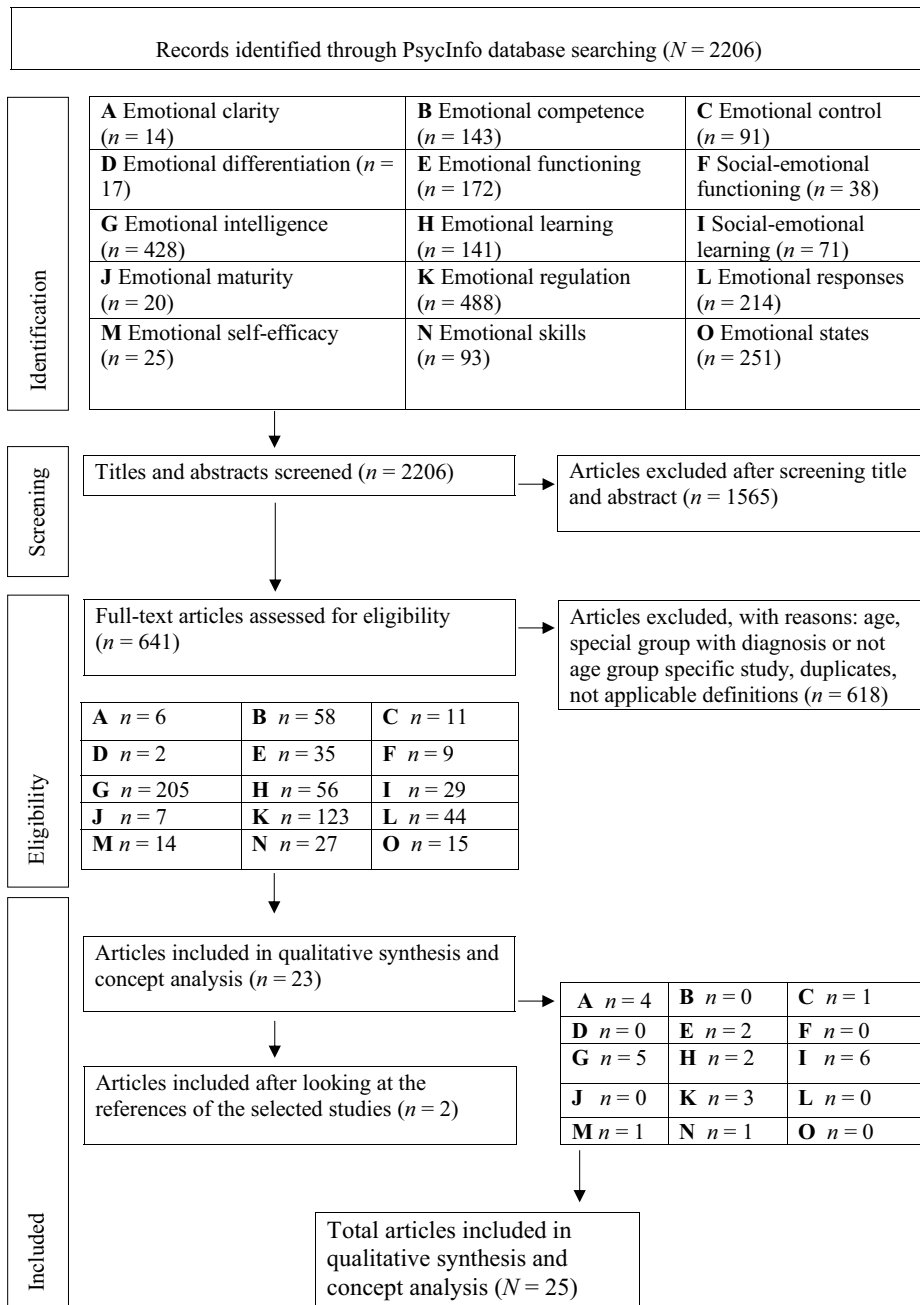| Term, author and publication year	Title	Definition of the term	Sample	Theoretical background of the term
Benita et al., 2017	Integrative emotion regulation predicts adolescents' prosocial behavior through the mediation of empathy	Emotion regulatory capacities affect moral emotions, empathy, and prosocial behaviour. Emotion regulation refers to the processes by which individuals influence what emotions they have, when they have them, how they experience them, and how they express them.	n = 241 (52% girls)	Eisenberg et al., 1997, Eisenberg et al., 2004; Gross, 1998
Latham et al., 2017 Emotional self-efficacy	Physiological correlates of emotional reactivity and regulation in early adolescents	Ability to change the expression and/or intensity associated with specific emotions.	n = 113 (51% girls)	Gross & Jazaieri, 2014
Qualter et al., 2015 UK & Netherlands Emotional skills	The Emotional Self-Efficacy Scale: Adaptation and validation for young adolescents	People's beliefs about whether they think they can successfully perceive, use, understand, and manage emotional information.	n = 192 (gender not mentioned)	Bandura, 1997, Bandura, 1999
Polan, Polan et al. (2013) USA	Are young adolescents' social and emotional skills protective against involvement in violence and bullying behaviours?	Ability to understand and competently express oneself, to understand and connect with others, and to effectively cope with the stress and challenges of daily life.	n = 171 (52% girls)	Bar-On & Parker, 2000

Records identified through PsycInfo database searching (*N* = 2206)

Identification

A Emotional clarity (*n* = 14)	**B** Emotional competence (*n* = 143)	**C** Emotional control (*n* = 91)
D Emotional differentiation (*n* = 17)	**E** Emotional functioning (*n* = 172)	**F** Social-emotional functioning (*n* = 38)
G Emotional intelligence (*n* = 428)	**H** Emotional learning (*n* = 141)	**I** Social-emotional learning (*n* = 71)
J Emotional maturity (*n* = 20)	**K** Emotional regulation (*n* = 488)	**L** Emotional responses (*n* = 214)
M Emotional self-efficacy (*n* = 25)	**N** Emotional skills (*n* = 93)	**O** Emotional states (*n* = 251)

Screening

Titles and abstracts screened (*n* = 2206) → Articles excluded after screening title and abstract (*n* = 1565)

Eligibility

Full-text articles assessed for eligibility (*n* = 641) → Articles excluded, with reasons: age, special group with diagnosis or not age group specific study, duplicates, not applicable definitions (*n* = 618)

A *n* = 6	**B** *n* = 58	**C** *n* = 11
D *n* = 2	**E** *n* = 35	**F** *n* = 9
G *n* = 205	**H** *n* = 56	**I** *n* = 29
J *n* = 7	**K** *n* = 123	**L** *n* = 44
M *n* = 14	**N** *n* = 27	**O** *n* = 15

Included

Articles included in qualitative synthesis and concept analysis (*n* = 23) →

A *n* = 4	**B** *n* = 0	**C** *n* = 1
D *n* = 0	**E** *n* = 2	**F** *n* = 0
G *n* = 5	**H** *n* = 2	**I** *n* = 6
J *n* = 0	**K** *n* = 3	**L** *n* = 0
M *n* = 1	**N** *n* = 1	**O** *n* = 0

Articles included after looking at the references of the selected studies (*n* = 2)

Total articles included in qualitative synthesis and concept analysis (*N* = 25)

Figure 1. PRISMA flow diagram of the process of selecting studies

Concept analysis

A concept analysis of emotional skills–related terms was performed using Walker and Avant (2014) concept analysis method to explore the features and qualities of the

Table 2. Search strategy from the electronic database

| Database	Population in PsycInfo	Search terms	Other
PsycINFO	100 childhood < birth to age 12 yrs >; 180 school age < age 6 to 12 yrs >; 200 adolescence < age 13 to 17 yrs >	Emotional clarity; emotional competence; emotional control; emotional differentiation; emotional functioning; social-emotional functioning; emotional intelligence; emotional learning; social-emotional learning; emotional maturity; emotional regulation; emotional responses; emotional self-efficacy; emotional skills; emotional states	Peer-reviewed journal, English language, date limits up to end of December 2018

concept and systematically outline the basic elements of the concept and phenomenon. Concept analysis captures the critical elements of the concept at the specific moment in time (Walker & Avant, 2014).

The whole qualitative concept analysis procedure includes eight steps, but for the purposes of this study, only the first four steps were applied. The remaining steps focus on semantics and detailed practical examples and were not appropriate or related to the aims of this study. The applied steps of Walker and Avant (2014) concept-analysis method are as follows: (a) select a concept, (b) determine the aims or purposes of the analysis, (c) identify all uses of the concept, and (d) determine the defining attributes.

In this study, (a) the concept is emotional skills of early adolescents, and (b) the purpose of the concept analysis was to explore how current research literature defines the emotional skills of early adolescents. The process of applying Steps 3 and 4 of the concept analysis is described in Figure 2.

Step 3, identification of all uses of the concept, was conducted based on the scoping review data on the terms' descriptions. The written description of each term was reduced to single items, and items with the same or very similar meanings were then organised into network table groups in Atlas.ti (Version 8.4.5; Atlas.ti, 2019) . Atlas.ti is a qualitative data analysis and research software program that enables the researcher to structure text according to thematic content, for example. This phase showed how single descriptors formed groups and were relevant to show different fields of emotional skills.

Step 4, determination of the defining attributes was conducted by collecting the items from these Atlas.ti network table groups, and then tabulating and categorizing
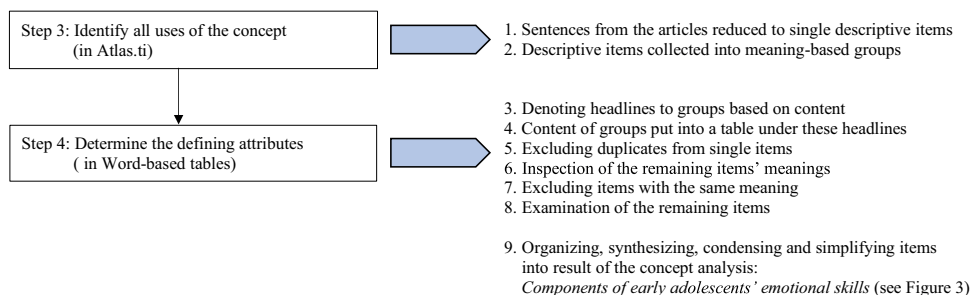
Figure 2. Applying Walker and Avant's concept analysis step 3 and 4
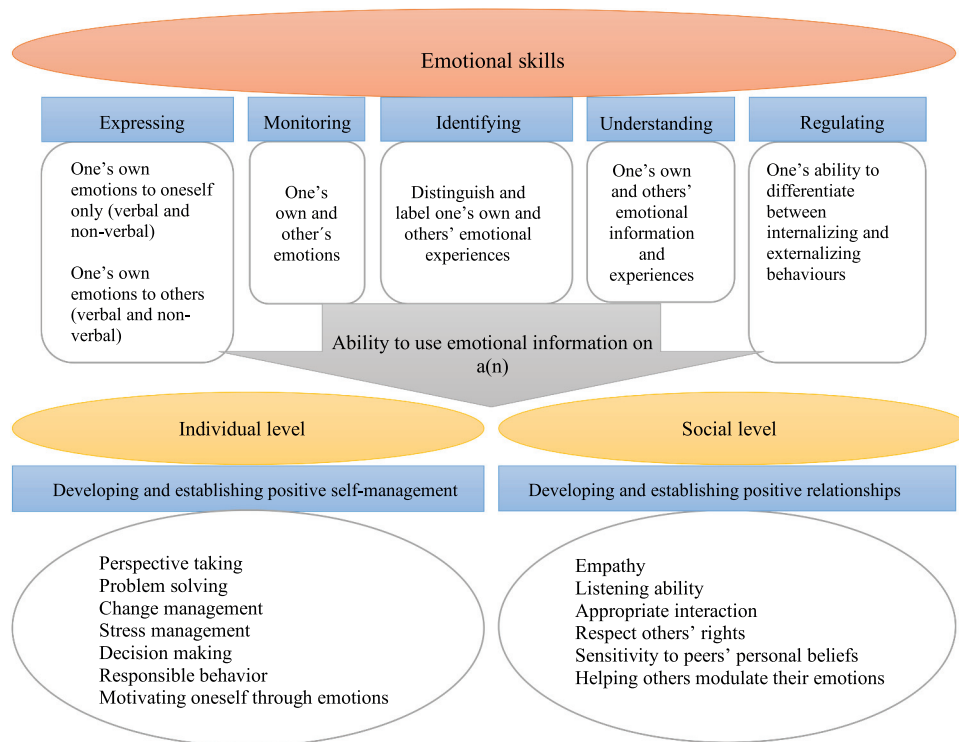
Figure 3. Components of early adolescents' emotional skills

them according to their descriptive main headings. The headings were the preexisting words in the table groups and were chosen based on how well they represented the meanings of all of the words in the same group. Repeated items and those with similar meanings were removed. For example, concepts related to regulation were described in the literature as the ability to control positive/negative emotions or ability to manage negative/positive emotions; the meaning of these descriptions are quite similar, and both are under the heading Regulating. The remaining data were synthesized, condensed, simplified, and developed further for the components of early adolescents' emotional skills resulting from this concept analysis (Figure 3).

Results

Scoping review

Table 1 provides a thorough overview of the included studies. A total of 2,206 studies were identified and considered for the qualitative synthesis and the concept analysis. After ineligible studies were excluded for not fulfilling the inclusion criteria 641 full-text articles were reviewed, and 25 papers were included (see Figure 1). The sample sizes ranged from one school class (the number of students was not mentioned) to 3,306 early adolescents. The total of *n* was 11,779 early adolescents. The percentage of females ranged from 41% to 63%; three studies did not mention the gender

distribution. Nine terms in the context of early adolescence could be explored from the 15 extracted keyword terms found in the preparation phase from PsychINFO. The papers were published between the years 2004 to 2018. The bulk of the papers were from the field of psychology. The terms and topics of the articles varied greatly across the 25 studies. In the analysed studies, the target group was defined with the following words: "early adolescents," "youth," "preadolescents," "children," "students," "pupils," "young adolescence," and "young persons."

Nine of the 15 emotional skills-related key terms were included in the study. These terms were "emotional clarity," "emotional control," "emotional functioning," "emotional intelligence," "emotional learning," "social-emotional learning," "emotional regulation," "emotional self-efficacy," and" emotional skills." The remaining terms were omitted because there were no articles based on the context of early adolesecents. These omitted terms were "emotional competence," "emotional differentiation," "social-emotional functioning," "emotional maturity," "emotional responses," and "emotional states."

All of the included studies had a written description of the emotional skills-related term, and all of the studies identified the theoretical background of the terms' descriptions. The theories were based on articles published between the years 1986 and 2016 (Figure 4). The terms "Emotional intelligence," "social-emotional learning," and "emotional regulation" were those with the broadest theoretical backgounds. Bandura (1997), Bar-On and Parker (2000), Conway et al. (2016), and Salovey and Mayer (1990) provided the background theory behind more than one of the emotional skills-related terms.

Concept analysis

The outcomes of the concept analysis for the nine emotional skills–related key terms resulted in 91 descriptions of the content of emotional skills when divided into single items. Some items were identical to each other, many of them had the same meaning, and different terms were often used to describe similar attributes. All of the items and their meanings were inspected, collected into groups and tabulated under the relevant headings, synthesized, condensed, simplified and developed further, and placed into a figure describing the components of emotional skills in early adolescents' lives (see Figure 3). The figure represents the implementation of the third and fourth steps of Walker and Avant (2014) concept analysis: identify all uses of the concept that can be discovered and determine the defining attributes.

Based on the concept analysis, the main components of early adolescents' emotional skills are (a) expressing, (b) monitoring, (c) identifying, (d) understanding, and (e) regulating emotions; along with the (f) ability to use emotional information. The last component can be seen as an implication of the five previous components. It comprises two parts: (a) the ability to use emotional information on an individual level for developing and establishing positive self-management and (b) the ability to use emotional information on a social level for developing and establishing positive relationships.

The main components include the person's own and an interactional point of view as well as positive and negative emotions. The 'expressing' component was divided into nonverbal and verbal expressing and whether the emotions are expressed to oneself only (for example, by writing, painting, by inner voice or crying) or to others. The 'monitoring' component was divided into ability to monitor both one´s own inner

emotions as well as other's emotions. The 'identifying' component involves bringing out one's ability to distinguish and label emotional experiences. The *'understanding'* component accounts for one's ability to understand both emotional information and experiences. The 'regulating' component includes one's ability to differentiate between internalizing and externalizing behaviours.

Based on these data, Component 6–'ability to use emotional information on a social and individual level' – includes several subcomponents (see Figure 3). The ability to use emotional information on an individual level for developing and establishing positive self-management includes the following skills: perspective taking, problem solving, change management, stress management, decision making, responsible behaviour, and motivating oneself through emotions.

The ability to use emotional information on a social level for developing and establishing positive relationships includes the following skills: empathy, listening ability, appropriate interaction, respecting others' rights, sensitivity to peers' personal beliefs, and helping others modulate their emotions.

Discussion

Definition of emotional skills among early adolescents

This study has refined the key concepts related to emotional skills identified in the literature for early adolescents among the general population. The aim was to find a practical, general description that would be applicable as a theoretical framework for developing a music therapy assessment tool for early adolescents' emotional skills in the future. To do this, a scoping review and a concept analysis of the emotional skills-related terms was conducted. As a result, this study shows that the components of emotional skills include six main skills, which take different sides of emotional skills into account, highlighting the importance of individual- and social-level emotional skills (see Figure 3).

Based on this research the main emotional skills are (a) expressing, (b) monitoring, (c) identifying, (d) understanding, (e) regulating; along with the (f) ability to use emotional information on a social level for developing and establishing positive relationships and on an individual level for developing and establishing positive self-management. The five aforementioned skills are considered basic skills, whereas the skill *'ability to use emotional information on the individual and social levels'* is more of an implication of these basic skills. It includes several sub-domains that present the diversity of the needed skills, in both positive relationships and self-management. These basic skills and their implication present the general description of emotional skills among early adolescents in the research literature until 2018.

Emotional skills are not disclosed in a particular linear order in Figure 3 because the scoping review articles did not mention the skills' developmental order. Our impression is that many emotional skills are present simultaneously and often cannot be divided into separate divisions in practical daily life situations or in a research study. Their nature is very dynamic, and their manifestation differs between each developmental stages of the lifespan. Emotional skills also comprise the multiple simultaneous processes in a body and mind based on their neurobiological, neurophysiological, and neuropsychological functions. An individual's temperament and personality, early interaction and attachment, language development, and cultural context also play

roles in the gestalt (e.g. Freund et al., 2010; Lamb & Lerner, 2015; Plutchik & Kellerman, 1983).

However, the presented components of emotional skills in this study (expressing, monitoring, identifying, understanding, regulating, ability to use emotional information on an individual level for developing and establishing positive self-management, and a social level for developing and establishing positive relationships) are useful for music therapy clinicians to analyze their work with early adolescents and to communicate in detail the phenomenona related to emotional skills in the therapy.

Interchangeable emotional skills-related terms

The Web of Science and Scopus databases highlighted 15 keyword terms used for describing emotional skills. This also shows that the term "emotional skills" is not yet solidly defined in the literature. The situation influenced the scoping review and concept analysis: instead of exploring one term, as usually done in a scoping review, it was necessary to focus on many key terms at the same time to explore the gestalt of early adolescents' emotional skills.

