

Original article

Music education through the lenses of ITERS-R: Discussing results from 206 toddler day care groups

Torill Vist

OsloMet—Oslo Metropolitan University, Norway,

Ellen Os

OsloMet—Oslo Metropolitan University, Norway

Abstract

This article presents results from a large-scale Norwegian study that examines the quality of early childhood education and care, using the research tool ITERS-R. Although ITERS-R consists of 39 items, this article focuses solely on results within music education in Item 18: Music and movement. According to ITERS-R, results from 206 toddler day care groups reveal that the quality of music education in Norwegian day care is low. Our in-depth study of a single item reveals that a lack of musical toys and instruments is what yields such a low score. The quality of singing and the use of recorded music, however, scores better. These results point to a music education philosophy in ITERS-R that diverges somewhat from contemporary music education philosophies and curricula. The article therefore also discusses some potential consequences of this difference.

Keywords

music education, early childhood education and care, toddlers, ITERS-R

Corresponding author:

Torill Vist, Department of Early Childhood Education, Faculty of Education and International Studies, OsloMet—Oslo Metropolitan University, Norway.

Email: torillv@oslomet.no

Introduction

This article presents results from the first Norwegian nationwide use of the international quantitative research tool *Infant/Toddler Environment Rating Scale – Revised*, or ITERS-R (Harms, Cryer, & Clifford, 2006) designed also to evaluate music education for children under the age of three. Between ten and fifteen years ago, there was a government incentive in Norway to offer any child under school age (i.e. six years) a place in early childhood education and care (ECEC) institutions (Barne- og familiedepartementet, 2003). This led to substantial changes in the number of children enrolled in early childhood education programs. In the year 2000, 38% of one- and two-year-olds went to ECEC. In 2017 these figures had grown to 82%, with the majority having ‘full-time’ access, meaning up to 41 hours per week (SSB, 2017). In total, 36% of children enrolled in Norwegian ECEC are now under three years of ageⁱ. Despite the lower average age of children, and that the arts are included as mandatory subjects in Norwegian ECEC, there is currently a focus on language and mathematics at the cost of music and the other arts (Østrem et al., 2009). The last relevant white paper from the Norwegian government hardly mentioned music, which seems to be a further indication of this tendency. (Kunnskapsdepartementet, 2015).

Parallel to this, in early childhood teacher education, mandatory credits in the arts have gone through severe cuts, from approximately 30% to 10% of the mandatory programme over four decades, with music accounting for roughly one-third of this decline (Kunnskapsdepartementet, 2012; Lærarutdanningsrådet, 1971). Nevertheless, all Norwegian ECEC teachers still have courses in practice-based music education, while their assistants, usually two-thirds of the staff, do not.

Due to these changes, the Norwegian Research Council offered funding for several projects investigating the quality of early childhood education. Among these is our project, *Searching for qualities, 2012-2017*. Combining quantitative and qualitative approaches and also focusing on the arts, we conducted surveys and undertook in-depth observational field studies. Some of the data collecting tools were developed elsewhere, such as ITERS-R, which originated in the US (Cryer, Harms, & Riley, 2004; Harms et al., 2006)ⁱⁱ. ITERS-R investigates 39 areas or ‘items’ of kindergartenⁱⁱⁱ life for children under 30 months. In this article, however, our purpose is to investigate results from one specific ITERS-R item, Item 18: Music and movement (Harms et al., 2006, p. 39). Taking a music education perspective, this article presents results from 206 ECEC groups concerning Item 18, in order to answer the

research question: *What is the quality of music education in Norwegian ECEC as seen through the lens of ITERS-R?*

However, from our (qualitative) research perspectives, critical reflection concerning the underlying pedagogical and aesthetical ideas of ITERS-R is also necessary. In the absence of such critique, one can easily adopt an educational philosophy of which one does not approve. Hence, we need to critically discuss the results of our research question in relation to the ITERS-R method in use, contemporary music education traditions, and the Norwegian *Framework Plan for the Content and Tasks of Kindergartens (FWP)* (Ministry of Education and Research, 2011; Utdanningsdirektoratet, 2017), which ECEC institutions in Norway are obliged to follow. In doing this—and as part of our continuous validating procedures (Kvale, 1989a)—we also contribute to discussion around *What perspectives on quality in music education does ITERS-R afford?* We believe that since we have already implemented a large-scale study with this instrument, we can offer other nuances to this discussion beyond a pure curriculum analysis.