Most of the studies described the terms with overlapping concepts. This supports the idea that in at least some contexts, it is possible and reasonable to use one general term ("emotional skills") when trying to get a general picture of the topic and its content. However, more distinctive terms should be used in, for example, research or clinical assessment, because the nuances between concepts may be important in some cases. Based on this study, socioemotional learning and emotional intelligence are the most popular emotional skills-related research areas when it comes to the emotional skills of early adolescents.

The theoretical background of emotional skills-related terms offered in the studies highlighted that this field is quite young, dating between 1986 and 2016. Some theoretical backgrounds in the scoping review studies were from the same researcher but from different years of their theoretical work. Some theoretical studies were used as background theory for more than one emotion skills-related term. This also supports the idea that the terms overlap with each other and that in some contexts, it is reasonable to use general term "emotional skills" (see Figure 4).

These results are consistent with previous studies that have identified how different terms for emotional skills are used interchangeably (Wigelsworth et al., 2010). However, this is the first study to systematically map out the different terms in use across the literature for this or any other age group, and analyse them in terms of concept meaning; therefore, this study may provide a unique contribution to the field. This study contributes to the continued refinement of terms related to emotional skills and will help to provide more concrete definitions across the literature. One of the benefits of providing and using consistent terminology is that doing so allows therapists and clients to interact more clearly, and it also provides the basis for continuous research to be applied in a meaningful way.

Early adolescents as a target group

The number of studies decreased when the search was limited to the age group of early adolescents between 11 and 13 years of age. This study focused primarily on the middle period of early adolescence, when puberty is likely to be actively ongoing. The age range of this study was strict, but even if the age range were extended to include 10- to 14-year olds, the number of studies would not have increased substantially. This

Theoretical background	emotional clarity	emotional control	emotional functioning	emotional intelligence	emotional learning	social-emotional learning	emotional regulation	emotional self-efficacy	emotional skills
Bandura, 1986		x							
Bandura, 1997			x					x	
Bandura, 1999								x	
Bar-On, 1997				x					
Bar-On & Parker, 2000				x					x
Brackett et al., 2011						x			
Casell, 2013						x			
Cole, Martin & Dennis, 2004					x				
Conway, Miller & Modrek, 2016			x				x		
Durlak et al., 2011						x			
Eisenberg et al. 1997							x		
Eisenberg et al. 2004							x		
Elias et al., 1997						x			
Gohm & Clore, 2000	x								
Gohm & Clore, 2002	x								
Goleman, 1995				x					
Goleman, 1996						x			
Gross, 1998							x		
Gross & Jazaieri, 2014							x		
Holsen, Smith & Frey, 2008						x			
Luebbers, Downey & Stough, 2007				x					
Mayer & Salovey, 1997				x					
Mayer, Caruso & Salovey, 2000				x					
Merrell et al., 2007						x			
Petrides & Furnham, 2001				x					
Petrides, Fredrickson & Furnham, 2004				x					
Salovey & Mayer, 1990	x			x					
Zimmerman, 2000								x	
Zins et al. 2004						x			

Figure 4. Theoretical background of the emotional skills-related terms

showed that research on early adolescents and emotional skills in the general population is quite scarce. This is an interesting and surprising finding, considering how emotionally unstable and meaningful early adolescence is in people's lives. In a therapy context, it is also valuable to work with early adolecents and their emotional skills because according to Piaget's cognitive development theory, in this development stage, children are capable of relativistic thinking and are able to consider their own behaviour more profoundly (Carr, 2016).

Focusing on early adolescents as the target group was laborious due the lack of definitions in the databases and vague definitions in research on this age group. The PsycINFO database does not allow a search to be narrowed to participants aged 11 to 13 years old; instead, three different age ranges had to be selected (childhood, school age, and adolescence) to be able to include the age range 11–13. In addition, authors did not clearly state the target group of early adolescents in their titles or abstracts. Instead, they used more general terms, like "youth," "adolescents," or "young people." These terms may include early adolescents but also quite a wide group of older or sometimes younger people. Some papers only mentioned the participants' school grade. Due to international differences in school systems, the class or grade year is not an exact indicator of a child's age, which was also problematic at the inclusion/ exclusion phase. In addition, the names of schools in different countries can vary (e.g. comprehensive school, grade school, elementary school or primary school). In many cases, detailed information about the age of the target group could only be found by reading the full text. Some articles mentioned only the mean age of their target group, and in the context of early adolescence, this is too general a description and could have led to bias at the data-extraction stage. Stricter definitions of early adolescence and the specific age range are needed, both in databases and by authors writing about this age group.

Comparing existing music therapy assessment tools

In general, existing music therapy assessment tools do not include emotional skills components in their gestalt, and they are not validated, especially for early adolescents (Cripps et al., 2016). However, when the results of this study are compared to existing music therapy assessment tools, such as the Individualized Music Therapy Assessment Profile (IMTAP) (Baxter et al., 2007), which is a general assessment tool for children and adolescents and includes quite an encompassing emotional domain, the components of early adolescents' emotional skills presented in this study seem to be partly the same. The IMTAP focuses on emotional differentiation/expression, regulation, and self-awareness (Baxter et al., 2007). 'Expressing' and 'regulation' are presented with similar captions as the corresponding components in this study. Based on our impression, the content of the IMTAP category 'self-awareness' seems to combine the elements of the components of 'monitoring', 'identifying' and 'understanding' of this study. The IMTAP category 'differentiaton' (combined with the category expression in the IMTAP) on a practical level, seems to be a skill to first identify and then express the emotions. These skills are combined. In this study the component 'identifying' is its own independent part. Category 6 of this study, 'ability to use emotional information on social and individual levels', is not presented in the IMTAP emotional domain.

Future research

Future research could consider studing the applicability of the components to music therapy assessment research. Once the purpose of an assessment tool has been clearly defined, the next step in the assessment-development process is to generate items for an assessment tool (DeVellis, 2017). It would also be important to explore how these skills can be seen in music-related work and expression. Additionally, applicability of the defined emotional skills to groups with special needs must be examined. This scoping review and concept analysis could also be repeated in the future when the volume of emotional skills-related research on early adolescents has increased. It might

then be possible to cover the whole conceptual field of emotional skills-related key terms in the analysis. Finally, it would be of potential interest to explore whether the presented emotional skills components are relevant to other age groups.

Limitations

Possible data selection bias may have resulted from the limited number of articles on emotional skills-related terms for the target age group. As a result of the literature search, not all 15 keyword terms could be examined in the context of early adolescents in the general population. Therefore, only nine terms of the 15 originally found terms were examined in the scoping review and concept analysis. This means that the definitions and the presented categories are incomplete and do not cover the whole conceptual field of emotional skills-related terms. However, the results do discuss the current state of the art of the literature on early adolescents' emotional skills. Further bias may have resulted from the concept analysis's implementation. The implementation process is always somewhat individual, depending on the topic and the researcher's choices. However, providing as detailed a description of the analysis process as possible (see Figure 2) helps other researchers to follow the process and evaluate the decisions made.

Conclusion

This study gives an overall picture of the emotional skills-related terms and their content in the context of early adolescence literature. This study also shows that in at least some contexts, the term "emotional skills" is possible and reasonable to use as a general term when trying to obtain a general picture of the topic and its content. In addition, the study highlights the small amount of research on emotional skills-related terms for early adolescents. Furthermore, the study shows that scoping reviews and concept analysis are useful research methods with which to explore written definitions of terms when the aim is to apply assessment-development theory and its first phase: to determine clearly what one wants to assess. Additionally, this study offers knowledge about the characteristics and theoretical background of the current research on the emotional skills of early adolescents in the general population. As a result, this study presents the components of early adolescents' emotional skills that are applicable as a theoretical framework, for example, in developing a music therapy assessment tool for this age group. The components are also useful for music therapy clinicians to analyze their work with early adolescents and to communicate in detail the phenomenona related to emotional skills in the therapy.

Despite the limitations and areas that are important to consider in future research and practice, this study offers an interesting point of view and a general overview of early adolescents' emotional skills as a gestalt. The study fulfils the main objective and offers definitions of emotional skills among early adolescents that are applicable for research developing music therapy assessments in the future.

Disclosure statement

Funding

Acknowledgements

Notes on contributors

Maija Salokivi, MA, is a music therapist and a doctorand of University of Jyväskylä, Finland. She has been working several years with children and adolescence with psychiatric and neurological problems. The aim of her PhD dissertation is to develop an assessment instrument for emotional skills of early adolescents in the context of music therapy. Her research interests include assessment, assessment development, emotional skills, children and adolescents.

Sanna Salanterä, PhD, RN, Professor of Clinical Nursing Science, Vice Dean of the Faculty of Medicine at University of Turku and Nurse Director at Turku University Hospital. She is specialized in clinical nursing science, nursing and patient decision-making, smart technology in nursing, pain nursing, health service research, children´s nursing and empowering patient education. She leads the research programs "Health producing basic care with smart technology" and "Health producing health promotion with smart technology." Both projects consist of several sub projects.

Esa Ala-Ruona, PhD, is a music therapist and psychotherapist working as a senior researcher at the Music Therapy Clinic for Research and Training, at University of Jyväskylä. His research interests are music therapy assessment and evaluation, and in studying musical interaction and clinical processes in improvisational psychodynamic music therapy, and furthermore the progress and outcomes of rehabilitation of stroke patients in active music therapy. Currently he is the president of the European Music Therapy Confederation. He regularly gives lectures and workshops on music therapy both nationally and internationally.

ORCID

Maija Salokivi http://orcid.org/0000-0003-0886-3532
Sanna Salanterä http://orcid.org/0000-0003-2529-6699
Esa Ala-Ruona http://orcid.org/0000-0003-3873-5179

References

American Psychological Association. (2018). *Dictionary of Psychology*. Ego. American Psychological Association. Retrieved October, 2019 from https://dictionary.apa.org/ego

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Atlas.ti. (2019). *ATLAS.ti scientific software development GmbH (Version 8.4.5)* [Mac educational license].

Baker, H. S., & Baker, M. N. (1987). Heinz Kohut's self psychology: An overview. *The American Journal of Psychiatry, 144*(1), 1–9. http://dx.doi.org.ezproxy.jyu.fi/10.1176/ajp.144.1.1

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.

Bandura, A. (1999). Self-efficacy: Toward a unifying theory of behavioral change. In R. F. Baumeister (Ed.), *Key readings in social psychology. The self in social psychology* (pp. 285–298). Psychology Press.

Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science*, *13*(2), 130–136. https://doi.org/10.1177/1745691617699280

Bar-On, R. (1997). *The emotional intelligence inventory (EQ-I): Technical manual*. Multi-Health Systems.

Bar-On, R., & Parker, J. (2000). *The Bar-On EQ-i: YV: Technical manual*. Multi-Health Systems.

Baxter, H., Berghofer, J., MacEwan, L., Nelson, J., Peters, K., & Roberts, P. (2007). *The individualized music therapy assessment profile*. Jessica Kingsley Publishers.

*Benita, M., Levkovitz, T., & Roth, G. (2017). Integrative emotion regulation predicts adolescents' prosocial behavior through the mediation of empathy. *Learning and Instruction*, *50*(Aug), 14–20. https://doi.org/10.1016/j.learninstruc.2016.11.004

Brackett, M. A., Kremenitzer, J. P., Maurer, M., Carpenter, M., Rivers, S. E., & Elbertson, N. (2011). *Creating emotionally literate classrooms: An introduction to the RULER approach to social and emotional learning*. National Professional Resource.

Brummer, K. (2005). Lapsuuden normaali kehitys leikki-iästä nuoruuteen. In M. Brummer & H. Enckell (Eds.), *Lasten ja nuorten psykoterapia* (pp. 29–43). WSOY.

Carpente, J. A. (2013). *The individual music-centered assessment profile for neurodevelopmental disorders: A clinical manual*. Regina Publishers.

Carr, A. (2016). *The handbook of child and adolescent clinical psychology*. Routledge. https://doi.org/10.4324/9781315744230

CASEL. (2013) . *2013 CASEL guide: Effective social and emotional learning programs-Preschool and elementary school edition*.

*Chung, S., & Moore Mcbride, A. (2015). Social and emotional learning in middle school curricula: A service learning model based on positive youth development. *Children and Youth Services Review*, *53*(June), 192–200. https://doi.org/10.1016/j.childyouth.2015.04.008

*Coelho, V. A., & Sousa, V. (2017). Comparing two low middle school social and emotional learning program formats: A multilevel effectiveness study. *Journal of Youth and Adolescence*, *46*(3), 656–667. https://doi.org/10.1007/s10964-016-0472-8

Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development*, *75* (2), 317–333. https://doi.org/10.1111/j.1467-8624.2004.00673.x

Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., Kastner, M., & Moher, D. (2014, December). Scoping reviews: Time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology*, *67*(12), 1291–1294. https://doi.org/10.1016/j.jclinepi.2014.03.013

Conway, A., Miller, A. L., & Modrek, A. (2016). Testing reciprocal links between trouble getting to sleep and internalizing behavior problems, and bedtime resistance and externalizing behavior problems in toddlers. *Child Psychiatry & Human Development*, *48*(4), 678–689. https://doi.org/10.1007/s10578-016-0692-x

Cripps, C., Tsiris, G., & Spiro, N. (Eds.). (2016). *Outcome measures in music therapy: A resource developed by the Nordoff Robbins research team*. Nordoff Robbins. https://www.nordoff-robbins.org.uk/research-projects/outcome-measures-in-music-therapy/

Daudt, H. M., Van Mossel, C., & Scott, S. J. (2013). Enhancing the scoping study methodology: A large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Medical Research Methodology*, *13*(1), 48. https://doi.org/10.1186/1471-2288-13-48

DeVellis, R. (2017). *Scale development-theory and applications* (4th ed.). SAGE Publications.

Douglass, E. T. (2006). The development of a music therapy assessment tool for hospitalized children. *Music Therapy Perspectives*, *24*(2), 73–79. https://doi.org/10.1093/mtp/24.2.73

*Downey, L. A., Johnston, P. J., Hansen, K., Birney, J., & Stough, C. (2010). Investigating the mediating effects of emotional intelligence and coping on problem behaviours in adolescents. *Australian Journal of Psychology*, *62*(1), 20–29. https://doi.org/10.1080/00049530903312873

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school- based universal interventions. *Child Development*, *82*(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Eisenberg, N., Fabes, R. A., Shepard, S. A., Murphy, B. C., Guthrie, I. K., Jones, S., Friedman, J., Poulin, R., & Maszk, P. (1997). Contemporaneous and longitudinal prediction of Children's social functioning from regulation and emotionality. *Child Development*, *68*(4), 642–664. http://dx.doi.org/10.2307/1132116

Eisenberg, N., Spinrad, T. L., Fabes, R. A., Reiser, M., Cumberland, A., Shepard, S. A., Valiente, C., Losoya, S. H., Guthrie, I. K., & Thompson, M. (2004). The relations of effortful control and impulsivity to children's resiliency and adjustment. *Child Development*, *75*(1), 25–46. https://doi-org.ezproxy.jyu.fi/10.1111/j.1467-8624.2004.00652.x

Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Hayenes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators.* Association for Supervision and Curriculum Development.

*Ferrando, M., Prieto, M. D., Almeida, L. S., Ferrándiz, C., Bermejo, R., López-Pina, J. A., Hernández, D., Sáinz, M., & Fernández, M.-A. (2011). Trait emotional intelligence and academic performance: Controlling for the effects of IQ, personality, and self-concept. *Journal of Psychoeducational Assessment*, *29*(2), 150–159. https://doi.org/10.1177/0734282910374707

Finnish Society for Music Therapy. (2015). Finnish Society for Music Therapy. Retrieved January, 2019, from http://www.musiikkiterapia.net/index.php/38-musiikkiterapia-eriasiakasryhmille /84lastenpsykiatria

Freund, A. M., Lamb, M. E., & Lerner, R. M. Eds. (2010). *The handbook of life-span development, Vol. 2: Social and emotional development.* John Wiley & Sons. Retrieved from Psychological Experiments Online Database.

Friedlander, L. H. (1994). Group music psychotherapy in an inpatient psychiatric setting for children: A developmental approach. *Music Therapy Perspectives*, *12*(2), 92–97. https://doi.org/10.1093/mtp/12.2.92

Furman, E. (1991). Early latency: Normal and pathological aspects. In S. I. Greenspan & G. H. Pollock (Eds.), *The course of life, vol.3: Middle and late childhood*, (pp.161–203) Internation Universities Press.

Geipel, J., Koening, J., Hillecke, T., Resch, F., & Kaess, M. (2018). Music-based interventions to reduce internalizing symptoms in children and adolescents: A meta-analysis. *Journal of Affective Disorders*, *255*(1), 647–656. https://doi.org/10.1016/j.jad.2017.08.035

Gohm, C. L., & Clore, G. L. (2000). Individual differences in emotional experience: Mapping available scales to processes. *Personality and Social Psychology Bulletin*, *26*(6), 679–697. https://doi.org/10.1177/0146167200268004

Gohm, C. L., & Clore, G. L. (2002). Four latent traits of emotional experience and their involvement in well-being, coping, and attributional style. *Cognition & Emotion*, *16*(4), 495–518. https://doi.org/10.1080/02699930143000374

Gold, C., Voracek, M., & Wigram, T. (2004). Effects of music therapy for children and adolescents with psychopathology: A meta-analysis. *The Journal of Child Psychology and Psychiatry*, *45*(6), 1054–1063. https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x

Gold, C., Wigram, T., & Voracek, M. (2007). Effectiveness of music therapy for children and adolescents with psychopathology: A quasi-experimental study. *Psychotherapy Research*, *17*(3), 289–296. https://doi.org/10.1080/10503300600607886

Goleman, D. (1995). *Emotional intelligence.* Bantam Books.

Goleman, D. (1996). *Emotional intelligence: Why it can matter more than IQ.* Bloomsbury.

Gonçalves, S. F., Chaplin, T. M., Turpyn, C. C., Niehaus, C. E., Curby, T. W., Sinha, R., & Ansell, E. B. (2019). Difficulties in emotion regulation predict depressive symptom trajectory from early to middle adolescence. *Child Psychiatry and Human Development*, *50*(4), 618–630. https://doi.org/10.1007/s10578-019-00867-8

Goodman, K. (1989). Music therapy assessment of emotionally disturbed children. *The Arts in Psychotherapy*, *16*(3), 179–192. https://doi.org/10.1016/0197-4556(89)90021-X

Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, *74*(1), 224–237. https://doi-org.ezproxy.jyu.fi/10.1037/0022-3514.74.1.224

Gross, J. J., & Jazaieri, H. (2014). Emotion, emotion regulation, and psychopathology: An affective science perspective. *Clinical Psychological Science*, *2*(4), 387–401. https://doi.org/10.1177/2167702614536164

*Gueldner, B., & Merrell, K. (2011). Evaluation of a social-emotional learning program in conjunction with the exploratory application of performance feedback incorporating motivational interviewing techniques. *Journal of Educational and Psychological Consultation*, *21*(1), 1–27. https://doi.org/10.1080/10474412.2010.522876

*Hamilton, J. L., Hamlat, E. J., Stange, J. P., Abramson, L. Y., & Alloy, L. B. (2014). Pubertal timing and vulnerabilities to depression in early adolescence: Differential pathways to depressive symptoms by sex. *Journal of Adolescence*, *37*(2), 165–174. https://doi.org/10.1016/j.adolescence.2013.11.010

*Hamilton, J. L., Kleiman, E. M., Rubenstein, L. M., Stange, M. F., Abramson, L. Y., & Alloy, L. B. (2016). Deficits in emotional clarity and vulnerability to peer victimization and internalizing symptoms among early adolescents. *Journal of Youth and Adolescence*, *45*(1), 183–194. https://doi.org/10.1007/s10964-015-0260-x

Henderson, H. A., Burrows, C. A., & Usher, L. (2017). Emotional development. In B. Hopkins, E. Geangu, & S. Linkenauger (Eds.), *The Cambridge encyclopedia of child development* (pp. 424–430). Cambridge University Press. https://doi-org.ezproxy.jyu.fi/10.1017/9781316216491

Hendricks, C. B., Robinson, B., Bradley, L. J., & Davis, K. (1999). Using music techniques to treat adolescent depression. *Journal of Humanistic Education and Development*, *38*(1), 39–46. https://doi.org/10.1002/j.2164-490X.1999.tb00160

Holsen, I., Smith, B. H., & Frey, K. S. (2008). Outcomes of the social competence program second step in Norwegian elementary schools. *School Psychology International*, *29*(1), 71–88. https://doi.org/10.1177/0143034307088504

Humphrey, N., Curran, A., Morris, E., Farrell, P., & Woods, K. (2007). Emotional intelligence and education: A critical review. *Educational Psychology*, *27*(2), 235–254. https://doi.org/10.1080/01443410601066735

Impiö, P. (2005). Nuoruusiän kehitys. In M. Brummer & H. Enckell (Eds.), *Lasten ja nuorten psykoterapia* (pp. 44–67). WSOY.

*Jordan, J.-A., McRorie, M., & Ewing, C. (2010). Gender differences in the role of emotional intelligence during the primary-secondary school transition. *Emotional & Behavioural Difficulties*, *15*(1), 37–47. https://doi.org/10.1080/13632750903512415

*Kwon, K., Kupzyk, K., & Bentona, A. (2018). Negative emotionality, emotion regulation, and achievement: Cross-lagged relations and mediation of academic engagement. *Learning and Individual Differences*, *67*, 33–40. https://doi.org/10.1016/j.lindif.2018.07.004

Lamb, M. E., & Lerner, R. M. (Eds.). (2015). *Handbook of child psychology and developmental science: Socioemotional processes* (Vol. 3, 7th ed.). John Wiley & Sons Inc.

Langan, D. (2009). A music therapy assessment tool for special education: Incorporating education outcomes. *Australian Journal of Music Therapy*, (20), 78–98. http://search.ebscohost.com.ezproxy.jyu.fi/login.aspx?direct=true&db=psyh&AN=2009-08539-007&login.asp&site=ehostlive

*Latham, M. D., Cook, N., Simmons, J. G., Byrne, M. L., Kettle, J. W. L., Schwartz, O., Vijayakumar, N., Whittle, S., & Allen, N. B. (2017). Physiological correlates of emotional reactivity and regulation in early adolescents. *Biological Psychology*, *127*, 229–238. https://doi.org/10.1016/j.biopsycho.2017.07.018

Layman, D. L., Hussey, D. L., & Laing, S. J. (2002). Music therapy assessment for severely emotionally disturbed children: A pilot study. *Journal of Music Therapy*, *39*(3), 164–187. https://doi.org/10.1093/jmt/39.3.164

Levesque, R. J. R. (2012). Developmental periods. In R. J. R. Levesque (Ed.), *Encyclopedia of adolescence* (pp. 687–688). Springer-Verlag New York Inc.

*Li, Y., Allen, J., & Casillas, A. (2017). Relating psychological and social factors to academic performance: A longitudinal investigation of high-poverty middle school students. *Journal of Adolescence*, *56*(1), 179–189. https://doi.org/10.1016/j.adolescence.2017.02.007

Lindahl Jacobsen, S. (2019). Music therapy with children and adolescents at risk. In S. Lindahl Jacobsen, I. Nygaard, & L. Bonde (Eds.), *A comprehensive guide to music therapy* (2nd ed., pp. 369–375). Jessica Kingsley Publishers.

Loewy, J. (2000). Music psychotherapy assessment. *Music Therapy Perspectives*, *18*(1), 47–58. https://doi.org/10.1093/mtp/18.1.47

Luebbers, S., Downey, L. A., & Stough, C. (2007). The development of an adolescent measure of EI. *Personality and Individual Differences*, *42*(6), 999–1009. https://doi.org/10.1016/j.paid.2006.09.009

MacKeith, J. (2011). The development of the outcomes star: A participatory approach to assessment and outcome measurement. *Housing, Care and Support*, *14*(3), 98–106. https://doi.org/10.1108/14608791111199778

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth*. MIT Press.

Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.), *Handbook of intelligence* (pp. 396–420). Cambridge University Press.

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3–31). Basic Books. https://doi.org/10.1177/1066480710387486

Merrell, K. W., Carrizales, D., Feuerborn, L., Gueldner, B. A., & Tran, O. K. (2007). *Strong kids: A social and emotional learning program*. Brookes.

*Modrek, A., & Kuhn, D. (2017). A cognitive cost of the need to achieve? *Cognitive Development*, *44*, 12–20. https://doi.org/10.1016/j.cogdev.2017.08.003

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Moore, K. S. (2017). Understanding the influence of music on emotions: A historical review. *Music Therapy Perspectives*, *35*(2), 131–143. https://doi.org/10.1093/mtp/miw026

Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (2nd ed., Vol. 1, pp. 419–493). John Wiley & Sons, Inc.

Petrides, K. V., Frederickson, N., & Furnham, A. (2004). The role of trait emotional intelligence in academic performance and deviant behavior at school. *Personality and Individual Differences*, *36* (2), 277–293. https://doi.org/10.1016/S0191-8869(03)00084-9

Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, *15*(6), 425–448. https://doi.org/10.1002/per.416

Phan, H. P. (2017). *The self-systems: Facilitating personal well-being experiences at school. *Social Psychology of Education: An International Journal*, *20*(1), 115–138. https://doi.org/10.1007/s11218-016-9350-1

Plutchik, R., & Kellerman, H. (Eds.). (1983). *Emotions in early development*. Academic Press. https://doi.org/10.1016/C2013-0-11314-1

*Polan, J. C., Sieving, R. E., & McMorris, B. J. (2013). Are young adolescents' social and emotional skills protective against involvement in violence and bullying behaviors? *Health Promotion Practice*, *14* (4), 599–606. https://doi.org/10.1177/1524839912462392

Porter, S., McConnell, T., McLaughlin, K., Lynn, F., Cardwell, C., Braiden, H., Boylan, J., & Holmes, V. (2017). Music therapy for children and adolescents with behavioural and emotional problems: A randomised controlled trial. *Journal of Child Psychology and Psychiatry*, *58*(5), 586–594. https://doi.org/10.1111/jcpp.12656

*Qualter, P., Whiteley, H. E., Hutchinson, J. M., & Pope, D. J. (2007). Supporting the development of emotional intelligence competencies to ease the transition from primary to high school. *Educational Psychology in Practice*, *23*(1), 79–95. https://doi.org/10.1080/02667360601154584

*Reyers, M. R., Brackett, M. A., Rivers, S. E., Elbertson, N. A., & Salovey, P. (2012). The interaction effects of program, training, dosage, and implementation quality on targeted student outcomes for the RULER approach to social and emotional learning. *School Psychology Review*, *41*(1), 82–99. https://doi.org/10.1080/02796015.2012.12087377

*Rubenstein, L. M., Hamilton, J. L., Stange, J. P., Flynn, M., Abramson, L. Y., & Alloy, L. B. (2015). The cyclical nature of depressed mood and future risk: Depression, rumination, and deficits in emotional clarity in adolescent girls. *Journal of Adolescence*, *42*, 68–76. https://doi.org/10.1016/j.adolescence.2015.03.015

*Qualter, P., Pool, L. D., Gardner, K. J., Ashley-Kot, S., Wise, A., & Wols, A. (2015). The emotional self-efficacy scale: Adaptation and validation for young adolescents. *Journal of Psychoeducational Assessment*, *33*(1), 33–45. https://doi.org/10.1177/0734282914550383

*Renshaw, T. L. (2017). Technical adequacy of the positive experiences at school scale with adolescents. *Journal of Psychoeducational Assessment*, *35*(3), 323–335. https://doi.org/10.1177/0734282915627920

Rydell, A.M., Berlin, L., & Bohlin, G. (2003). Emotionality, emotion regulation, and adaptation among 5- to 8-year-old children. *Emotion*, *3*(1), 30–47. https://doi.org/10.1037/1528–3542.3.1.30

Salmela-Aro, K. (2011). Stages of adolescence. In B. Bradford Brown & M. J. Prinstein (Eds.), *Encyclopedia of adolescence* (pp. 360–368). Academic Press. https://doi.org/10.1016/B978-0-12-373951-3.00043-0

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, *9*(3), 185–211. https://doi.org/10.2190/DUGG-P24E-52WK-6CDG

Santrock, J. W. (2008). *Adolescence*. McGraw-Hill Higher Education.

Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S.-J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). Adolescence: A foundation for future health. *The Lancet*, *379*(9826), 1630–1640. https://doi.org/10.1016/S0140-6736(12)60072-5

Shamseer, L., Moher, D., Clarke, M., Ghersi, D., Liberati, A.,Petticrew, M., . . . Whitlock, E. (2015, January 2). Preferred reporting items for systematic review and meta-analysis protocols (prisma-p) 2015: Elaboration and explanation. *BMJ (Online)*. BMJ Publishing Group. https://doi.org/10.1136/bmj.g7647

Shuman, J., Kennedy, H., DeWitt, P., Edelblute, A., & Wamboldt, M. (2016). Group music therapy impacts mood states of adolescents in a psychiatric hospital setting. *The Arts in Psychoterapy*, *49*, 50–56. https://doi.org/10.1016/j.aip.2016.05.014

*Stange, J. P., Alloy, L. B., Flynn, M., & Abramson, L. Y. (2013). Negative inferential style, emotional clarity, and life stress: Integrating vulnerabilities to depression in adolescence. *Journal of Clinical Child & Adolescent Psychology*, *42*(4), 508–518. https://doi.org/10.1080/15374416.2012.743104

*Top, N., Liew, J., & Luo, W. (2017). Family and school influences on youths´behavioral and academic outcomes: Cross-level interactions between parental monitoring and character development curriculum. *The Journal of Genetic Psychology: Research and Theory on Human Development*, *178*(2), 108–118. https://doi.org/10.1080/00221325.2017.1279118

Social Insurance Institution of Finland. (2017). *Kelan kuntoutustilasto*. Kela. https://helda.helsinki.fi/handle/10138/234527

Studies marked with an asterisk were included in the review.

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., Lewin, S., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, *169*(7), 467–473. https://doi.org/10.7326/M18-0850

*Trinidad, D. R., Unger, J. B., Chou, C. P., & Anderson Johnson, C. (2004). The protective association of emotional intelligence with psychosocial smoking risk factors for adolescents. *Personality and Individual Differences*, *36*(4), 945–954. https://doi.org/10.1016/S0191-8869(03)00163-6

Uhlig, S., Janse, E., & Scherder, E. (2018). "Being a bully isn't very cool . . . ": Rap & sing music therapy for enchanced emotional self-regulation in an adolescent school setting- a randomized controlled trial. *Psychology of Music, 2018*, *46*(4), 568–587. https://doi.org/10.1177/0305735617719154

Waldemar, J. O. C., Rigatti, R., Menezes, C. B., Guimarães, G., Falceto, O., & Heldt, E. (2016). *Impact of a combined mindfulness and social-emotional learning program on fifth graders in a Brazilian public school setting. *Psychology and Neuroscience*, *9*(1), 79–90. https://doi.org/10.1037/pne0000044

Waldon, E. G., & Gattino, G. (2018). Assessment in music therapy -Introductory considerations. In S. Lindahl Jacobsen, E. G. Waldon, & G. Gattino (Eds.), *Music Therapy Assessment* (pp. 21–73). Jessica Kingsley Publishers.

Walker, L. O., & Avant, K. C. (2014). *Strategies for theory construction* (5th ed.). PEARSON.

Wasserman, N. M. (1972). Music therapy for the emotionally disturbed in a private hospital. *Journal of Music Therapy*, *9*(2), 99–104. https://doi.org/10.1093/jmt/9.2.99

Wells, N. F. (1988). An individual music therapy assessment procedure for emotionally disturbed young adolescents. *The Arts in Psychotherapy*, *15*(1), 47–54. https://doi.org/10.1016/0197-4556(88)90051-2

Wheeler, B. (2018). Assessment in music therapy –Foreword. In S. Lindahl Jacobsen, E. G. Waldon, & G. Gattino (Eds.), *Music therapy assessment* (pp. 10–17). Jessica Kingsley Publishers.

Wigelsworth, M., Humphrey, N., Kalambouka, A., & Lendrum, A. (2010). A review of key issues in the measurement of children's social and emotional skills. *Educational Psychology in Practice*, *26*(2), 173–186. https://doi.org/10.1080/02667361003768526

*Wigelsworth, M., Lendrum, A., & Humphrey, N. (2013). Assessing differential effects of implementation quality and risk status in a whole-school social and emotional learning programme: Secondary SEAL. *Mental Health and Prevention*, *1*(1), 11–18. https://doi.org/10.1016/j.mhp.2013.06.001

Yurgelun-Todd, D. (2007). Emotional and cognitive changes during adolescence. *Cognitive Neuroscience, 17*(2), 251–257. https://doi.org/10.1016/j.conb.2007.03.009

Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology, 25*(1), 82–91. https://doi.org/10.1006/ceps.1999.1016

Zins, J. E., & Elias, M. J. (2006). Social and emotional learning. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 1–13). National Association of School Psychologists.

Zins, J. E., Weissberg, R. P., Wang, M. P., & Walberg, H. J. (2004). *Building academic success on social and emotional learning: What does the research say?* Teachers College Press.

II

PROMOTING EMOTIONAL SKILLS IN EARLY ADOLESCENTS WITH MENTAL HEALTH CONDITIONS IN MUSIC THERAPY – A CONTENT ANALYSIS OF FOCUS GROUP INTERVIEWS

by

Maija Salokivi, Sanna Salanterä, Suvi Saarikallio & Esa Ala-Ruona, 2023

Routledge
Taylor & Francis Group

ORIGINAL RESEARCH ARTICLE

🔓 OPEN ACCESS · Check for updates

Promoting emotional skills in early adolescents with mental health conditions in music therapy – a content analysis of focus group interviews

Maija Salokivi [ID][a], Sanna Salantera [ID][b], Suvi Saarikallio [ID][c] and Esa Ala-Ruona [ID][c]

[a]Department of Music, Art and Culture Studies, University of Jyväskylä, Jyväskylä, Finland; [b]Department of Nursing Science, University of Turku, Turku, Finland; [c]Department of Music, Art and Culture Studies, University of Jyväskylä, Jyväskylä, Finland

ABSTRACT

Introduction: Music therapy is actively used with early adolescents in relation to their emotional skill development. Yet, the conceptualization of emotional skills is typically not systematically addressed in therapeutic practice. This study examined music therapists' views on the progress of emotional skills when working with early adolescents with mental health conditions. The study also explored what kind of methods the therapists use with the target group, and the applicability of a previously published conceptual model.

Method: We conducted a deductive-inductive content analysis of transcripts from four focus group interviews among 13 professional music therapists.

Results: The therapists concluded that the progress of the emotional skills of their clients can be seen both in daily functioning as well as the client's functioning in therapy. The selection of therapy methods was broad and included both music-based and non-music-based methods. Therapists considered the presented conceptualization of emotional skills to be valid, but had difficulty examining their practices using all levels of the model. Several practical features were identified that were considered beneficial for the therapists in clinical practice.

Discussion: This study adds to knowledge about the progress of emotional skill development, working methods, and useful perspectives for working on emotional skills in early adolescents with mental health conditions. The conceptual model of emotional skills can offer a tool for helping music therapists define, observe and analyse emotional skills in the therapy context.

Introduction

Early adolescents (approximate age 11–13 years) are in the middle of many biological, cognitive, and socio-emotional changes (Salmela-Aro & Levesque, 2011; Sawyer et al., 2012). Mentally, early adolescents start to be more proactive, more able to self-regulate

and more self-reflective (Bandura, 2018). They start to solve more abstract problems, develop hypotheses, and are able to consider consequences of different hypotheses (Carr, 2015). However, many early adolescents struggle with the balanced development from childhood to adolescence and have mental health conditions.

According to the World Health Organization (WHO), 20 per cent of children and adolescents have mental health conditions, such as depression, anxiety, behavioural disorders, and developmental disabilities, and these conditions are the major causes of illness and disability among young people (10–19 years) (World Health Organization, 2021). WHO (2021) estimates that half of all mental health conditions start by the age of 14 years. Therefore, early adolescence is a particularly meaningful time to focus on mental health. Mental health conditions have diverse effects in early adolescents' life, such as difficulties in schoolwork, school absences, and use of intoxicants (WHO, 2021; Zins et al., 2006). Early adolescents' mental health conditions are often related to a lack of emotional and interaction skills (Gonçalves et al., 2019; Parker et al., 2006).

Emotional skills of early adolescents

Emotional and interaction skills generally include how people understand emotions of their own or others, how they express their internal states, needs, and desires and how they manage emotional and social life situations (Malti & Cheah, 2021). During early adolescence, the development of emotional and interaction skills is associated with greater emotional reactivity, individuals' ability to reflect more on emotions and assess the acceptability and expression of emotions, and to develop strategies to manage emotions in a new way (Davey et al., 2008; Steinberg, 2005).