Norwegian research in ECEC has mostly consisted of qualitative, small-scale, in-depth studies, providing less knowledge about the general level of quality and nationwide tendencies (Bjørnstad et al., 2012; Os & Bjørnstad, 2016). Over the last few years, this has begun to change, but even earlier use of ITERS-R in Norway was “designed as a case study” (Baustad, 2012, p. 9). Norwegian studies in ECEC focusing on music are also mainly small-scale, qualitative studies (e.g. Bjørkvold, 1981; Vestad, 2013). In addition, they primarily focus on the children (and their behaviour), or the encounter between parents, children and music, as is also the case for Norwegian studies in non-institutional settings (e.g. Bonnár, 2014; Knudsen, 2008). Research focusing on ECEC’s musical environment and quality or teachers’ musical competence is rare in Norway (one exception is Kulset, 2016a; Kulset, 2016b). Young (2016) has suggested this under-explored area may be an international tendency. While there are several international studies concerning arts/music teachers’ training and competence in ECEC (Garvis & Pendergast, 2011; Kelly, 1998; Nardo, Custodero, Persellin, & Fox, 2006; Scott-Kassner, 1999; Valerio & Freeman, 2009; Yim & Ebbeck, 2011), to the best of our knowledge, there are no in-depth studies of ITERS-R’s Item 18. Music and movement. Hence, general or ‘global’ quality in Norwegian ECEC music education for children under the age of three needs to be investigated more thoroughly.

The Infant/Toddler Environment Rating Scale - Revised

As a general infant/toddler environment rating scale, ITERS-R assesses global quality of educational programmes in centre-based childcare. It is rather well-known internationally in ECEC discourse, and many ECEC research projects apply the ITERS-R scale (e.g. Barros & Aguiar, 2010; Bisceglia, Perlman, Schaack, & Jenkins, 2009; Boller et al., 2010; Fenech, Sweller, & Harrison, 2010; Helmerhorst et al., 2014; Hestenes, Cassidy, Hegde, & Lower, 2007; Mathers, Singler, & Karemaker, 2012; Vermeer et al., 2008).

About the general scale

ITERS-R is designed to investigate quality in kindergarten life for children under 30 months. The intention is to give—on a group level—a general or holistic picture of the central aspects of quality in early childhood education. Since the observation of one group only takes three to four hours, observing a large number of ECEC centres is possible. The scale consists of 39 items organized into seven subscales^{iv}. Item 18. Music and movement is one of the 10 items within the subscale ‘Activities’. Each item consists of several indicators rated on different levels. The observer scores these requirements according to the degree to which they have been met. The descriptors for scores are rated on a 7-point scale of level 1 (inadequate), level 3 (minimal), level 5 (good) and level 7 (excellent).

When scoring ITERS-R, the observer starts the scoring at level 1 and moves upwards. The original procedure is to stop the scoring when the group fails to meet requirements in one of the indicators on one of the levels, even though the group might reach some requirements on higher levels. In our research, we implemented an alternate scoring in which the observer continues to score all indicators in the items. Harms, Cryer and Clifford (2006) recommend this alternate scoring procedure as a means of gaining additional information. However, scoring all indicators does not affect the items’ ITERS-R score. It only gives a more nuanced picture of the group’s strengths and weaknesses, and provides opportunities for in-depth studies in all aspects represented in the items. For the purpose of this article, the expanded procedure allowed us to analyse aspects of music education in Norwegian ECEC groups, as seen through the lenses of ITERS-R, because we collected data from all groups on all the indicators. Furthermore, it also improved our ability to critically analyse the content of the ITERS-R scale.

Despite its frequent international use, most of the research projects applying ITERS-R do not report results on the item level, and none has, to our knowledge, reported results at the

indicator level. The few studies we have found presenting results on the item level indicate that the scores on Item 18 are low compared to their total ITERS-R score (the scores of all the 39 items together). In a US study, music and movement obtained the score 3.6. (minimal) (Boller et al., 2010), while Portugal scored 2.4 (Barros & Aguiar, 2010) and Brazil scored 1.7 (Campos, Esposito, Bhering, Gimenes, & Abuchaim, 2011) (inadequate).

About Item 18. Music and movement

The investigated item is named Item 18. Music and movement^v. Although the two terms could indicate an equality in importance, the scale reveals a clear emphasis on music as an aural phenomenon at the sacrifice of movement. This article will not discuss movement in depth. Dance or movement deserves another full article, particularly since in ITERS-R it is primarily seen as a type of, or element in, music experience.

Taking a closer look at Item 18, the indicators on level 1 refer to whether music is used or if loud music interferes with ongoing activity (for much of the day)^{vi}. Although the exact language of the scale is ‘music experiences’ (see Harms et al., 2006, p. 39), it is the activities of the group that are scored (or more precisely, the environment and the caregivers’ actions), rather than children’s experiences. On level 3, (two) musical toys/instruments must be accessible for free play much of the day, with one staff member initiating both a music activity and an alternative activity for children who do not want to participate. On level 5, there must be accessible instruments for all the children, and informal staff singing in addition to another music experience provided by staff. Moreover, recorded music must be used, but at limited times. On level 7, accessible instruments must be rotated (i.e. replaced with other instruments during certain periods), the music must vary in style and genre, and staff must encourage children to clap, sing, dance, etc. Hence, the scale is rather superficial (and the demands for a high score easy to obtain, in our view. This superficiality is also a critique raised on a general level by Fenech (2011), resulting in ITERS-R being viewed as a minimum measure.

Fig. 1: Overview of levels and indicators in Item 18. Music and movement (Harms et al., 2006, p. 39). NB: On level 1, a ‘negative’ practice is scored. On levels 3 -7, a ‘positive’ practice is scored. The quotes present the main topics in each indicator. Parenthesises and notes for clarification (*) are left out of this figure. (Reprinted by permission of the Publisher. From Thelma Harms, Debby Cryer, and Richard M. Clifford, Infant/Toddler Environment Rating Scale®-Revised Edition (ITERS-R). New York: Teachers College Press. Copyright ©

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Former critique of ITERS-R

ITERS-R has been criticized from several perspectives. One line of critique claims that ITERS-R is too global or general to deal in any depth with the specific aspects the items investigate (Dickinson, 2006; Fenech, 2011; Fenech et al., 2010; Hallam, Fouts, Bargreen, & Caudle, 2009). In particular, the scale is criticized for being superficial concerning qualities in adult-child interaction (Bisceglia et al., 2009; Fenech, 2011; Helmerhorst et al., 2014; Hooper, 2013). Os and Bjørnstad (2016) broaden this critique to also include the support for peer interactions. Adult-child and peer interactions are of the utmost importance in relation to music, and even more so considering a relational perspective on music education.

Along with other large-scale quantitative instruments, ITERS-R is also criticized for its tendency toward an objectivist approach to quality (Mathers et al., 2012). ‘In order to define and measure quality, the ITERS-R draws from three main sources’: Research evidence from theoretical fields such as health, development and education, professional views of best practice and “the practical constraints of real life in a child care setting” (Harms et al., 2006, p. 1). The guiding principle is to focus on what is known to be good for children—while they are in the programme, as well as long afterward. Dickinson (2006) notes that the original scales (ECERS, first published in 1980, and ITERS, published in 1990) were developed during a period (starting in the late 1970s) when the Western world was focusing on attachment theory, in which “children’s social, emotional, and intellectual development provided a strong basis for constructing tools to rate the quality of preschool classrooms” (Dickinson, 2006, p. 179). Such impressions are sometimes still confirmed in *All about ITERS-R*^{vii}. ITERS-R seems to not emphasize contemporary relational perspectives, either in music or in developmental psychology, although such perspectives are clearly part of contemporary discourse concerning children and child development (Reynolds & Burton, 2017; Schaffer, 1984, 2004, 2006; Smith & Ulvund, 1999; Sommer, 2012).

Nevertheless, to provide not only qualitative data, but also large-scale quantitative data, our project chose ITERS-R as one of several instruments. It contributes to knowledge about quality in Norwegian ECEC that we consider is important to share, whether in terms of quality itself or discourse. Furthermore, such large-scale studies are apparently of greater interest to Norwegian journalists, politicians and policymakers than qualitative (relational)

studies (see Dagsavisen, 2.10.2015; Forskningsrådet, 11.5 2016; VG, 26.10 2015). However, it is only the general results and how our country performs compared with other countries that are exposed in the media. The underlying educational and philosophical premises, or the chosen perspectives on music education, are barely touched upon.

Music, defined

In *All about ITERS-R*, Cryer, Harms and Riley (2004) define music as ‘the combination of tones and rhythms that often follow a melodic pattern – either using voices or sound-making instruments’ (p. 237). Item 18 considers “how musical experiences, such as chanting, singing, listening to and making music with toys and instruments are provided to infants/toddlers” (p. 237). Movement is not mentioned here, but what *is* mentioned is that music “can encourage children’s language, social-emotional, and motor development” (p. 237). Although this reveals a common understanding of music, at least in the Western world, one could have expected a more explicit connection to the expression of emotion in the definition^{viii}. Furthermore, in investigating infants and toddlers (and since ITERS-R claims to be based on relevant research), we notice that the definition of music does not include newer relational perspectives on music (e.g. Dissanayake, 2000; Malloch & Trevarthen, 2009a; Small, 1998; Stern, 1985/2000).