In scientific literature, the practical and detailed definition of the term "emotional skills" has been unclear, and many overlapping terms have been used inconsistently (Humphrey et al., 2007; Matthews et al., 2002; Wigelsworth et al., 2010). There are also differences in whether the emotional skills are approached as merely emotional (e.g. Saarni, 1999) or as a combination of social and emotional skills (e.g. Denham et al., 2003, 2012). When Salokivi et al. (2021) conducted a scoping review to define the term "emotional skills" in the context of early adolescence, they found 15 different emotional skills-related key terms from the scientific literature. They originally chose the term "emotional skills" because it is a generic term that is used daily in Finland by medical, rehabilitation, and educational professionals. Finally, based on the results of the scoping review and a conceptual analysis of terms related to emotional skills, they identified six components of emotional skills in early adolescents: (a) expressing, (b) monitoring, (c) identifying, (d) understanding, (e) regulating emotions, and (f) the ability to use emotional information (i.e. implication component). The implication component is composed of two parts: (a) the ability to use emotional information on an individual level for developing and establishing positive self-management, and (b) the ability to use emotional information on a social level for developing and establishing positive relationships (Salokivi et al., 2021). The developed conceptual model (a conceptual model is an idea or concept presented in the form of a diagram or other illustration [Corsini, 2016]) highlights the different components of emotional skills, but does not highlight the order of development of the skills or the relationships between the components. Salokivi's et al. (2021) conceptual model of emotional skills in early adolescents serves as the framework for this study. The model is presented in Figure 1.
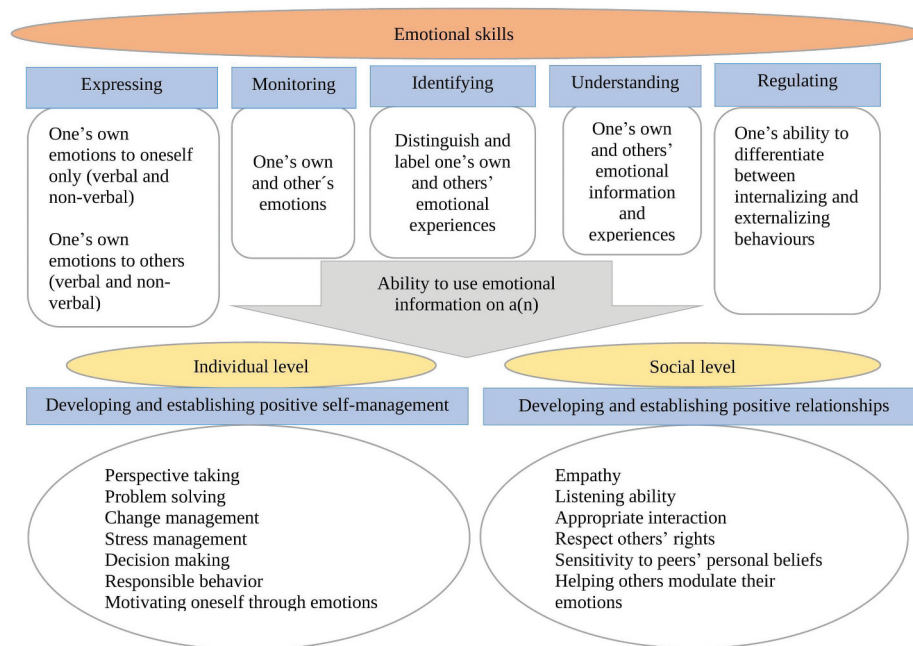
Emotional skills

Expressing	Monitoring	Identifying	Understanding	Regulating
One's own emotions to oneself only (verbal and non-verbal) One's own emotions to others (verbal and non-verbal)	One's own and other's emotions	Distinguish and label one's own and others' emotional experiences	One's own and others' emotional information and experiences	One's ability to differentiate between internalizing and externalizing behaviours

Ability to use emotional information on a(n)

Individual level — Developing and establishing positive self-management

Perspective taking
Problem solving
Change management
Stress management
Decision making
Responsible behavior
Motivating oneself through emotions

Social level — Developing and establishing positive relationships

Empathy
Listening ability
Appropriate interaction
Respect others' rights
Sensitivity to peers' personal beliefs
Helping others modulate their emotions

Figure 1. Components of early adolescents' emotional skills (Salokivi et al., 2021).

Music therapy among early adolescents with mental health conditions

In Finland, children and adolescents are the largest client group in music therapy, and most of them have mental health conditions (Social Insurance Institution of Finland, 2020). They have behavioural problems, difficulties in emotional regulation, fears, challenging life situations, or low self-esteem (Finnish Society for Music Therapy, 2021). Research on the effectiveness of music therapy as a treatment for early adolescents (11–14 yrs.) with mental health conditions is relatively limited, but a few studies have reported many beneficial effects. Music therapy can reduce anxiety (Hendricks et al., 1999) and depression (Chen et al., 2019), influence mood state (Shuman et al., 2016), increase emotional responsiveness (Wasserman, 1972), reduce impulsiveness and increase self-regulation (Layman et al., 2002; Uhlig et al., 2018) and assist in developing a self-image (Friedlander, 1994). Gold et al. (2004) published a meta-analysis of the effectiveness of music therapy in the treatment of children and adolescents with psychopathological problems. The analysis showed that music therapy had a significant, medium or large effect on health. The analysis did not disaggregate the impact of music therapy by age group in children and adolescents, so the study does not highlight the impact of therapy on early adolescents in particular.

Music therapy methods in use for early adolescents with mental health conditions

Music therapy methods used in music therapy for early adolescents with mental health conditions have not been systematically studied. However, music therapy methods among early adolescents in general have been categorized into the following domains:

live songs (choosing, singing, playing, and writing), improvisation (instrumental and vocal), pre-recorded music (listening, discussion, and relaxation), and musical games (McFerran, 2010). These methods can be further categorized into receptive and active methods. In receptive methods, the client listens to pre-recorded or live performed music, and in active methods clients create music through voice, instruments, or song writing (Geipel et al., 2018). These methods vary depending on the therapist's orientation and the client's interests.

When considering the studies that have reported positive effects of music therapy among early adolescents (11–14 yrs.), both receptive and active methods have been used. Methods include music listening (Chen et al., 2019; Gold et al., 2017; Layman et al., 2002; Shuman et al., 2016), improvisation (Gold et al., 2017; Shuman et al., 2016), singing and rapping (Chen et al., 2019; Uhlig et al., 2018) and playing many kinds of instruments (Layman et al., 2002; Shuman et al., 2016).

Promotion of early adolescents' emotional skills is an essential component of the music therapist's work. Since early adolescents are the largest client group served by music therapists in Finland, research on this topic is of practical relevance. It is also justified to focus the research specifically on early adolescents rather than on adolescents in general. The age range of young people is wide, from 10 to 19 years (WHO, 2021), and studies have shown differences, for example, in emotional regulation between age groups (Zimmermann & Iwanski, 2014). In music therapy, it is important to identify the early adolescents' emotional skills and any changes or progress in them. It should be possible to monitor progress systematically. However, research on this topic is scattered and no studies have presented a compendium, e.g. a conceptual model, which summarizes emotional skills. There are also no studies on what indicators of progress in emotional skills music therapists monitor or what methods they use in their work to develop emotional skills in early adolescents.

Study objectives

This study investigated Finnish music therapists' views on the progress of emotional skill development in music therapy for early adolescents with mental health conditions. Additionally, the study explored what kind of therapeutic methods music therapists use with the target group. The study also investigated the applicability of the conceptual model of emotional skills in early adolescents (Salokivi et al., 2021) to the clinical practice of music therapy.

Methods

The authors used focus group interviews and a deductive-inductive content analysis study design for exploring the music therapists' experiences and perceptions.

Rationale for study design

The focus group interview enables in-depth discussion even if the number of participants is relatively small; it helps to understand what and how people think about a specific area of interest, and it also enables interaction between the participants (Barbour, 2007). Interaction between informants helps to explore and clarify

participants' perspectives, experiences, concerns and needs, and also helps informants to challenge their perspectives (Kitzinger & Holloway, 2005; Liamputtong, 2011).

Participants

Music therapists with at least five years of working experience were recruited using a Webropol internet questionnaire (version 31.07.2020 MPO; Webropol, 2020). At least five years of clinical experience was considered necessary to understand the development of emotional skills during the therapy process. Webropol – questionnaire was distributed among all professional members (227) of the Finnish Society of Music Therapy in August 2020. Webropol is a web-based survey and reporting tool. Music therapists who work with early adolescents were asked to answer the questionnaire about diagnostic client groups they work with, duration of working experience and the willingness to participate in a focus group interview. The study's fact sheet and data protection notification were attached. One reminder about the questionnaire was sent. The questionnaires were conducted anonymously. After a reminder, 33 music therapists answered the questionnaire and 13 therapists were willing to participate in focus group interviews. Participants were of different genders, different age groups, with varying lengths of work experience. Most of the participants worked as private music therapists, as is often the case in Finland. They also worked in different geographical areas of Finland. All participants were of Finnish background. Participants who consented to the focus group interview provided their contact details and in return received the focus group interview questions, a survey fact sheet and a privacy notice in relation to the focus group interview.

Setting

Four video-recorded focus groups were organized as online video-meetings in August 2020, due to geographical distances and restrictions related to the COVID-19 pandemic. Four groups were considered sufficient because studies show that 80% of new knowledge is gained after two or three focus groups (Guest et al., 2017).

The number of the participants in groups varied between two and five. The maximum group size of five members was set beforehand because such a group size allows participants to be active members of the discussion and to explore the issues in detail (Liamputtong, 2011; Smithson et al., 2008). One group included only two members because of a last-minute cancellation. The three other groups had three to five members. No one else was present in the focus group meetings besides the participants and the researcher.

Focus group interviews

The focus group interviews were semi-structured, which provided an opportunity to focus the discussion on predetermined theoretical issues, but also allowed for new insights to emerge if they were generated by the focus groups (Brinkmann, 2013). The interview was divided into four main questions based on the research questions: (a) Where do you see the progress of emotional skills in music-based functioning? (b) Where do you see the progress of emotional skills in non-music-based functioning? (c) What music-based methods do you use when you are working on emotional skills? (d) What non-music-based methods do you use when you are working on emotional skills? All four questions contained five sub-questions based on the components of

emotional skills (Salokivi et al., 2021) (see Figure 1). Focus group interview questions are presented in Supplementary Material 1.

The implication component of emotional skills "*ability to use emotional information*" was not included in the questions because of its broad content. It would have expanded the set of questions, and the focus group interviews' time limit would have been exceeded. The original English-language components of the emotional skills were translated into Finnish. Commonly used terms in Finnish were used in the translation. The translation was largely based on a suggestion from the translation app DeepL (DeepL GmbH, 2017). The translation application DeepL is an AI-based application that uses artificial neural networks. All the focus group interviews were video recorded completely and transcribed verbatim manually.

The applicability of the emotional skills domains to music therapy practice was assessed on the basis of the focus group interview data. Interviewees had been given the emotional skills components to familiarize themselves with beforehand. At the beginning of the interviews, the conceptual model was verbally outlined to the interviewees, the purpose of the study was explained, and the interviewees were given the opportunity to ask follow-up questions before the interviews began. These discussions and the data from the focus group interviews were used to explore how the participants applied the emotional skills components in their music therapy practice.

The first author, who acted as moderator/interviewer, was a doctoral researcher and had previous experience with focus group interviewing. She had worked several years as a music therapist and was very familiar with the subject of the study. She had met most of the participants previously in other professional contexts. The interviewer's role was to ask the pre-determined set of questions, moderate the discussion if needed, take care of more reticent participants' engagement, follow the saturation of the discussion within one question, and lead the interview forward within the time limit. The time limit was 1.5–2 hours, depending on the group size (Liamputtong, 2011).

Ethical considerations

The study received approval from the Human Sciences Ethics Committee of University of Jyväskylä (Number: 746/13.00.04.00/2020). The first Webropol survey was conducted anonymously with the study's fact sheet and data protection notification. Participants received the study's fact sheet, data protection notification, and an informed consent form. Data were saved in two separate hard disks with a secure login. The researcher who was an interviewer was the only person who handled the focus group data before anonymization. The participants were not identifiable in the transcriptions or the research report.

Deductive-inductive content analysis

The qualitative content analysis was conducted using a deductive approach, applying the components of emotional skills (see Figure 1) as a conceptual starting point, but also using an inductive analysis method, which allowed the participants' experiences of working methods in therapy and progress in emotional skill development to be described (Elo & Kyngäs, 2008). The first author of the study conducted the analysis. The starting point for coding was the four main domains and 20 sub-domains presented as part of the research questions (a, b, c, d) and openness for new domains.

Table 1. Deductive-inductive content analysis process in this study.

1. Transcribing verbatim the four focus interviews
2. Listening to interviews again and making any necessary corrections to the transcriptions
3. Reading through the transcripts several times before starting the coding process
4. Coding in Atlas.ti based on four predefined main domain and 20 sub-domains. At the same time, openness to new domains. In the end: 36 sub-areas and 194 codes
5. Analyzing the compiled data
6. Verifying domains and codes. In the end: one new main domain with several sub-domains. Final: five main domains, 27 sub-domains and 132 codes
7. Reviewing the result of the coding by co-researcher
8. Analyzing the compiled data
9. Refocusing on the main research questions so that the aim of the study is clear before reporting the results
10. Outlining the results section of the article based on the data collected
11. Reviewing the content of the findings by going back to the focus group data at both code and citation level and re-reading the transcripts of the interviews
12. Revising the results section in the manuscript and adding quotes from the focus group interviews
13. Comparing the result of the coding with the result part of the manuscript by a co-researcher
14. Reflecting on the outcome of this research in the discussion section of the article, based on previous research and theories

Coding was accomplished with Atlas.ti, version 8.4.5 (2019). Atlas.ti is a qualitative data analysis and research software program that enables the researcher to move forward and backward in the data and structure text and organize domains, codes and quotes.

The first coding round produced four main domains, 36 sub-domains and 194 codes. After analyzing the gathered information, domains and codes were particularized. At the end, the process produced five main domains, 27 sub-domains and 132 codes (main codes and sub-domains are presented in supplementary materials). One new domain was: useful perspectives for working on emotional skills in early adolescents with mental health conditions. Main domains and sub-domains, after analyzing focus group interview, are presented in Supplementary Material 2.

A second researcher (the fourth author of this study) reviewed all the main domains, sub-domains and the result of coding. At a later stage of the analysis, he reviewed the coding again and how the results of the coding were reported. Throughout the deductive and inductive analysis, the first and last authors were in constant dialogue, and all members of the research team held regular meetings on the progress of the analysis (Elo et al., 2014). In addition, the first author, who conducted the analysis, wrote a memo on the steps of the analysis process. Table 1 shows the steps of the deductive-inductive content analysis in this study to give the reader an idea of the process.

Results

The findings of the study are grouped into four main categories, three based on the three main aims of the study (indicators of progress in emotional skill development, methods used, and applicability of the conceptual model to clinical practice) and a fourth based on the perspectives that the content analysis highlights as useful for music therapists.
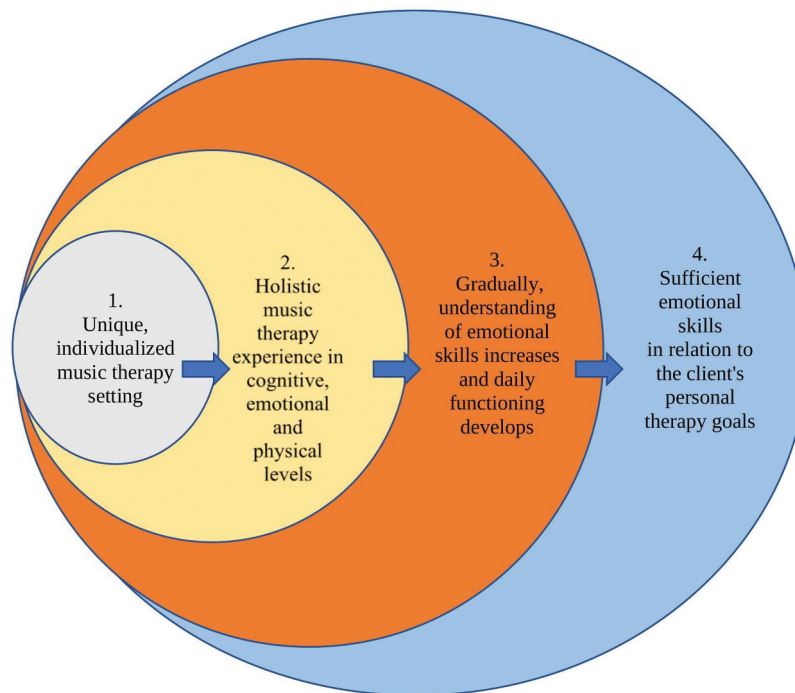
Figure 2. Multilevel, holistic music therapy process in emotional skills.

Progress of emotional skill development in music-based and non-music based functioning

Participants described the development of emotional skills as a multi-level and holistic experience. Music therapy provides cognitive, emotional and physical experiences through music-based and non-music-based methods. Gradually, the client achieves an understanding of emotional skills, which progressively leads to desirable changes in daily function. This process is illustrated in Figure 2.

Progress in music-based functioning

The progress in emotional expression was reflected in a general increase in listening and playing music, but also in a gradual increase in personal content in self-composed songs and music. In addition, the client's expression became more versatile and courageous. Interviewee H describes: "Changes happen in rhythm, tone, and volume, and often the music becomes more melodic."

In emotional regulating, progress was seen in an increase of structured musical expressing and functioning, and in being able to concentrate on working for a longer time. Interviewee J states:

> It goes from chaos to containment. The starting point is often quite a mess. When the client can play a basic beat with drums, it is possible to play, for example, faster or slower and then it is possible to take control of both the music and the emotions it conveys.
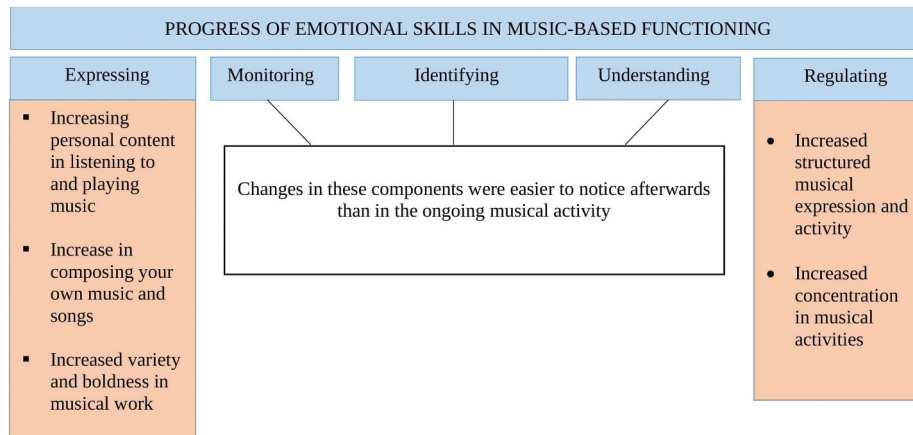
Figure 3. Progress of emotional skill development in music-based functioning.

Progress in other areas of emotional skills, monitoring emotions, identifying emotions, and understanding emotions, were considered to be areas where progress was easier to see in retrospect, not necessarily in ongoing musical activities. In general, many interviewees described that often at the beginning of the process their clients want to use existing, composed music and songs. Then, when the client feels comfortable enough, they may start to improvise, write songs and compose music. Interviewee C commented: "At first I use existing songs or melodies, which gives a feeling of security. Improvisation can be so revealing, and I think on some level young people understand it." The progression of emotional skills in music-based activities is shown in Figure 3.

Progress in non-music-based functioning

In non-music-based functioning, progress in emotional expression and emotion regulation was the easiest for participants to describe. Progress in emotional expression was reflected in increased verbal and other emotional expression, as well as in the ability to analyse one's own experiences. Personal content in therapy work both increased and deepened. Interviewee G stated: "The client is more courageous in expressing himself, more relaxed and more confident in the therapy situation. If there are some difficult situations, the client is willing to start exploring them and is able to be in those feelings. "

The client no longer negates or avoids exploring difficult issues. The use of imagination increased, the clients were braver in general, and an interaction was experienced to be more positive. Interviewees reported that sometimes towards the end of the therapy process, music-based methods were not used at all and verbal discussions were the main method of intervention.