Psychologist Stern (1985/2000) and anthropologist Dissanayake (2000, 2001, 2012) emphasize the infant's need for care and belonging when explaining human musicking and musicality (see also Barrett, 2016; Koops, Kuebel & Smith, 2017). Small (1998) suggests an approach to musical quality that celebrates relationships, and we support these views. Sharing emotions expressed through sound, gesture, eye contact and touch is paramount in early interactions with others. It is the nonverbal, emotional expressions of the voice—its pulse, rhythm, melody, timbre and dynamics—that are perceived as meaningful. Infants and toddlers respond to this meaningfulness with their nonverbal and musical competence, their *communicative musicality* (Malloch, 1999; Malloch & Trevarthen, 2009a). The fundamental forms of artistic expression in music and other temporal arts grow from our innate capacity for communicative musicality (Mazokopaki & Kugiumutzakis, 2009). Thus, music and topics such as interaction, communication and community might be more closely related than in traditional definitions. As Dissanayake (2001) claims: “Mother-infant dialogue seems to be the prototype for a kind of fundamental emotional narrative that adult music, dance movement, and poetic language can grow out of, build upon, exemplify, and sustain” (p. 404).

Caregiver-infant dialogues may also be the first steps toward ritualized music activity in ECEC, whether in the shape of circle time or unstructured music interaction, which contributes to togetherness (Singer, 2002).

With an understanding of Mallock and Trevarthen's (2009a) communicative musicality, we are not only afforded a new way of thinking about music, but also to acknowledge a relational turn in the understanding of musicality and music education (Vist, 2011). What is considered 'quality' in early childhood music education may therefore change. However, such a wide definition of music education may not be acknowledged everywhere^{ix}. Working in ECEC teacher education, we understand music education more broadly than music instruction and aims such as the development of musical skills. We agree that "[p]erhaps the greatest challenge for early childhood music educators is to sustain the joy of music and the music creativity that are so clearly evident in the months or years that precede formal instruction" (Trehub, 2006, p. 44). Furthermore, and in line with the Norwegian FWP, the aim of education in the arts also includes elements of understanding, meaning and development related to emotion, social abilities, well-being, etc. Since ECEC is the only educational institution exposing most Norwegian children under the age of three to music, this type of music education is important to interrogate and evaluate^x.

Method

Participants

Participants in this study were 206 ECEC groups from 93 centres enrolling 2,811 children, thereby representing a stratified random selected sample^{xi}. The groups were located in four different regions/counties in Norway, and are representative of the Norwegian population. However, a total of 63% of the groups were located in public centres, with 37% in private centres. In accordance with the Norwegian population of ECEC centres, this reveals that public centres were overrepresented. Even so, the results show no significant differences in the total ITERS-R score between groups in public and private centres (Bjørnstad & Os, 2018).

With the exception of three groups, at least one staff member in all groups had a bachelor's degree or higher in early childhood education and care. The group sizes ranged between 8 and 56 children. Three quarters of the groups were toddler groups enrolling children from one to three years, while 11% enrolled children between one and four years, and 12% were groups

with children from one to six years^{xii}. The organization of groups included both smaller and stable groups (8–19 children) and flexible groups (20–56 children). Stable groups spend most of their time together in their own classrooms, which are equipped for routines, play and activities. ‘Flexible groups’ means that several groups share interest centres, and sometimes also wardrobes, bathrooms and snack-rooms (‘basebarnehager’ in Norwegian). Three quarters of the sample were stable groups and one quarter were flexible groups. However, there were no significant differences between stable and flexible groups’ ITERS-R scores on Item 18.

Procedures

Fourteen observers participated in collecting the ITERS-R data. Prior to data collection, two leading researchers^{xiii} were certified in ITERS-R through an intensive training and reliability check with Debby Cryer^{xiv}. They both trained 12 hired data collectors in ITERS-R following the ERSI institute procedure. The mean reliability score for all observers, compared with leading researchers, was 87.5%. To avoid systematic differences in scoring during the observational process, all observers were engaged in follow-up discussions. None of the observers (or the individuals teaching them the method) had any special competence in music and music education.