In emotional regulating within non-music-based functioning, progress was seen in the ability to concentrate more, tolerate uncertainty and disappointments, be more present in the situation and interaction, manage aggression, and accept guidance for their functioning. The therapy situation was more peaceful in its entirety.

Figure 4. Progress of emotional skill development in non-music-based functioning.

The progress in the components emotional monitoring, emotional identifying and emotional understanding could be seen in the content of verbal discussions and in the client's ability to recognize their own emotions and those of others. When emotional understanding develops further, an ability to empathize increases and it is easier to distinguish one's own emotions from those of others. Interviewee J described the change in interaction:"It is most important that you are able to listen . . . the music, the therapist . . . The clients start to consider . . . . When you develop in listening, you can identify, regulate, and understand these things."

The indicators of progress of emotional skill development in non-music-based functioning is presented in Figure 4.

General progress, without being categorized under specific areas of emotional skills, was reflected in many ways in non-music-based work. The client commits to therapy, was able to make independent choices and share important moments with the therapist more often and was more skilful in steering one's own functioning. In addition, the clients were more interested in their life in general, their self-esteem was better, and social skills developed positively both in and out of therapy. In addition, the clients' social roles were better balanced, as was feedback from outside therapy. The therapists interviewed had experienced that it was quite typical at the beginning of therapy that feedback from the client could vary in different social contexts and could be contradictory. Gradually, the feedback became more consistent as the therapy process progressed. The therapists described all these positive changes mentioned above as the result of emotional integration.

Music-based and non-music-based therapy methods

Participants worked with a wide range of methods on all the emotional skills. In most cases, the methods were not targeted at a specific component of the emotional skills.

Music-based methods

Participants worked in the forms of playing, singing, and listening to music. Playing and singing could occur with improvised music, precomposed music, or the songs the client composed in the therapy. Listening to music could entail listening to existing recordings or recordings of the client's own improvisation or singing. Participants described how listening to the client's recordings provided an opportunity to delve deeper into the meanings the client gave to the music; inner expression was tangible and could be explored from a distance. Interviewee H described how both improvisation and finished compositions enabled work on emotional skills such as monitoring and identifying: "Improvisation is a good example of how it happens: it is a process that happens as improvisation progresses. I think it's quite natural to follow the emotions in a piece of music and then identify those emotions."

This study was conducted among Finnish music therapists and some locally developed methods were mentioned as being very typical. These methods were Figurenotes (Kaikkonen et al., 2016) and Storycomposing (Hakomäki, 2020). Both can be used in composing, playing, and singing. In Figurenotes, the notation is very concrete, and the notes are marked with colours and shapes. Notation includes all the necessary musical information, such as rests, pitches and octaves (Kaikkonen et al., 2016). Storycomposing is a model of musical interaction that provides a means of expressing experiences and emotions. The client's musical creation is notated using Figurenotes, which allows the content of the musical creation to be reviewed afterwards. The musical creation is also presented to a selected group of people (Hakomäki, 2020).

When working with emotion regulation skills, participants emphasized the use of musical structure and learning. Through motivational music training, clients gain a multi-level experience of emotion regulation on a mental, physical, and cognitive level. The structure of music provides a ready-made framework for this. Participants also felt that musical interaction in general was a good way to practice regulation. Interviewee I reflected on this aspect: "Regulation happens in the interaction between us, the client starts to understand that we are doing this together, and it makes sense to listen and adjust one's own playing to match the other's music in a reciprocal way."

Non-music-based methods

Participants used many other methods besides music without setting them under certain emotional skills' component. Therapists use, for example, plays, board games, computer games, puppet theatre, and drama. These were used together with music but also separately. Interviewee L told about drama and puppet theatre:

> I use a lot of drama and a puppet theatre; it gives a possibility to get distance from the emotions and explore them. Often, emotions are already in the playing even if the client is not recognizing them yet in oneself.

Additionally, storytelling, painting, drawing, filmmaking, and cards with the emotion-related pictures were used. Interviewee D described this kind of cards:

> If the clients' emotional expression is difficult and scanty, I may ask them to choose a card. Then we start to explore how we could play or draw the emotion, or we find a song that would reflect it somehow. This often works well, and we can start to talk about the emotions or play music based on a certain feeling.

Photography, family portraits, physical expression, dance and relaxation techniques were used. Vibroacoustic and physioacoustic methods were also mentioned as part of therapy as a physical way of dealing with different experiences. In the area of regulation, participants discussed the ability to manage stress and how to teach concrete ways to do so. Interviewee M described, "I try to get the client to notice where in their body they feel a certain emotion. I also teach how to release anxiety or tension from the body, for example. I teach stress management and relaxation management." Participants mentioned that in stress management, the client needed many more emotional skills than just regulation, such as monitoring, identifying, and understanding.

Playing games was also mentioned as a way of regulating emotions. Participants described that games were often motivating and appealing to clients, and that they allowed them to practice emotion regulation and learn to tolerate disappointment and frustration. In addition, one participant described how to make use of YouTube videos that the client brings to therapy. The participant felt that the videos provided opportunities to monitor and identify emotions and allowed for an understanding of the client's personal interests. The participant sought to extract emotional content from the videos and direct the client's attention to emotionally important themes in the videos.

All interviewees felt that oral discussion was an important part of the music therapy process. Verbal discussion can be associated with other methods, but sometimes it is the main method depending on the client's choice. However, verbal discussion can be difficult for some clients and sometimes their emotional vocabulary may be limited. Part of the therapeutic work may involve expanding the vocabulary so that the client can express emotions more effectively. Verbal discussion opens up the possibility of exploring feelings afterwards. Overall, versatile interaction skills were perceived as important, as interviewee M stated, "Clients need musical expression, but also words and pictures. Improving all kinds of communication skills is one of the main goals of my work."

Applicability of the conceptual model of the components of emotional skills in music therapy practice

Therapists were not used to analyzing emotional skills in as much detail as the way they are categorized in the components. Participants described well how to work with the regulation and expression of emotional skills and how these skills progressed. Participants had difficulty analyzing progress in other emotional skills. Participants identified the other components and understood their content, but found it difficult to identify a specific moment when identifying, monitoring or understanding emotions occurred in practice. They felt that these skills could be observed retrospectively in the progress of the client's daily functioning, rather than, for example, in an ongoing musical moment.

Useful perspectives for working on emotional skills in early adolescents with mental health conditions

Participants pointed out that early adolescents often want to control the therapy situation, and their desire to avoid dealing with emotions can be strong at the

beginning. Interviewees stressed that this avoidance is a kind of precondition. Interviewee H described this stage: "With early adolescents, it is important that they tolerate emotions. . . tolerate the tension that comes with emotions . . . so that they can be there, in those situations."

Participants stated that modelling and mirroring are workable methods in therapy. Participants model and mirror the emotional contents in music and in discussion with the emotional and verbally unsure early adolescents. For example, in discussion this can happen by presenting reflective questions, such as what interviewee M stated: "I may say that: Somehow, I think that this music may tell about these kinds of feelings, what do you think about it, could it be so or do you think that I'm wrong?" Participants stated that it is important to increase the emotional vocabulary of the client through these kinds of reflective questions.

In general, participants stressed the importance of a positive working atmosphere where clients can experience success and acceptance. They emphasized playfulness and humour as a working attitude of the therapist. Therapists avoided imposing strict rules on the therapy situation, only the necessary rules, such as not harming oneself, the therapist or the equipment.

Participants highlighted strongly the importance of a family-centred working approach. The early adolescents with mental health conditions are often wounded in their family relationships, and it can take time before they are ready to trust the therapist. Participants stated that an interaction with the therapist should offer a substitutive experience for the client. The training and practice of emotional skills takes place first in the therapeutic relationship, then elsewhere. However, early adolescents spend most of their time in their families and often the guardians have similar types of problems with interactions and emotional skills. It is important that when new skills are learned in therapy, the guardians are also ready to support and develop their own emotional and interaction skills. Interviewee B pondered: "It is important that guardians understand that therapy is looking for the change and this change will need guardians' support, even it is not necessarily easy for them. They are the enablers of the change."

Participants also gave their views on how to help therapists to cope with their work in emotional therapy. Because of the intensity of the therapy work and its emotional strain, the participants said that self-reflecting on the transference feelings and having regular clinical supervision were crucial for the therapist's own well-being. Clinical supervision helps to observe the therapy situations afterwards and allows for new viewpoints from the supervisor.

Participants also discussed the possibility of terminating therapy. When are the emotional skills sufficient? In general, it is obvious that developing emotional skills continues throughout an individual's life. The interviewee therapists stated that feedback from outside of therapy played a crucial role in indicating a positive progress in emotional skills. They emphasized the importance of discussions with guardians and teachers about how the client applied the emotional skills at home and at school. In addition, a client's self-evaluation and the therapist's impression and experience of working with the client provided additional information.

Discussion

Progress of emotional skill development in music therapy

This study describes the progress of emotional skill development in music therapy as a multi-level and holistic process that encompasses the mental, physical and cognitive levels (see Figure 2). The client's ability to function in daily life was the main indicator of progress. Progress in emotional skill development was identified as an outcome of "emotional integration". Emotional integration seems to be the same as the theoretical term "affect integration". Affect integration is defined as an essential component of mental health that encompasses the functional integration of affect, cognition, and behaviour (Solbakken et al., 2011). It refers to the ability to use the adaptive properties of distinct affect in personal adjustment (Taarvig et al., 2015). Many psychotherapeutic approaches highlight the integration of affect, cognition and behaviour as the main area of therapeutic progress (Solbakken et al., 2011).

Participants described many beneficial effects of music therapy, especially in the emotional skills expressing and regulating (see Figure 3 and 4). Also, for example, Montello and Coons (1998) and Patterson et al. (2015) have reported that music therapy facilitates self-expression among early adolescents and adolescents with mental health conditions. Layman et al. (2002) and Uhlig et al. (2018) have reported reduced impulsivity and increased self-regulation.

The study presents a point of view that the possibility of using improvisation, song writing, and composing with the early adolescent might sometimes be one indicator of progress. The possibility to work with these methods may reflect an increased sense of safety and trust in the therapy process and the client's readiness to go deeper into personal contents.

Methods for developing emotional skills in early adolescents

All possible music-based and non-music-based methods are in use both simultaneously and separately. Both musical and verbal work are essential. This study supports the idea that an eclectic approach is best practice when working on emotional skills for early adolescents with mental health conditions (Gold et al., 2004; McFerran, 2010). The multimethod eclectic approach means that techniques from different models or theories are mixed and the therapist chooses from a variety of music therapy techniques to meet individual client's needs (Gold et al., 2004).

On the basis of this study, it is not possible to target specific working methods to a particular area of emotional skills. However, in the regulating component, participants emphasized using more musical structure and learning. The structural element of music offered a natural multilevel (mental, physical, and cognitive) working base for training regulating.

Applicability of the conceptual model of the components of emotional skills in music therapy practice

Based on the impression from the focus group interview data, the professionals interviewed in this study accepted the emotional skills components (see Figure 1)

as framework for analyzing emotional skills, however, as explained in this article, they experienced challenges in responding in it. The conceptual model was new, and the therapists were not used to analyzing the emotional skills-related therapy work in such detail. Based on these data, working with the regulating and expressing components are at the very core of emotional skills-related music therapy work and professionals are most aware of how to work with these components and follow the progress.

In most cases, participants in focus group interviews discussed all components of emotional skills simultaneously, even when asked about a specific component. This finding may reflect the holistic nature of music therapy work, but it may also reflect the therapists' clinical style of analysis and decision making. Applying clinical decision-making in a therapy context means making decisions about whether a client needs therapy, which methods would be best, and how to assess whether the treatment is effectively meeting the client's needs (Marsh et al., 2018). Hence, it might be important for the therapists to be more conscious of all the emotional skills and how to observe them in clinical decision-making.

The "implication component of emotional skills" (Salokivi et al., 2021) was not a part of the focus group questions and the content analysis because of the component's broadness. However, interestingly, the participants underlined the fluency of daily functioning as the best indicator of the progress of emotional skills. This may reflect the fact that the implicational component of emotional skills is also an integral part of the components of emotional skills. The music therapy research also presents that music therapy is a useful approach to support the same skills that are mentioned under the implication component, for example, self-management (Gadberry & Harrison, 2016; Keen, 2004; Strehlow, 2009; van der Walt & Baron, 2006; Whitehead Pleaux et al., 2007) and social skills' progress among children and adolescents (Chen et al., 2019; Gooding, 2011; Pater et al., 2021; Pavlicevic et al., 2014).

Useful perspectives for working on emotional skills in early adolescents with mental health conditions

Participants in this study also identified certain characteristics of working with early adolescents. Early adolescents often avoid dealing with emotions. Early adolescents' and children's willingness to avoid emotion-eliciting situations has also been reported in the case of anxiety disorders (Mathews et al., 2014; Suveg & Zeman, 2004). Early adolescents with mental health conditions need a lot of emotional support and a strong sense of security in the therapeutic relationship, to be ready to deal with personal emotional issues and move forward in the therapeutic process.

The findings suggest that modelling and mirroring are effective methods in therapy practice when working with early adolescents. The idea of modelling is based on Bandura's Social Learning Theory which emphasizes learning by observing, modelling, and imitating the behaviour, attitudes, and emotional reactions of others (Bandura & Goslin, 1969). In the context of therapy, modelling offers the client new patterns of behaviour and coping strategies (Rosenthal et al., 1978). By mirroring, the therapist communicates attentiveness, but also prepares the ground for a more personal expression by the client. By mirroring, the therapist also helps the client to become more aware of what has just been expressed (Ferrara, 1994).

Our analysis highlighted playfulness and humour as the therapist's working attitude when working among early adolescents. This attitude has been suggested for working

with young people in general (McFerran, 2010; McFerran, 2020) Playfulness and humour promote connection and build a relationship between client and therapist (Amir, 2005; Haire & Macdonald, 2019).

The study also highlights the importance of a family-centred working approach. The same approach has also been recommended in the music therapy literature earlier (Jacobsen & Thompson, 2016; Oldfield & Flower, 2008). Working together with parents and guardians allows for the application of new emotional skills for daily life.

In addition, when working with the target group and emotional skills-related issues, the results of this study emphasize the importance of reflecting transference feelings and clinical supervision. Transference feelings can be divided into transference and countertransference feelings. The first is a dynamic of the client's conscious and unconscious feelings relating to the therapist, and the second is the therapist's conscious and unconscious feelings relating to the client (Bruscia, 1998). Related clinical supervision and its importance as a means of examining transference of the therapist is important (Bruscia, 1998). The importance of professional supervision is also noted in Jackson (2008), Kennelly et al. (2012), and Kennelly et al. (2016).

The results of the study also provide music therapists with perspectives on how to assess when emotional skills are sufficient. In general, smooth daily functioning was the most important indicator of adequate emotional skills. In addition, a shared understanding of the client's situation between therapist, client, caregivers, and teacher is essential. In the psychotherapy literature, criteria for the end of therapy include the recovery of appropriate emotional functioning, age-appropriate functioning, a sense of emotional integration, improvement in social relationships, and the ability to think emotionally about self and others (Lanyado et al., 2010). Participants in this study also described these changes. Such general improvements are also mentioned in a meta-analysis by Gold et al. (2004), where music therapy is reported to reduce behavioural problems and improve overall development in children with psychopathological problems.

Future research

In the future, this research could be extended by larger samples of music therapists, within internationally and culturally diverse contexts. Further research is also needed to explore the relationship between music therapy and sufficiently good daily functioning. Identified skill progress and therapy methods may vary between different diagnostic groups, and further research is needed to provide more accurate and targeted information. The conceptual model of the components of emotional skills in early adolescents was created based on studies of the general population of early adolescents, so variation may exist among clients with special needs, and these variations need to be explored.

Critical reflections on the research

To increase the trustworthiness of the study, we used Lincoln and Guba's qualitative research criteria including reflections around credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1986). Credibility creates confidence that the results are truthful and credible for the participants. The credibility of this study was enhanced by participants' opportunity for discussion and critique during the interviews, independent

review of the coding and results by another researcher, regular peer discussions with the research team, and regular discussions of the study at dissertation seminars. In addition, the focus group interviews followed recommended focus group interview procedures and the interviewer had prior knowledge of the research methodology. Dependability means a logical and reasoned continuum of data collection, data analysis and theory generation, the quality of which can be assessed and monitored by other researchers. In this study, dependability has been reinforced by describing the research methods and steps as precisely as possible, and by using direct quotes from the interviews in the research report. Confirmability gives confidence that other researchers will confirm the results. The confirmability of this study is enhanced by regular reviews of research choices, both at dissertation seminars and with the research team. In addition, during the focus group interviews, the interviewer regularly checked with the participants that she had correctly understood the content produced by the interviewees. Transferability refers to the extent to which results can be generalized or transferred to other contexts or settings. The transferability of this study is enhanced by appropriate sampling and at least partial (full data saturation will probably never be possible) data saturation in focus groups. The discussion moved on to the next question only when the previous question did not bring up any new perspectives. Moreover, all four interview groups raised fairly similar points of view, and no completely new aspects emerged to any significant extent as the group changed.

To increase the trustworthiness and quality of the study, methodological reporting follows the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007) and the EPICURE guidelines for qualitative research (Stige et al., 2009). The COREQ checklist and the EPICURE evaluation report are presented in the supplemental materials of this study (Suppl. 3 and 4).

Despite the effort to produce high quality and dependable research data, research always contains the potential for varying degrees of bias. A broad target population (mental health conditions) may introduce biases by excluding features relevant to a particular diagnostic group. Bias can also be caused by the cultural context. This study, conducted in a northern welfare state among white Finnish music therapists, reflects their perception of the subject and the results may not be applicable to other cultures.

Conclusions

This study provides an overview of progress in emotional skill development and music therapy methods when working with early adolescents with mental health problems. The study presents a conceptual model of the components of emotional skills as one possible framework for music therapy work, which can help music therapy researchers to structure their research on emotional skills. The model will also help music therapists to structure their thinking and reflections on working with emotional skills with early adolescents. The study also provides many useful considerations for practical music therapy work when working with early adolescents with mental health problems to develop emotional skills.

Disclosure statement

The authors report no conflict of interest.

Funding

Notes on contributors

Maija Salokivi MA, is a music therapist and a doctorand of University of Jyväskylä, Finland. She has been working several years with children and adolescents with psychiatric and neurological problems. The aim of her PhD dissertation is to develop an assessment instrument for emotional skills of early adolescents in the context of music therapy. Her research interests include assessment, assessment development, emotional skills, children and adolescents.

Sanna Salanterä PhD, RN, Professor of Clinical Nursing Science, Vice Dean of the Faculty of Medicine at University of Turku and Nurse Director at Turku University Hospital. She is specialized in clinical nursing science, nursing and patient decision-making, smart technology in nursing, pain nursing, health service research, children's nursing and empowering patient education. She leads the research programs "Health producing basic care with smart technology" and "Health producing health promotion with smart technology". Both projects consist of several sub projects.

Suvi Saarikallio PhD, currently a professor of Music Education and Docent of Psychology at Music, Art and Culture studies at University of Jyväskylä, Finland. She is a member of music psychology research team and widely conducts research and teaching in music psychology, music education, and music therapy. She is currently the President of Finnish Society for Music Education (FiSME) and the Secretary General of European Society for the Cognitive Sciences of Music (ESCOM).

Esa Ala-Ruona PhD, Associate Professor, music therapist and psychotherapist working as a senior researcher at the Music Therapy Clinic for Research and Training, at University of Jyväskylä, Finland. His research interests are music therapy assessment and evaluation, and in studying musical interaction and clinical processes in improvisational psychodynamic music therapy, and furthermore the progress and outcomes of rehabilitation of stroke patients in active music therapy. Currently he is the president of the European Music Therapy Confederation. He regularly gives lectures and workshops on music therapy both nationally and internationally.

ORCID

Maija Salokivi ⓘ http://orcid.org/0000-0003-0886-3532
Sanna Salantera ⓘ http://orcid.org/0000-0003-2529-6699
Suvi Saarikallio ⓘ http://orcid.org/0000-0002-4647-8048
Esa Ala-Ruona ⓘ http://orcid.org/0000-0003-3873-5179

References

Amir, D. (2005). Musical humour in improvisational music therapy. *Australian Journal of Music Therapy, 16*, 3–24. https://search.informit.org/doi/10.3316/informit.409894769542038
Atlas.ti (8.4.5). 2019. *ATLAS.ti scientific software development GmbH (Version 8.4.5)* [Mac educational license]. https://atlasti.com/
Bandura, A. (1969). Social-learning theory of identificatory processes. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 213–262). Rand McNally.
Bandura, A. (2018). Toward a psychology of human agency: Pathways and reflections. *Perspectives on Psychological Science, 13*(2), 130–136. https://doi.org/10.1177/1745691617699280
Barbour, R. (2007). *Doing focus groups*. SAGE Publications Ltd. https://doi.org/10.4135/9781849208956
Brinkmann, S. (2013). *Understanding qualitative research*. Oxford University Press.
Bruscia, K. E. (1998). An introduction to music psychotherapy. In K. E. Bruscia (Ed.), *The dynamics of music psychotherapy* (pp. 18–29). Barcelona Publishers.

Carr, A. (2015). *The handbook of child and adolescent clinical psychology*. Routledge. https://doi.org/10.4324/9781315744230

Chen, C. J., Chen, Y. C., Ho, C. S., & Lee, Y. C. (2019). Effects of preferred music therapy on peer attachment, depression, and salivary cortisol among early adolescents in Taiwan. *Journal of Advanced Nursing*, *75*(9), 1911–1921. https://doi.org/10.1111/jan.13975

Corsini, R. (2016). *The Dictionary of Psychology*. Routledge. https://doi.org/10.4324/9781315781501

Davey, C. G., Yücel, M., & Allen, N. B. (2008). The emergence of depression in adolescence: Development of the prefrontal cortex and the representation of reward. *Neuroscience and Biobehavioral Reviews*, *32*(1), 1–19. https://doi.org/10.1016/j.neubiorev.2007.04.016

DeepL GmbH. (2017). *DeepL Translator*. https://www.deepl.com/translator

Denham, S. A., Bassett, H., Mincic, M., Kalb, S., Way, E., Wyatt, T., & Segal, Y. (2012). Social-emotional learning profiles of preschoolers' early school success: A person-centered approach. *Learning and Individual Differences*, *22*(2), 178–189. https://doi.org/10.1016/j.lindif.2011.05.001

Denham, S. A., Blair, K. A., Demulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, *74* (1), 238–256. https://doi.org/10.1111/1467-8624.00533

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open*, *4*(1). https://doi.org/10.1177/2158244014522633.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62* (1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Ferrara, K. W. (1994). *Therapeutic ways with words*. Oxford University Press.

Finnish Society for Music Therapy. (2021, April 8). *Musiikkiterapiaa eri asiakasryhmille*. https://www.musiikkiterapia.net/index.php/mita-musiikkiterapia/musiikkiterapia-eri-asiakasryhmille

Friedlander, L. H. (1994). Group music psychotherapy in an inpatient psychiatric setting for children: A developmental approach. *Music Therapy Perspectives*, *12*(2), 92–97. https://doi.org/10.1093/mtp/12.2.92

Gadberry, A. L., & Harrison, A. (2016). Music therapy promotes self-determination in young people with autism spectrum disorder. *International Journal of School & Educational Psychology*, *4*(2), 95–98. https://doi.org/10.1080/21683603.2016.1130580

Geipel, J., Koenig, J., Hillecke, T. K., Resch, F., & Kaess, M. (2018). Music-based interventions to reduce internalizing symptoms in children and adolescents: A meta-analysis. *Journal of Affective Disorders*, *225*, 647–656. https://doi.org/10.1016/j.jad.2017.08.035

Gold, C., Saarikallio, S., Crooke, A. H. D., & Skewes McFerran, K. (2017). Group music therapy as a preventive intervention for young people at risk: Cluster-randomized trial. *Journal of Music Therapy*, *54*(2), 133–160. https://doi.org/10.1093/jmt/thx002

Gold, C., Voracek, M., & Wigram, T. (2004). Effects of music therapy for children and adolescents with psychopathology: A meta-analysis. *Journal of Child Psychology and Psychiatry*, *45*(6), 1054–1063. https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x

Gonçalves, S. F., Chaplin, T. M., Turpyn, C. C., Niehaus, C. E., Curby, T. W., Sinha, R., & Ansell, E. B. (2019). Difficulties in emotion regulation predict expressive symptom trajectory from early to middle adolescence. *Child Psychiatry & Human Development*, *50*(4), 618–630. https://doi.org/10.1007/s10578-019-00867-8

Gooding, L. F. (2011). The effect of a music therapy social skills training program on improving social competence in children and adolescents with social skills deficits. *Journal of Music Therapy*, *48*(4), 440–462. https://doi.org/10.1093/jmt/48.4.440

Guest, G., Namey, E., & McKenna, K. (2017). How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field Methods*, *29*(1), 3–22. https://doi.org/10.1177/1525822X16639015

Haire, N., & Macdonald, R. (2019). Humour in music therapy: A narrative literature review. *Nordic Journal of Music Therapy*, *4*(28), 273–290. https://doi.org/10.1080/08098131.2019.1577288

Hakomäki, H. (2020). Storycomposing: An interactive and creative way to express one's own musical inventions. In *Creativity and the Child* (pp. 147–156). BRILL. https://doi.org/10.1163/9781848880061_015

Hendricks, C. B., Robinson, B., Bradley, L. J., & Davis, K. (1999). Using music techniques to treat adolescent depression. *Journal of Humanistic Counseling, Education and Development*, *38*(1), 39–46. https://doi.org/10.1002/j.2164-490x.1999.tb00160.x

Humphrey, N., Curran, A., Morris, E., Farrell, P., & Woods, K. (2007). Emotional intelligence and education: A critical review. *Educational Psychology*, *27*(2), 235–254. https://doi.org/10.1080/01443410601066735

Jackson, N. A. (2008). Professional music therapy supervision: A survey. *Journal of Music Therapy*, *45* (2), 192–216. https://doi.org/10.1093/jmt/45.2.192

Jacobsen, S. L., & Thompson, G. (Eds.). (2016). *Music therapy with families: Therapeutic approaches and theoretical perspectives*. Jessica Kingsley Publishers.

Kaikkonen, M. (2016). Music for all: Everyone has the potential to learn music. In D. V. Blair & K. A. McCord (Eds.), *Exceptional music pedagogy for children with exceptionalities: International perspectives*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780190234560.001.0001

Keen, A. W. (2004). Using music as a therapy tool to motivate troubled adolescents. *Social Work in Health Care*, *39*(3–4), 361–373. https://doi.org/10.1300/J010v39n03_09

Kennelly, J., Baker, F., Morgan, K., & Daveson, B. (2012). Supervision for music therapists: An Australian cross-sectional survey regarding views and practices. *Australian Journal of Music Therapy*, *23*, 41–57. https://www.proquest.com/scholarly-journals/supervision-music-therapists-australian-cross/docview/1112922992/se-2?accountid=14774

Kennelly, J. D., Daveson, B. A., & Baker, F. A. (2016). Effects of professional music therapy supervision on clinical outcomes and therapist competency: A systematic review involving narrative synthesis. *Nordic Journal of Music Therapy*, *25*(2), 185–208. https://doi.org/10.1080/08098131.2015.1010563

Kitzinger, J. (2005). Focus group research: Using group dynamics to explore perceptions, experiences and understandings. In I. Holloway (Ed.), *Qualitative research in health care* (pp. 56–70). Open University Press.

Lanyado, M., & Horne, A. (2010). The therapeutic setting and process. In M. Lanyando & A. Horne (Eds.), *The handbook of child and adolescent psychotherapy: Psychoanalytic approaches* (pp. 157–174). Routledge. https:Ṛ0.43249780203877616

Layman, D. L., Hussey, D. L., & Laing, S. J. (2002). Music therapy assessment for severely emotionally disturbed children: A pilot study. *Journal of Music Therapy*, *39*(3), 164–187. https://doi.org/10.1093/jmt/39.3.164

Liamputtong, P. (2011). *Focus Group Methodology: Principles and Practice*. SAGE Publications Ltd. https://doi.org/10.4135/9781473957657

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, *1986*(30), 73–84. https://doi.org/10.1002/ev.1427

Malti, T., & Cheah, C. S. L. (2021). Toward complementarity: Specificity and commonality in social-emotional development: Introduction to the special section. *Child Development*, *92*(6), e1085–1094. https://doi.org/10.1111/cdev.13690

Marsh, J. K., De Los Reyes, A., & Lilienfeld, S. O. (2018). Leveraging the multiple lenses of psychological science to inform clinical decision making: Introduction to the special section. *Clinical Psychological Science*, *6*(2), 167–176. https://doi.org/10.1177/2167702617736853

Mathews, B. L., Kerns, K. A., & Ciesla, J. A. (2014). Specificity of emotion regulation difficulties related to anxiety in early adolescence. *Journal of Adolescence*, *37*(7), 1089–1097. https://doi.org/10.1016/j.adolescence.2014.08.002

Matthews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth*. MIT Press. https://doi.org/10.7551/mitpress/2704.001.0001

McFerran, K. (2010). *Adolescents, music and music therapy: Methods and techniques for clinicians, educators and students*. Jessica Kingsley Publishers.

McFerran, K. (2020). Adolescents and music therapy: Contextualized recommendations for research and practice. *Music Therapy Perspectives*, *38*(1), 80–88. https://doi.org/10.1093/mtp/miz014

Montello, L., & Coons, E. E. (1998). Effects of active versus passive group music therapy on preadolescents with emotional, learning, and behavioral disorders. *Journal of Music Therapy*, *35* (1), 49–67. https://doi.org/10.1093/jmt/35.1.49

Oldfield, A., & Flower, C. (Eds.). 2008. *Music therapy with children and their families*. Jessica Kingsley Publishers.

Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (pp. 419–493). John Wiley & Sons, Inc.

Pater, M., Spreen, M., & van Yperen, T. (2021). The developmental progress in social behavior of children with autism spectrum disorder getting music therapy. A multiple case study. *Children and Youth Services Review*, *120*, 105767. https://doi.org/10.1016/j.childyouth.2020.105767

Patterson, S., Duhig, M., Darbyshire, C., Counsel, R., Higgins, N. S., & Williams, I. (2015). Implementing music therapy on an adolescent inpatient unit: A mixed-methods evaluation of acceptability, experience of participation and perceived impact. *Australasian Psychiatry*, *23*(5), 556–560. https://doi.org/10.1177/1039856215592320

Pavlicevic, M., O'Neil, N., Powell, H., Jones, O., & Sampathianaki, E. (2014). Making music, making friends: Long-term music therapy with young adults with severe learning disabilities. *Journal of Intellectual Disabilities*, *18*(1), 5–19. https://doi.org/10.1177/1744629513511354

Rosenthal, T. L., & Bandura, A. (1978). Psychological modeling: Theory and practice. In S. L. Garfield & A. E. Begin Chichester (Eds.), *Handbook of psychotherapy and behavior change: An empirical analysis* (pp. 621–658). John Wiley.

Saarni, C. (1999). *The Development of Emotional Competence*. Guildford Press.

Salmela-Aro, K. (2011). Stages of Adolescence. In R. J. R. Levesque (Ed.), *Encyclopedia of Adolescence* (pp. 360–368). Elsevier Inc. https://doi.org/10.1016/B978-0-12-373951-3.00043-0

Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2021). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. *Nordic Journal of Music Therapy*, *31*(1), 63–88. https://doi.org/10.1080/08098131.2021.1903977

Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S. -J., Dick, B., Ezeh, A. C., & Patton, G. C. (2012). *Adolescence: A foundation for future health. The Lancet*, *379*(9826), 1630–1640. https://doi.org/10.1016/S0140-6736(12)60072-5

Shuman, J., Kennedy, H., Dewitt, P., Edelblute, A., & Wamboldt, M. Z. (2016). Group music therapy impacts mood states of adolescents in a psychiatric hospital setting. *The Arts in Psychotherapy*, *49*, 50–56. https://doi.org/10.1016/j.aip.2016.05.014

Smithson, J. (2008). Focus Groups. In P. Alasuutari, L. Bickman, & J. Brannen (Eds.), *The SAGE Handbook of Social Research Methods* (pp. 357–430). SAGE Publications Ltd. https://doi.org/10.4135/9781446212165

Social Insurance Institution of Finland. (2020). *Social Insurance Institution's rehabilitation statistics*. https://helda.helsinki.fi/handle/10138/315063?locale-attribute=en

Solbakken, O. A., Hansen, R. S., Havik, O. E., & Monsen, J. T. (2011). Assessment of affect integration: Validation of the affect consciousness construct. *Journal of Personality Assessment*, *93*(3), 257–265. https://doi.org/10.1080/00223891.2011.558874

Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, *9*(2), 69–74. https://doi.org/10.1016/j.tics.2004.12.005

Stige, B., Malterud, K., & Midtgarden, T. (2009). Toward an agenda for evaluation of qualitative research. *Qualitative Health Research*, *19*(10), 1504–1516. https://doi.org/10.1177/1049732309348501

Strehlow, G. (2009). The use of music therapy in treating sexually abused children? *Nordic Journal of Music Therapy*, *18*(2), 167–183. https://doi.org/10.1080/08098130903062397

Suveg, C., & Zeman, J. (2004). Emotion regulation in children with anxiety disorders. *Journal of Clinical Child & Adolescent Psychology*, *33*(4), 750–759. https://doi.org/10.1207/s15374424jccp3304_10

Taarvig, E., Solbakken, O. A., Grova, B., & Monsen, J. T. (2015). Affect consciousness in children with internalizing problems: Assessment of affect integration. *Clinical Child Psychology and Psychiatry*, *20*(4), 591–610. https://doi.org/10.1177/1359104514538434

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, *19*(6), 349–357. https://doi.org/10.1093/intqhc/mzm042

Uhlig, S., Jansen, E., & Scherder, E. (2018). "Being a bully isn't very cool … ": Rap & sing music therapy for enhanced emotional self-regulation in an adolescent school setting – a randomized controlled trial. *Psychology of Music*, *46*(4), 568–587. https://doi.org/10.1177/0305735617719154

van der Walt, M., & Baron, A. (2006). The role of music therapy in the treatment of a girl with pervasive refusal syndrome: Exploring approaches to empowerment. *Australian Journal of Music Therapy*, *17*, 35–53. https://www.proquest.com/scholarly-journals/role-music-therapy-treatment-girl-with-pervasive/docview/208663882/se-2?accountid=14774

Wasserman, N. M. (1972). Music therapy for the emotionally disturbed in a private hospital. *Journal of Music Therapy*, *9*(2), 99–104. https://doi.org/10.1093/jmt/9.2.99

Webropol. (2020, July 31). *Webropol Internet Questionnaire*. https://new.webropolsurveys.com/

Whitehead Pleaux, A., Zebrowski, N., M Baryza, M. J., & Sheridan, R. (2007). Exploring the effects of music therapy on pediatric pain: Phase 1. *Journal of Music Therapy*, *44*(3), 217–241. https://doi.org/10.1093/jmt/44.3.217

Wigelsworth, M., Humphrey, N., Kalambouka, A., & Lendrum, A. (2010). A review of key issues in the measurement of children's social and emotional skills. *Educational Psychology in Practice*, *26*(2), 173–186. https://doi.org/10.1080/02667361003768526

World Health Organization. (2021, August 9). *Adolescent mental health*. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Zimmermann, P., & Iwanski, A. (2014). Emotion regulation from early adolescence to emerging adulthood and middle adulthood: Age differences, gender differences, and emotion-specific developmental variations. *International Journal of Behavioral Development*, *38*(2), 182–194. https://doi.org/10.1177/0165025413515405

Zins, J. E., & Elias, M. J. (2006). Social and emotional learning. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 1–13). National Association of School Psychologists.

III

VALIDATION OF ITEM POOL FOR EARLY ADOLESCENTS' EMOTIONAL SKILLS ASSESSMENT IN MUSIC THERAPY

by

Maija Salokivi, Sanna Salanterä, Suvi Saarikallio & Esa Ala-Ruona 2023

Nordic Journal of Music Therapy (Online publication)

DOI: 10.1080/08098131.2023.2245433

Routledge
Taylor & Francis Group

ORIGINAL RESEARCH ARTICLE

🔓 OPEN ACCESS   Check for updates

Validation of item pool for early adolescents' emotional skills assessment in music therapy

Maija Salokivi (ID)[a], Sanna Salanterä[b], Suvi Saarikallio[c] and Esa Ala-Ruona[d]

[a]Department of Music, Art and Culture Studies, University of Jyväskylä, Jyväskylä, Finland; [b]Clinical Nursing Science, University of Turku, Turku, Finland; [c]Music Education, University of Jyväskylä, Jyväskylä, Finland; [d]Music Therapy, University of Jyväskylä, Jyväskylä, Finland

ABSTRACT

Introduction: Evaluating the validity of the content is an essential step in developing an assessment tool, including an analysis of the quality of the items within the tool. This study describes the content validation of items in the early adolescents' emotional skills assessment tool in a music therapy context.

Methods: Content validity was evaluated based on relevance scores provided by two expert panels. Psychometric scores were obtained by calculating item-specific content validity index (I-CVI), scale-specific content validity index (S-CVI) and modified kappa score. In addition, the coverage and understandability of the items were evaluated.

Results: The validation process identified 60 valid items distributed across six components of emotional skills: expressing, monitoring, identifying, understanding, regulating and the ability to use emotional information. Item I-CVI scores ranged from 0.80 to 1.00, the scale content validity index (S-CVI) was 0.95, the modified kappa score ranged from 0.65 to 1.00, item coverage at scale level was 1.00, and item understandability was 0.92.

Discussion: The items developed in the study have high validity and are scientifically grounded. The items can be a first step towards a validated assessment tool to evaluate emotional skills in early adolescents. The added value of this study is that the set of items developed is the first to cover all the components of emotional skills identified in the literature. Therefore, music therapists can use the items to observe in more detail the different dimensions of emotional skills in early adolescents.