Even though we implemented the alternate scoring procedure for the 7-point scale, scoring all indicators even when groups did not reach requirements on lower levels, the numerical ITERS-R scores reported in this article are consistent with the original scoring procedure. Hence, the reliability of the Norwegian ITERS-R scores is not affected by the alternative procedure.

Observations took place between October 2013 and April 2015. Each participating group was visited once by one of the 14 observers following the procedures described in *Infant/Toddler Environment Rating Scales Revised Edition* (Harms et al., 2006). Based on three to four hours of observation of the group (children and staff) and a short interview with the leading teacher in the group (to obtain information concerning aspects of ITERS-R that could not be observed during the visit), all items in ITERS-R were scored^{xv}. Prior to the observations, and based on written information about the study, children’s parents and staff in the participating groups gave their consent to participate, in accordance with mandatory ethical considerations for research in Norway. The caregivers were asked to conduct the day as usual, following their regular programme (without special adaptations for the presence of an observer). As a result, activities related to music only comprised a limited portion of the day.

Analysis

Although ITERS-R can be considered a quantitative research tool, the analysis processes presented in this article are both quantitative *and* qualitative. Qualitative meaning and judgement processes underlie all quantitative measurements and knowledge. For this reason, Campbell (1978) recommends that quantitative methods should be sandwiched in-between (a qualitative foundation (see also Tschudi, 1989), as revealed in the ITERS-R documents (Harms et al. 2006; Cryer et al. 2004), and qualitative examinations (as we do in this article's discussion). Furthermore, if observations are seen as discursive practices (Jensen, 1989), the discourse of observational tools such as ITERS-R are, in our opinion, discursive practices that need to be analysed and made explicit along with the quantitative data. ITERS-R is an observational tool (although with some interview questions) that investigates human life worlds; hence, our backgrounds as primarily qualitative researchers has been useful.

Nevertheless, the data were first presented and analysed in SPSS (Statistical Package for the Social Sciences). Focusing on music, we continued our analysis and result development by conducting a curriculum and content analysis on the data and documents involved (Cryer et al., 2004; Harms et al., 2006; Ministry of Education and Research, 2011; Utdanningsdirektoratet, 2017). These processes could be considered discursive, partly relying on the wide concept of discourse from Laclau and Mouffe (2001). With Os acting as one of the leading data collectors, and Vist encountering the data without this experience, we found our differing backgrounds and understandings very fruitful in these parts of the analysis and discussion.

Validity

In the introduction to the ITERS-R method, Harms et al. (2006) present aspects of reliability related to the observers and the scale. Current and predictive validity are not discussed, since they are “well established [in the original ITERS from 1990] and the current revision maintains the basic properties of the original instrument” according to Harms et al. (2006, pp. 2, our brackets). In our project, using ITERS-R to investigate music education in *Norwegian ECEC*, ecological validity becomes relevant. Ecological validity usually implies “whether the results of a study pertain to the complex interactions in the everyday social world” (Kvale, 1989b, p. 74). In our case, this also involves questions related to the cultural origins of the scale and the differences in knowledge and ideology between the time when it was created and our results. As mentioned in the introduction, our research question is: “*What is the quality of music education in Norwegian ECEC as seen through the lens of ITERS-R? We*

also claimed that this article contributed to a discussion around what perspectives on quality in music education ITERS-R affords. Inspired by Kvale's focus on validity, we could also discuss if ITERS-R covers the complex music-related interactions in the everyday ECEC world, especially a culturally different ECEC world. If "[t]o validate is to question" (Kvale, 1989b, p. 80), this article's discussion can also be understood as such a validating process.

Results

The total ITERS-R score (all items included) in 206 Norwegian ECEC groups was 3.9. This places the Norwegian sample at a minimal level when it comes to general quality. The result on Item 18 was even lower: 2.4, and hence, 'inadequate'. As seen in Fig. 2, over half of the groups received a score of 2, and hardly any got a score of 5 (good), 6 or 7 (excellent) in this item. In an international context, the Norwegian ITERS-R score on Item 18 was the same as the Portuguese score (Barros & Aguiar, 2010), higher than the Brazilian (Campos et al., 2011) and lower than in the US (Boller et al., 2010).

Fig. 2: Distribution of ECEC groups between different levels in Item 18. Music and movement by percentage.

Compared to other items in the Norwegian sample, Item 18 got the second lowest score of all items. As far as ITERS-R is concerned, Norwegian ECEC centres are not providing good quality in the field of music. Furthermore, music scores were slightly lower than visual arts (2.9) and drama (3.3). Interestingly, these results within the arts are contradictory to self-reporting through interviews and questionnaires (Gulpinar & Hernes, 2018; Østrem et al., 2009), in which music achieves distinctly better results than the other arts.