Introduction

Early adolescents (around 11–13) undergo many biological, externally visible changes, but their inner emotional development is also progressing. These changes in emotional development include greater emotional reactivity; an increased ability to reflect on

emotions and to evaluate the acceptability and expression of emotions; and new strategies to manage emotions (Davey et al., 2008; Steinberg, 2005). Unfortunately, many early adolescents have a range of mental health conditions that complicate their years of adolescence. Mental health conditions such as depression, anxiety, behavioural disorders, and developmental disability are the leading causes of illness and disability among young people (10–19 years old). Unfortunately, half of these conditions begin already by the time a young person reaches 14 years of age (World Health Organization, 2021). Children and young people with mental health conditions face a wide range of risks, including poor school performance, poor subjective emotional well-being, behavioural problems and adverse life events such as dropping out of school (Aviles et al., 2006; McLeod et al., 2012; Tempelaar et al., 2014). In addition, these mental health conditions are often accompanied by deficits in emotional and interpersonal skills (Gonçalves et al., 2019; Parker et al., 2006).

In Finland, where the authors of this study come from, early adolescents with mental health conditions are the largest group of music therapy clients. Early adolescents account for 60% of all children (0–15 years old) using music therapy, and 85% of the early adolescents in music therapy have mental health problems (Social Insurance Institution of Finland, 2017). The significant size of the client group, the importance of emotional skills in the lives of children and adolescents, and the practical benefits of music therapy with children and adolescents with mental health conditions (Geipel et al., 2018; Gold et al., 2004, 2007) are a justifiable reason to seek a validated assessment tool for the progress of early adolescents' emotional skills in a music therapy context. In addition, the requirement for evidence-based practice, the expectations of funders, and the desire of music therapists to communicate the impact and effectiveness of their work make the development of an assessment tool meaningful to the field (Cripps et al., 2016).

There is currently no validated and reliable assessment tool in music therapy for assessing emotional skills in early adolescents (Cripps et al., 2016). Moreover, existing assessment tools only consider a limited number of emotional skills and their different components, not all of which have been defined in the scientific literature (Salokivi et al., 2022). Existing music therapy assessment tools that are available for children and adolescents assess different aspects of emotional skills, such as emotional expression (Langan, 2009; Mackeith et al., 2011), emotional responsiveness (Layman et al., 2002), emotional constriction (Wells, 1988), social-emotional functioning or behaviour (Douglas, 2006; Goodman, 1989), affect range (Loewy, 2000), and differentiation, expression, regulation and self-awareness (Baxter et al., 2007).

This study uses the term "early adolescents' emotional skills" even though the English term "emotion" does not have an unambiguous meaning, and there is no scientific consensus on the definition of the term (Frijda, 2016; Izard, 2010; Lakoff, 2016). The term "emotion" is a multi-component and multi-level concept (Zachar, 2010), and it can be viewed as an everyday concept or as a scientific concept (Widen & Russell, 2010). The difference between an everyday and scientific concept can be examined by separating the descriptive and prescriptive definitions. The descriptive definition refers to the definition of a word in everyday life, and the prescriptive definition refers to the scientific concept of a word, which includes a set of events that scientific theory aims to explain (Widen & Russell, 2010). In this study, we use the descriptive definition of The APA Dictionary of Psychology of the word "emotion": "a complex pattern of reactions, including experiential, behavioural and physiological

elements, through which an individual attempts to process a personally significant issue or event" (American Psychological Association, 2023).

Validating the items of the assessment tool through an operationalisation process

The validity of an assessment tool means the extent to which it measures the characteristics of the issue being studied (Devon et al., 2007). The validity of the assessment tool includes content, construct and criterion validity (Lynn, 1986). Content validity is a prerequisite for other types of validity and should therefore be a priority for assessment developers (Zamanzadeh et al., 2015). Content validity assessment examines how well a sample of items captures the operational definition of a concept (Polit & Beck, 2006) and to what extent the items adequately represent the content domain (Carmines & Zeller, 1979; Yaghmaie, 2003).

This study presents the content validation process of an item pool used to assess emotional skills in early adolescents with mental health conditions in the context of music therapy. The research questions for this study are: What kind of item pool will be generated based on the results of previous studies (Salokivi et al., 2022, 2023)? Does the item pool have adequate content validity?

The progression of content validation of the item pool is presented through a five-step operationalisation process: (1) developing a theoretical definition; (2) specifying variables derived from the theoretical definition; (3) identifying observable indicators; (4) selecting means of measuring the indicators; and (5) evaluating the adequacy of the resulting operational definition (Waltz et al., 2016). The starting point (step 1) for the validation process is carefully determining the concept (Salkind, 2012). We reported on the process of concept definition in our previous study (Salokivi et al., 2022), in which the components of emotional skills in early adolescents were theoretically defined through a scoping review and concept analysis. The second (2) and third (3) steps of the operationalisation we reported in the study by Salokivi et al. (2023). In those steps, we applied the components of early adolescents' emotional skills to the music therapy clinical practice. We used focus group interviews and content analysis to explore how music therapists worked with the different components of emotional skills in early adolescents, what methods they use, and where they can see the progress of the emotional skills during the therapy process. This knowledge was a foundation for the next steps presented in this study: (4) selecting means of measuring the indicators and (5) evaluating the adequacy of the resulting operational definition. In step four, the item pool is formulated, and in step five, the adequacy of the created items is evaluated based on their psychometric values. Figure 1 shows the validation process for the items.

Methods

The item pool initially included 62 items, which fell within the six primary components of the conceptual model of emotional skills: expressing emotions; monitoring emotions; identifying emotions; understanding emotions; regulating emotions; and the ability to use emotional information for self-management and establishing social relationships (Salokivi et al., 2022). Each component contained several items. The number of items in the subcomponents ranged from four to 14. The first author of this study formulated the item pool based on the results of two previous studies
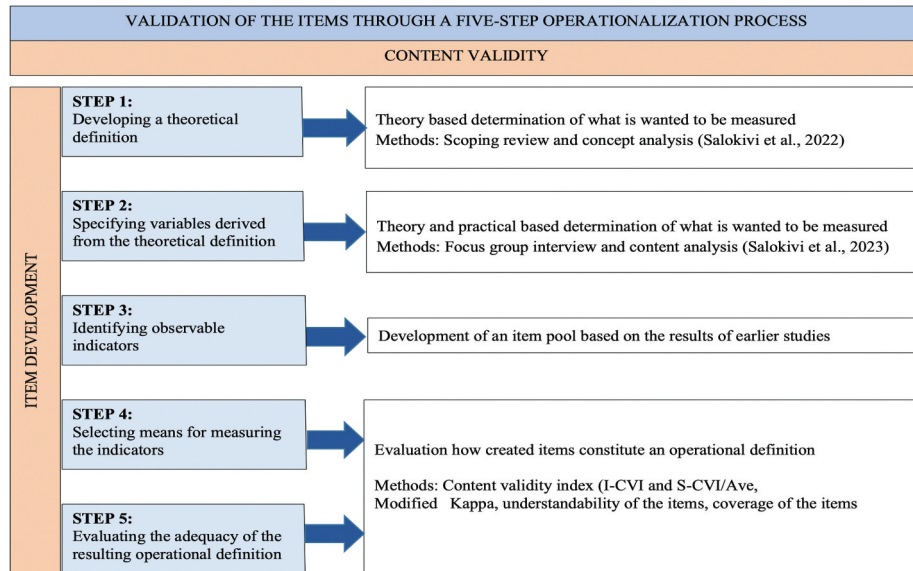
Figure 1. Validation of the items through a five-step operationalisation process.

(Salokivi et al., 2022, 2023). The senior researcher, also the second author of this article, commented on the items and suggested changes. After the items were re-edited, a final set of items was formed, and the content validity of these items was analysed.

Analysing items

The relevance of the items was studied based on the answers of expert panels through the Content Validity Index (CVI) and Modified Kappa. Psychometric scores were also calculated for the understandability of the items and coverage of the scale. In addition, qualitative written comments were collected from expert panellists to help further develop the questions where necessary.

Participants of the expert panels

Two groups of panellists were involved in the first round of the item evaluation for relevance, understandability, and coverage. One group comprised health researchers ($n = 8$), and the other comprised music therapy clinicians ($n = 8$). Health researchers represented theoretical expertise, and music therapists represented clinical expertise. The health researchers were doctoral researchers who volunteered to participate. Instrument development is a part of their education, and they are familiar with evaluating items, especially from the perspective of written form and understandability. Music therapists were volunteer clinicians who participated in an earlier phase of the research project and consented to participate in this phase of the study. They were specialists in the content and context. The responses of the music therapists and health researchers were

examined separately for possible divergences. The research team were second-round panellists ($n = 3$) and evaluated the understandability of the reformulated items when needed. The panellists were senior researchers with instrument development and music therapy expertise.

Content validity index

Content validity was calculated at the item level using the Item Content Validity Index (I-CVI) and the scale level with the Scale Content Validity Index (S-CVI) (Lynn, 1986). In this study, the I-CVI and S-CVI were examined as follows: The panels of experts were asked to rate each item on the scale regarding its relevance to the underlying concept (Polit & Beck, 2006). The developed questionnaire had a 4-point ordinal scale (1 = not relevant, 2 = somewhat relevant, 3 = quite relevant, and 4 = highly relevant) (Lynn, 1986; Waltz & Bausell, 1981).

The I-CVI was calculated as follows: the number of experts who gave the question a score of 3 or 4 divided by the total number of experts (Polit & Beck, 2006). The I-CVI had to be at least 0.78 for an item to be accepted. The recommended threshold for a panel of six to ten experts is 0.78 (Lynn, 1986). If the I-CVI of an item was less than 0.78 when the panellist groups' responses were calculated separately, both groups' average I-CVI determined whether the item was accepted.

The S-CVI in this study was an S-CVI/Ave (average), which is defined as the average I-CVI value at the scale level and is a recommendation for the S-CVI calculation when there are several members in the expert panel (Polit & Beck, 2006; Waltz & Bausell, 1981). S-CVI/Ave was calculated by summing the I-CVI values of the 3- and 4-classified items, divided by the total number of items. The value had to be at least .90 for the scale to be accepted (Polit & Beck, 2006).

Modified kappa

The modified kappa (k*) is the consensus among evaluators that the item is relevant and considers the possibility of chance agreement (Polit et al., 2007). The kappa values were evaluated to determine whether they were fair, good, or excellent (Cicchetti & Sparrow, 1981; Fleiss, 1971). Polit et al. provided scale developers with a ready-made table for estimating k* values based on the number of experts and their agreement. Scale developers can compare their survey I-CVI values with this table without having to calculate the modified kappa. This study used a pre-established table, which is presented in Table 1.

However, if the researcher wants to calculate the k* value, the first information needed is the subject's random agreement. The random agreement can be examined using a binomial random variable formula that calculates how often a given event occurs in a fixed number of trials or attempts (Polit et al., 2007; Ross, 2017):

$$P_c = \left[\frac{N!}{A!(N-A)!} \right] .5^N$$

Pc refers to the probability of chance agreement, N is the number of experts, and A is the number agreeing on good relevance. Sign !, after N and A, means that the number is a factorial function; in other words, one must multiply all whole numbers from the chosen number to 1 (for example, $3! = 3 \times 2 \times 1 = 6$). The second step is

Table 1. Evaluation of I-CVIs with different numbers of experts and agreement.

(1)	(2)	(3)a	(4)b	(5)c	(6)d
Number of Experts	Number Giving Rating of 3 or 4	1-CVI	Pc	k*	Evaluation
3	3	1.00	.125	I.00	Excellent
3	2	.67	.375	.47	Fair
4	4	1.00	.063	I.00	Excellent
4	3	.75	.25	.67	Good
5	5	1.00	.041	I.00	Excellent
5	4	.80	.156	.76	Excellent
6	6	1.00	.016	I.00	Excellent
6	5	.83	.094	.81	Excellent
6	4	.67	.234	.57	Fair
7	7	1.00	.008	I.00	Excellent
7	6	.86	.055	.85	Excellent
7	5	.71	.164	.65	Good
8	8	1.00	.004	I.00	Excellent
8	7	.88	.031	.88	Excellent
8	6	.75	.109	.72	Good
9	9	1.00	.002	I.00	Excellent
9	8	.89	.014	.89	Excellent
9	7	.78	.070	.76	Excellent

[a]I-CVI, item level content validity index.
[b]Pc (probability of a chance occurrence) was computed using the formula for a binomial random variable, with one specific outcome: $Pc = [N!/A! (N - A) !]*.5^N$ where N = number of experts and A = number agreeing on good relevance.
[c]$k*$ = kappa designating agreement on relevance: $k* = (1\text{-CVI} - pc)/(1 - pc)$.
[d]Evaluation criteria for kappa, using guidelines described in Cicchetti and Sparrow (1981) and Fleiss (1971): Fair = k of .40 to .59; Good = k of .60–.74; and Excellent = k > .74.
From "Polit et al. (2007), Is the CVI an acceptable indicator of content validity? Appraisal and recommendations". Copyright 2007 by John Wiley & Sons.

calculating the I-CVI (the proportion of agreements on relevance) and the probability of chance agreement (Polit et al., 2007).

Understandability and the coverage of the items

The panel of experts was asked to rate each item for understandability. The scale used was the same as in the relevance evaluation: a 4-point ordinal scale (1 = not clear, 2 = somewhat clear, 3 = quite clear, and 4 = highly clear). If the understandability of the item was < 0.78 (the same threshold value as in the relevance calculation), the item was reformulated and developed further with the second round's smaller group of senior researchers ($n = 3$) until the understandability of the item was at an acceptable level. Because of the small size of this group, a universal agreement was required before the item was accepted. In this context, the universal agreement meant that all panellists gave a score of 3 or 4 for the item.

The expert panellists had the opportunity to write a comment on each item if they wanted to clarify why the item was difficult to understand or if they wanted to give their recommendations for rewording the item. These open-ended qualitative comments were used to develop better items if the items still needed to receive an appropriate validity score in the first round.

The panels of experts were also asked to evaluate the items' coverage of the concept (emotional skills of early adolescents). The panellists received a short semi-structured questionnaire about coverage. The scale for the evaluation was a 4-point ordinal scale

(1 = strongly disagree, 2 = somewhat disagree, 3 = somewhat agree, and 4 = strongly agree) (David, 1992). They could also comment if they wanted to add or remove items or comment on something else concerning the item.

Translation of the items

The panellists were Finnish, and the original items were in Finnish. The final item pool's Finnish items were translated into English using DeepL Translator, a neural machine translator that uses an artificial neural network (DeepLGmbH, 2017). After translating the AI, a native speaker of both Finnish and English translated the English items back into Finnish. The result of the back-translation was compared to the original Finnish items, and if some of the items needed to be reworded to improve understandability, changes were made. However, the back-translation process did not significantly alter the English translation of the Deep L translator. The meanings of the items remained the same. The AI translation used "emotion" and "feeling" as parallel terms in English, while only one term was used in the original Finnish version. In the translated English items, the term "emotion" was retained. Thus, the final English language set of items was created.

Ethical considerations

The study received ethical approval from the Human Sciences Ethics Committee of the University of Jyväskylä (Number: 746/13.00.04.00/2020). Participants in expert panels received the study's fact sheet and data protection notification. The panellists were aware that they had the right to refuse to participate in the study or to discontinue participation if they wished, without penalty. Data were saved and stored in a secure data environment. The participants in the expert panel were not identifiable in the research report.

Results

The results of this study describe the content validity of the items in the item pool to be used to assess emotional skills in early adolescents. The items in the item pool were categorised according to the components of the emotional skills of early adolescents (Salokivi et al., 2022). The emotional skills components were: expressing, monitoring, identifying, understanding, and regulating emotions; and the ability to use emotional information both on an individual level to develop and establish positive self-management and on a social level to develop and establish positive relationships.

Content validity

Item content validity index, scale content validity index and modified kappa
After averaging the I-CVI values of the original 62 items between the groups, only one item had an I-CVI value below 0.78. This item was deleted before the full-scale content validity index, and modified kappa was calculated. When calculating the average of both panellists' groups, item-specific I-CVI values ranged from 0.80 to 1.00 for 61 items, which is an excellent result (Cicchetti & Sparrow, 1981; Fleiss, 1971). The more detailed results of the expert panels in terms of I-CVI scores for all 62 items were as
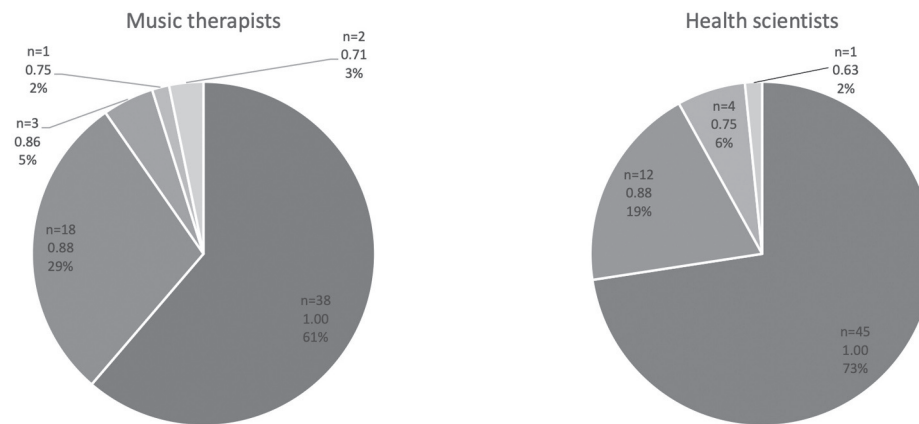
Figure 2. Percentage distribution of relevance scores for the I-CVI expert panels.

follows: Music therapists: 38 items 1.00, 18 items 0.88, three items 0.86, one item 0.75 and two items 0.71 and health researchers: 45 items 1.00, 12 items 0.88, four items 0.75 and one item 0.63. A detailed item-specific table of I-CVI relevance values and modified kappa values can be found in Table S1. The appendix contains all values examined for the items and is included as online supplemental material due to its large size. Figure 2 shows the I-CVI distributions of the expert panels as a percentage.

The set of items in the following stages of the study consisted of 61 items. The average of the S-CVI/Ave values of the panellist groups for the relevance of the 61 items was 0.95, which is an excellent result (Cicchetti & Sparrow, 1981; Fleiss, 1971). The modified kappa evaluation of the 61 items ranged from 0.65 to 1.00 (good to excellent), indicating an acceptable level of agreement (Cicchetti & Sparrow, 1981; Fleiss, 1971). Most items had excellent modified kappa values between 0.88–1.00 from both panellist groups. The expert group opinions were as follows. Music therapists: 38 items 1.00, 18 items 0.88, three items 0.85, and two items 0.65; health researchers: 45 items 1.00, 12 items 0.88, four items 0.72.

Understandability and the coverage of the items

The Content Validity Index for the understandability of the items and the overall scale was counted for relevance in the same way as the I-CVI and S-CVI/Ave. Understandability I-CVI values for the 61 tentative items yielded results between 0.63–1.00. Expert groups' opinions were as follows: music therapists: 27 items 1.00, 24 items 0.88, one item 0.86, eight items 0.75, and one item 0.63; health researchers: 35 items 1.00, 20 items 0.88, two items 0.75, and four items 0.63. Figure 3 presents the distribution of the I-CVI understandability results of the expert panels in percentages.