Fig. 3: Percentages of groups fulfilling requirements on indicator level within Item 18. Music and movement (the complete indicator text is presented in Fig. 1).

A total of 100% of the participating Norwegian child groups fulfilled level 1: all groups had some type of music/movement experience for children (indicator 1.1), and loud music did not interfere with ongoing activities for much of the day (indicator 1.2). To reach level 3 (minimal), all three indicators on level 3 must be observed. Thus, at least two musical toys or

instruments must be accessible for free play – by the children – much of the day (indicator 3.1). “To give credit for musical materials, they must be intended specifically for children to use for music” (Cryer et al., 2004, p. 241). An adult playing the guitar would not meet the requirement. As shown in Fig. 3, this is where the majority of the Norwegian ECEC groups fail to meet the requirements of ITERS-R. Only 35% scored on this indicator. On the other hand, ‘one staff-initiated music activity daily’ still scores very high (98%), and an alternative activity for children who did not want to participate was also often provided (79%). From what we understand, the staff-initiated activity was very often related to singing, thereby also confirming other findings (Østrem et al., 2009).

Comparing the first indicator on levels 3, 5 and 7 (3.1, 5.1 and 7.1), it became clear that they are all related to the use of musical material, toys or instruments that are accessible much of the day. The same three indicators clearly stood out as the ones where few ECEC groups met the necessary requirements (35%, 3% and 7%, respectively), revealing a severe lack in the availability of instruments to children in Norwegian ECEC.

The differences in scoring on level 5 were quite striking. While only 3% of the groups had many (pleasant sounding) musical toys or instruments accessible for much of the day (indicator 5.1), 81% of the staff sang daily with the children, and recorded music was used at limited times and with a positive purpose by 82% of the groups (indicator 5.2 and 5.4). In addition to singing, an additional music experience was provided by the staff in 65% of the groups. On level 7 (excellent), the gaps are not as striking, as only 0.5% of the groups scored on this level. Nonetheless, disregarding the failure to meet requirements on lower levels, in 69% of the groups, staff encouraged children to dance, clap, sing, etc. (indicator 7.3). A total of 47% of the groups used various types of music with the children (indicator 7.2). However, this indicator is one that is not necessarily observed within three to four hours. Instead, the observer may ask teachers what is done over time. Hence, the validity regarding this indicator is different from the observed ones.

Discussion

In this section, we will discuss in more detail three important aspects of music suggested by the indicators: the use of musical instruments and toys, the use of singing (and the rest of the body) and the use of recorded music. At the end, we discuss some alternative perspectives pointed to in the introduction.

The lack of musical instruments

We mentioned that indicators 3.1, 5.1 and 7.1 in Item 18 are all related to the use of musical material, toys or instruments that are accessible to children for much of the day. According to Harms et al. (2006), what separates 3.1 from 5.1 is the quantity of the instruments and their pleasant sound, and—from 7.1—that the instruments rotate, with different instruments present at different times. The valid FWP during this investigation similarly states that in order to work toward the goals of the learning area that includes music, the kindergarten should “ensure that children every day have access to books, pictures, instruments (...)” (Ministry of Education and Research, 2011, p. 37); these indicators are as relevant today. However, only 35%, 3% and 7% of the groups met these requirements, at 3.1, 5.1 and 7.1, respectively. Thus, these three indicators, or the lack of musical instruments, are the major reason why Item 18 has the second lowest score of all the items in our inquiry. Bjørnstad and Os (2018) report that lack of materials is the primary reason for low scores on almost all the items in the subscale Activities, with the same tendency also found in the Netherlands (Vermeer et al., 2008). Norwegian children’s opportunities to explore, create and express themselves in sound are clearly limited. However, adults responding to children knocking out a rhythm on material other than musical instruments or toys, such as body percussion, were not scored in these indicators and were barely addressed in others, thus confirming ITERS-R’s traditional, Western approach to music.

Why has this lack of instruments become the Norwegian reality? Relating the results to our experiences during fieldwork, it was clear that in many centres the instruments were placed in closets or upper shelves most of the time, sometimes to a degree that they were forgotten. When Vist brought two African djembes with her in the third week of her qualitative fieldwork, the staff typically said: ‘Don’t we also have one such drum? Is it still in the closet?’ It was indeed in the closet—together with rhythm eggs, a guitar and more. The ITERS-R score does not only reveal whether the centres *have* musical instruments, but also whether or not the instruments *are accessible* for free play much of the day.

We have presented and discussed these results with ECEC staff all over the country, and several arguments frequently surfaced in their responses. First, the instruments are often only in use during circle time in concern for the sound environment and to avoid noise^{xvi}. Secondly, staff claim that they choose to use the instruments only on special occasions—out of a kind of respect for the instruments—in order to preserve their ‘freshness’ as new and

interesting objects, and to avoid the instruments being damaged. On the other hand, and thirdly, one of the reasons for the low score might also be that the instruments present were damaged. Fourthly, several ECEC centres try to keep sound-making instruments in a special room. However, if this room is locked for much of the day, it does not benefit either the children or the scoring. Finally, not all adults are comfortable with, and know how to use, the instruments.

Aside from the above-mentioned arguments, some centres hardly have any musical instruments or toys, not even in a closet or top shelf. This argument deserves further consideration. Since children in Norwegian ECEC below three years of age must be considered toddlers (1-2 years), is a difference in the use of music between infant and toddler care reflected in these results? The type of instruments should maybe *differ*, but there are no good arguments for not providing toddlers instruments for their musical development, interaction, expression and play. Furthermore, infants need to be provided other musical activities, particularly intersubjective musical communication with staff and other children.

We claim that there is great potential when it comes to the use of music instruments and toys in Norwegian ECEC, without even spending much money on new purchases in some centres. Most apparent is the clear potential for raising the awareness of instruments' existence, and for making those instruments accessible much of the day to both children *and* staff. This might also challenge thinking about how rooms are organized and where instruments are stored.

Focus on singing

From a communicative musicality perspective, and with ITERS-R being an infant and toddler scale, the focus on music instruments is, to us, peculiar. Every child and adult brings with her/him a body, including feet to bounce with, thighs to drum on, hands to clap with and a voice to sing and express other sounds with. We consider the body, including the voice, to be by far the most important instrument in music education for children under the age of three. In the Norwegian FWP as well, there is a greater focus on singing than playing instruments (Utdanningsdirektoratet, 2017), an emphasis that is similarly reflected in our own results. In 98% of the groups, the staff initiated at least one music activity per day (indicator 3.2), which was very often a singing activity. In 81% of the groups, the staff also informally sang/chanted daily with children (indicator 5.2).

However, demands related to singing are easy to fulfil in ITERS-R. On level 3, distinctions are made based on the accessibility of instruments, staff initiation of musical activities and children's freedom of choice. There is no explicit focus on singing at this level, although singing is suggested as one possible activity. Singing is mentioned in six indicators altogether, but in five of them only as one of several examples of activities. Only indicator 5.2 focuses exclusively on singing and chanting. Therefore, only one observed incident of singing or chanting is sufficient to fulfil one of the requirements at the good (5) level. In comparison, access to instruments was exclusively scored in three indicators.

Not until the level of excellence, in indicator 7.3, should “[s]taff encourage *children* to dance, clap or sing along’ (Harms et al., 2006, p. 39, our italics), thus emphasizing children's initiative and right to participation. Although ITERS-R does claim that “[t]oddlers also enjoy listening and singing along” (Cryer et al., 2004, p. 237), indicators do not elicit children's singing as much as staff singing *to* the children. We must bear in mind that this is an *environment* rating scale, in contrast to most research results from the last 40 years, which describe infant and toddler singing styles and functions (e.g. Bjørkvold, 1981; P. S. Campbell, 1998; Malloch & Trevarthen, 2009a; Sole, 2016; Welch, 2006). However, in a relational perspective, one might expect more (and earlier) emphasis on the quality of interactions where staff encourage, support and encounter children's musical actions. Could this also be related to the aforementioned developmental perspective and the traditional Western definition and understanding of music?

As mentioned above, when singing is involved, Norwegian ECEC scores better. In interviews with staff, Østrem et al. (2009) found that the most frequent activity in Norwegian ECEC—when working within the learning area of communication, language and text—was the use of song, rhyme and jingles. These results also indicate that singing and other vocal activities are an important element of circle time (Eide, Os, & Pramling Samuelsson, 2012). ITERS-R advocates little use of such group activities. Cryer, Harms and Riley (2004) claim that “[g]enerally, group activities do not promote the type of learning from which young children benefit most (...)” (p. 393). Our FWP does not seem critical of such activities.