The understandability of the fifteen items was below the acceptable value of 0.78. When averaging the I-CVI scores of both expert groups for the understandability of these fifteen questions, the scores for the five items still ranged from 0.63 to 0.75 and were under the acceptable value of 0.78. Therefore, these five items went to a small group of senior experts for further review. The five items were reformulated to improve their understandability until a consensus score of 1.00, a universal agreement, was reached. One item did not reach a universal agreement on understandability and
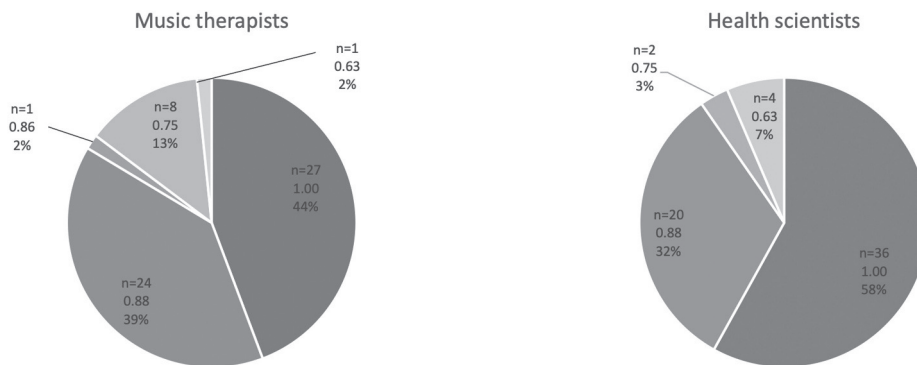
Figure 3. Percentage distribution of understandability scores for the I-CVI expert panels.

Table 2. Reformulation of the four items.

Original item	Reformulated item
3. Expressing emotions non-verbally by oneself	3. Expressing feelings by oneself when being alone (writing, making music, painting)
4. Personal contents when listening to or playing music	4. Expresses personal contents in music listened to or played
36. Musical expression is structured	36. Can play/sing in rhythm
37. Other expression is structured	37. Verbal expression is understandable

was removed from the set of items at this stage. Detailed information on all the I-CVI understandability values of the items is provided in Table S1. Table 2 presents the reformulation of the remaining four items that reached a universal agreement (1.00) among all senior experts.

After the understandability assessments described in the two previous paragraphs and the necessary rewording of the four items by a small group of panellists, the final set of 60 items with I-CVI values between 0.86 and 1.00 were selected. These final items are presented in Table S2. Next, the scale-level understandability of the final set of 60 items was counted by calculating the average understandability of the items. The average for understandability was 0.92.

In addition, the coverage of the concept was calculated, and the I-CVI was used to assess coverage. Both music therapists and health researchers covered the items with a value of 1.00. The experts did not recommend adding any items to the pool. At the end of the validation evaluation, the item pool comprised 60 validated items.

Discussion

Based on this study, the 60 items selected for the final item pool were valid and acceptable regarding the psychometric results. The content validity process identified 60 items that fell within six dimensions: expressing emotions (eight items); monitoring emotions (four items); identifying emotions (six items); understanding emotions (four items); regulating emotions (14 items); and an ability to use emotional information both on self-management (14 items) and establishing social relationships (10 items). All 60 items included in the final item pool received excellent scores for relevance (0.80–1.00), understandability (0.86–1.00), scale-

level understandability (0.92) and scale content validity (S-CVI) (0.95). In addition, the modified kappa score for chance agreement ranged from good to excellent (0.65–1.00), and the scale coverage was rated high (1.00). Based on the results, the item pool generated by the study has a high level of validity, is scientifically grounded, and is helpful for further research.

There were no significant differences between the responses of the music therapists and health researchers. The similarity in the responses of the expert groups and the strong content validity scores of items may reflect the impact of the careful development process that preceded this study. Our two previous studies laid the groundwork for this study and the developed item pool. In the first study, we focused on developing a theoretical definition (Salokivi et al., 2022). In our second study, we examined the applicability of the theoretical definition to music therapy practice (Salokivi et al., 2023).

The results of this study may provide valuable insights for validation research on assessing emotional skills in early adolescents undergoing music therapy. Few existing music therapy assessment tools, potentially also applicable to assess emotional skills in early adolescents, report how their validity has been assessed (Cripps et al., 2016). This makes it difficult to evaluate the psychometric quality of assessment tools or the items they contain. This study describes in detail the content validity analysis of the item pool of the assessment tool. In addition to the reported content validity assessment, the added value of this study is that the item pool developed in this study is the first to cover the different components of emotional skills as described in the research literature. In this study, we have used a specific description of the components of emotional skills that we developed earlier (Salokivi et al., 2022). The description helps us better conceptualise all the components of emotional skills.

Furthermore, we have examined the phenomenon of emotional skills in practice in the context of music therapy (Salokivi et al., 2023), created practice-based items, and assessed the content validity of these items. The result is a first step towards a validated assessment tool. The items used in the final assessment tool will still be further refined and developed. However, the current item pool comprises a detailed description, based on current knowledge, of the phenomenon of emotional skills in music therapy when working with early adolescents and, as such, offers new insights for music therapists and music therapy researchers.

The linguistic formulation of the items developed in this study does not necessarily correspond to the formulation used in the final assessment tool. The linguistic format may change when the items are tested in practical music therapy work. In addition, the perspective of the items in this study has been kept at a general level without taking a definitive position on who will ultimately use the items (therapist or client etc.). Testing the items in further studies in music therapy practice will provide the information needed to determine what size of the item set is adequate and what kind of linguistic formulation of the items will be most suitable. Therefore, the item pool developed is only an intermediate step towards the items used in the final assessment tool.

Waldon et al. (2018) state, "Without professionally developed and standardised assessment tools, the field of music therapy is less robust and less equipped to meet the demands of a respected health care profession" (p. 42). The results of this study are a preliminary step towards a validated assessment tool to assess the emotional skills of early adolescents with mental health conditions. Furthermore, a validated item pool

may already be helpful to music therapy clinicians in their practice. They can use these items to learn and observe different components of emotional skills in early adolescents and use this information to improve the well-being of their young clients.

Strengths and weaknesses

As Spiro et al. (2020) noted, the feasibility and psychometric properties of an assessment tool are critical issues in the selection and usefulness of that tool. From this perspective, the developed item pool for emotional skills of early adolescents with mental health conditions has strengths and weaknesses. Based on this study, the 60 remaining items after the psychometric evaluation have strong content validity, and the item development has been appropriate and careful. However, the 60-item assessment tool in music therapy is still too long, and its practical feasibility is not necessarily excellent. Additionally, the items in the item pool have not yet been tested in a clinical context, and it is possible that, for example, some of the items are not relevant in a therapy practice or some items overlap. It should also be noted that the items presented to the expert panels do not represent all possible items related to emotional skills, and some essential items may be missing. This limitation was minimised by conducting two previous studies to ensure that the concept and its operationalisation were comprehensive and scientifically grounded. In addition, the experts could suggest additional items for the set of items, which also helped to minimise the possible absence of essential items.

Future research

The validated item pool can be used as a foundation for the assessment tool, which could then be tested and developed further to obtain psychometrically valid, clinically relevant, and feasible tools. Content validity evaluation of the assessment tool should continue with reliability evaluation (through internal consistency and test-retest), construct validity (through factor analysis), and criterion-related validity (an estimate of the extent to which a measure agrees with a gold standard) (Grant & Davis, 1997).

Conclusions

This study presents the first set of 60 items with high content validity to assess the emotional skills of early adolescents with mental health conditions in the context of music therapy. The study describes how content validity was assessed regarding the item content validity index, scale content validity index/average, modified kappa scores, and item understandability and coverage. This set of items is a preliminary step towards a validated tool for assessing emotional skills in early adolescents, which still needs to be created and does not yet exist in music therapy. A validated assessment tool will strengthen music therapists' ability to assess emotional skills development more accurately during the music therapy process. In addition, a validated assessment tool will also help therapists better articulate music therapy's impact on clients, guardians, and therapy funders.

Disclosure statement

Funding

Notes on contributors

Maija Salokivi, MA, is a music therapist and a doctoral researcher at the University of Jyväskylä, Finland. She has worked with children and adolescents with psychiatric and neurological problems for several years. Her PhD dissertation aims to develop an assessment instrument for the emotional skills of early adolescents in the context of music therapy. Her research interests include assessment, assessment development, emotional skills, and children and adolescents.

Sanna Salanterä, PhD, RN, Professor of Clinical Nursing Science, Vice Dean of the Faculty of Medicine at the University of Turku and Nurse Director at Turku University Hospital. She specialised in clinical nursing science, nursing and patient decision-making, innovative technology in nursing, pain nursing, health service research, children´s nursing and empowering patient education. She leads the research programs "Health producing basic care with smart technology" and "Health producing health promotion with smart technology". Both projects consist of several sub-projects.

Suvi Saarikallio, PhD, Professor of Music Education, Docent of Psychology at the University of Jyväskylä, Finland. She is a music psychology research team member and widely conducts research and teaching in music psychology, music education, and music therapy. She is currently President of the Finnish Society for Music Education (FiSME) and the European Society for the Cognitive Sciences of Music (ESCOM) Secretary General.

Esa Ala-Ruona, PhD, Associate Professor, music therapist and psychotherapist working at the Music Therapy Clinic for Research and Training at the University of Jyväskylä, Finland. His research interests are music therapy assessment and evaluation, studying musical interaction and clinical processes in improvisational psychodynamic music therapy, and the progress and outcomes of rehabilitation of stroke patients in active music therapy.

ORCID

Maija Salokivi http://orcid.org/0000-0003-0886-3532

References

American Psychological Association. (2023). *Dictionary of psychology*. Emotion. Retrieved January 2023, from https://dictionary.apa.org/emotion

Aviles, A. M., Anderson, T. R., & Davila, E. R. (2006). Child and adolescent social-emotional development within the context of school. *Child and Adolescent Mental Health*, *11*(1), 32–39. https://doi.org/10.1111/j.1475-3588.2005.00365.x

Baxter, H., Berghofer, J., MacEwan, L., Nelson, J., Peters, K., & Roberts, P. (2007). *The individualized music therapy assessment profile*. Jessica Kingsley Publishers.

Carmines, E., & Zeller, R. (1979). *Reliability and validity assessment*. SAGE Publications, Inc. https://doi.org/10.4135/9781412985642

Cicchetti, D. V., & Sparrow, S. A. (1981). Developing criteria for establishing interrater reliability of specific items: Applications to assessment of adaptive behavior. *American Journal of Mental Deficiency*, *86*(2), 127–137.

Cripps, C., Tsiris, G., & Spiro, N. (Eds.). (2016). *Outcome measures in music therapy: A resource developed by the Nordoff Robbins research team*. Nordoff Robbins. https://www.nordoff-robbins.org.uk/research-projects/outcome-measures-in-music-therapy/

Davey, C. G., Yücel, M., & Allen, N. B. (2008). The emergence of depression in adolescence: Development of the prefrontal cortex and the representation of reward. *Neuroscience and Biobehavioral Reviews*, *32*(1), 1–19. https://doi.org/10.1016/j.neubiorev.2007.04.016

David, L. (1992). Instrument review: Getting the most from your panel of experts. *Applied Nursing Research*, *5*(2), 194–197. https://doi.org/10.1016/S0897-1897(05)80008-4

DeepL GmbH. (2017). DeepL translator (4.5.542015)[Computer software]. DeepL SE. https://www.deepl.com/translator

Devon, H. A., Block, M. E., Moyle-Wright, P., Ernst, D. M., Hayden, S. J., Lazzara, D. J., Savoy, S. M., & Kostas-Polston, E. (2007). A psychometric toolbox for testing validity and reliability. *Journal of Nursing Scholarship*, *39*(2), 155–164. https://doi.org/10.1111/j.1547-5069.2007.00161.x

Douglas, E. (2006). The development of a music therapy assessment tool for hospitalized children. *Music Therapy Perspectives*, *24*(2), 73–79. https://doi.org/10.1093/mtp/24.2.73

Fleiss, J. L. (1971). Measuring nominal scale agreement among many raters. *Psychological Bulletin*, *76*(5), 378–382. https://doi.org/10.1037/h0031619

Frijda, N. H. (2016). The evolutionary emergence of what we call "emotions". *Cognition and Emotion*, *30*(4), 609–620. https://doi.org/10.1080/02699931.2016.1145106

Geipel, J., Koenig, J., Hillecke, T. K., Resch, F., & Kaess, M. (2018). Music-based interventions to reduce internalizing symptoms in children and adolescents: A meta-analysis. *Journal of Affective Disorders*, *225*, 647–656. https://doi.org/10.1016/j.jad.2017.08.035

Gold, C., Voracek, M., & Wigram, T. (2004). Effects of music therapy for children and adolescents with psychopathology: A meta-analysis. *Journal of Child Psychology and Psychiatry*, *45*(6), 1054–1063. https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x

Gold, C., Wigram, T., & Voracek, M. (2007). Effectiveness of music therapy for children and adolescents with psychopathology: A quasi-experimental study. *Psychotherapy Research*, *17*(3), 289–296. https://doi.org/10.1080/10503300600607886

Gonçalves, S. F., Chaplin, T. M., Turpyn, C. C., Niehaus, C. E., Curby, T. W., Sinha, R., & Ansell, E. B. (2019). Difficulties in emotion regulation predict depressive symptom trajectory from early to middle adolescence. *Child Psychiatry and Human Development*, *50*(4), 618–630. https://doi.org/10.1007/s10578-019-00867-8

Goodman, K. (1989). Music therapy assessment of emotionally disturbed children. *The Arts in Psychotherapy*, *16*(3), 179–192. https://doi.org/10.1016/0197-4556(89)90021-X

Grant, J. S., & Davis, L. L. (1997). Focus on quantitative methods: Selection and use of content experts for instrument development. *Research in Nursing & Health*, *20*(3), 269–274. https://doi.org/10.1002/(sici)1098-240x(199706)20:3<269:aid-nur9>3.3.co;2-3

Izard, C. E. (2010). The many meanings/aspects of emotion: Definitions, functions, activation, and regulation. *Emotion Review*, *2*(4), 363–370. https://doi.org/10.1177/1754073910374661

Lakoff, G. (2016). Language and emotion. *Emotion Review*, *8*(3), 269–273. https://doi.org/10.1177/1754073915595097

Langan, D. (2009). A music therapy assessment tool for special education: Incorporating education outcomes. *Australian Journal of Music Therapy*, *20*, 78–98. https://link.gale.com/apps/doc/A352616845/AONE?u=anon~9bb1b5f9&sid=googleScholar&xid=996e9fb0

Layman, D. L., Hussey, D. L., & Laing, S. J. (2002). Music therapy assessment for severely emotionally disturbed children: A pilot study. *Journal of Music Therapy*, *39*(3), 164–187. https://doi.org/10.1093/jmt/39.3.164

Loewy, J. (2000). Music psychotherapy assessment. *Music Therapy Perspectives*, *18*(1), 47–58. https://doi.org/10.1093/mtp/18.1.47

Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, *35*(6), 382–386. https://doi.org/10.1097/00006199-198611000-00017

Mackeith, J., Burns, S., & Lindeck, J. (2011). The music therapy star: The outcomes star for children in music therapy. *Triangle Consulting Social Enterprise*, 2–18.

McLeod, J. D., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, behavior problems and academic achievement. *Journal of Health and Social Behavior*, *53*(4), 482–497. https://doi.org/10.1177/0022146512462888

Parker, J. G., Rubin, K. H., Erath, S. A., Wojslawowicz, J. C., & Buskirk, A. A. (2006). Peer relationships, child development, and adjustment: A developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and method* (pp. 419–493). John Wiley & Sons, Inc. https://doi.org/10.1002/9780470939383.ch12

Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing and Health*, *29*(5), 489–497. https://doi.org/10.1002/nur.20147

Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Focus on research methods: Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing and Health*, *30*(4), 469–467. https://doi.org/10.1002/nur.20199

Ross, S. M. (2017). Discrete random variables. In S. M. Ross (Ed.), *Introductory statistics* (pp. 203–262). Academic Press. https://doi.org/10.1016/b978-0-12-804317-2.00005-9

Salkind, N. (2012). Content validity. In N. Salkind (Ed.), *Encyclopedia of research design*. SAGE Publications, Inc. https://doi.org/10.4135/9781412961288

Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2022). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. *Nordic Journal of Music Therapy*, *31*(1), 63–88. https://doi.org/10.1080/08098131.2021.1903977

Salokivi, M., Salanterä, S., Saarikallio, S., & Ala-Ruona, E. (2023). Promoting emotional skills in early adolescents with mental health conditions in music therapy – A content analysis of focus group interviews. *Nordic Journal of Music Therapy 32* (5), 423–444. https://doi.org/10.1080/08098131.2023.2169336

Social Insurance Institution of Finland. (2017). *Kelan kuntoutustilasto*. https://helda.helsinki.fi/handle/10138/234527

Spiro, N., Tsiris, G., & Cripps, C. (2020). Sounds good, but . . . what is it? An introduction to outcome measurement from a music therapy perspective. *Approaches: An Interdisciplinary Journal of Music Therapy*, *12*(1), 8–29. https://approaches.gr/spiro-a20180627/

Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, *9*(2), 69–74. https://doi.org/10.1016/j.tics.2004.12.005

Tempelaar, W. M., Otjes, C. P., Bun, C. J., Plevier, C. M., van Gastel, W. A., MacCabe, J. H., Kahn, R. S., & Boks, M. P. M. (2014). Delayed school progression and mental health problems in adolescence: A population-based study in 10,803 adolescents. *BMC Psychiatry*, *14*(244). https://doi.org/10.1186/s12888-014-0244-5

Waldon, E. G., Lindahl Jacobsen, S., & Gattino, G. (2018). Assessment in music therapy: Psychometric and theoretical considerations. In S. L. Jacobsen, E. G. Waldon, & G. Gattino (Eds.), *Music therapy assessment: Theory, research and application* (pp. 47–80). Jessica Kingsley Publishers.

Waltz, C. F., & Bausell, R. B. (1981). *Nursing research: Design, statistics, and computer analysis*. F.A. Davis.

Waltz, C. F., Strickland, O. L., & Lenz, E. R. (2016). *Measurement in nursing and health research*. Springer Publishing Company. https://doi.org/10.1891/9780826170620

Wells, N. (1988). An individual music therapy assessment procedure for emotionally disturbed young adolescents. *The Arts in Psychotherapy*, *15*(1), 47–54. https://doi.org/10.1016/0197-4556(88)90051-2

Widen, S. C., & Russell, J. A. (2010). Descriptive and prescriptive definitions of emotion. *Emotion Review*, *2*(4), 377–378. https://doi.org/10.1177/1754073910374667

World Health Organization. (2021, August 9). *Adolescent mental health*. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health

Yaghmaie, F. (2003). Content validity and its estimation. *Journal of Medical Education*, *3*(1), 25–27. https://brieflands.com/articles/jme-105015.html

Zachar, P. (2010). Has there been conceptual progress in the science of emotion? *Emotion Review*, *2* (4), 381–382. https://doi.org/10.1177/1754073910374668

Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A.-R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centred communication. *Tabriz University of Medical Sciences*, *4*(2), 165–178. https://doi.org/10.15171/jcs.2015.017