Thinking back on her own scoring, what comes to Os' mind is that when children had a toy, the staff often started singing a song relevant to that toy. Other than this, adult responses to children's musical initiatives seemed rather rare, and most of the time the song repertoire was limited and traditional, thus confirming Måsvær's (2005) findings. Nevertheless, in

concluding this section, there is greater emphasis on singing in Norwegian ECEC than in ITERS-R, as ITERS-R can be seen as a minimum scale that does not distinguish qualities on a very high level—particularly regarding aspects of music aside from the accessibility of instruments.

Recorded music

The musical environment for young children has changed dramatically over the last two decades. CDs, Mp3 files, smart phones and iPads have found their way into ECEC centres and the lives of infants and toddlers, thereby influencing the use, functions and experiences of music (Skånland, 2012; Vestad, 2013; Young, 2009). Recorded music is a topic on every level of scoring. Level 1 considers constant background noise, while level 3 suggests playing music for dancing. In indicator 5.3, tape or CD accompaniment are suggested in addition to singing. Not until 5.4 is it mandatory to use ‘[r]ecorded music (...) at limited times and with a positive purpose’ (Harms et al., 2006, p. 39). On level 7, various genres like classical or popular music are suggested as recordings or live performances.

We are happy to see that no one had “loud music (...) on much of the day” (interfering with ongoing activities (indicator 1.2)) (Harms et al., 2006, p. 39). We have no data for comparison, but from our visits to kindergartens over the past 20 to 30 years, the tendency to put on CDs, etc. as background music seems to have declined. In our sample, 82% of the groups fulfilled the requirements in 5.4. That means that recordings played with a positive purpose were *not* left on for more than 20 minutes after the activity terminated. We cannot find similar demands on anything but recorded music in the whole scale. Is this because audible noise is considered by ITERS-R to be more disturbing than ‘visual noise’?

The term ‘tape’ in 5.3 seems rather old-fashioned in a Norwegian context. Today, music is often accessed through social media. New ways of using recorded music (as in video games, computers and cell phones) are not reflected in Item 18, nor are they explicitly excluded. The use of recorded music is also mentioned in Item 23. Even so, ITERS-R does not take new digital and social areas of music education directly into consideration.

Conclusions and further discussion

In this article, we have interrogating the quality of music education in Norwegian ECEC through the lenses of ITERS-R through results from our study of 206 Norwegian ECEC

groups scores relating to Item 18: Music and movement,. We have also contributed to the discussion about what perspectives on quality in music education ITERS-R affords.

Our results indicate the ITERS-R score on Item 18 in our Norwegian inquiry was 2.4, which is considered inadequate. In its evaluation of the quality of music education for infants and toddlers in ECEC, ITERS-R reveals a traditional, Western understanding of music. ITERS-R further underscores the importance of musical instruments and toys being accessible to children much of the day, and hence also outside of circle time. Our inquiry of the 206 groups revealed a very low accessibility in Norwegian ECEC, despite the FWP guidance for instruments to be available to children daily. The frequency of singing, and the Norwegian results related to such activities, is much better in these groups. ITERS-R tells us little about the quality of the singing per se, but in line with the FWP and earlier research, singing is a common activity in Norwegian ECEC. Concerning the use of recorded music, these results are also better than the item score indicates. Unfortunately, contemporary digital practices in music are not reflected by this scale.

Looking beyond instruments, singing and recorded music

A narrowed focus on instruments, singing and recorded music puts other aspects of a music education in the shadows, therefore revealing something about ourselves as well as ITERS-R. Although the topics emphasized in the discussion cannot completely avoid operating within a relational or intersubjective frame, the content and quality of intersubjectivity or relations in ECEC is not explicitly emphasized in Item 18. Other aspects that could have been examined are children's imagination and creativity in music, formal vs. informal learning and dance and body percussion.

As also mentioned previously, formal group activities such as circle time are not recommended as a frequent learning activity in ITERS-R; consequently, ITERS-R maintains a position in conflict with guidance advocated in the Norwegian FWP. The content of circle time in toddler groups often includes songs, singing games, rhymes and jingles (Eide et al., 2012). These musical expressions also represent ritualized practices (Dissanayake, 2009; Kulset, 2016a; Singer, 2002), and thus follow a fixed course of sound and action, but with clearly surprising variations (Hernes, Os, & Selmer-Olsen, 2010; Os & Eide, 2013). The conventionalized, fixed and repeated patterns of ritualized activities foster the potential for the development of togetherness in groups, particularly because they give participants an unambiguous basis for conduct conducive to participation. This is regarded as especially

important for very young children's possibilities for participation and inclusion in a group. Young children with limited verbal language skills often establish shared meaning with peers (as well as grown-ups) through non-verbal signals and actions (Kulset, 2016b; Singer, 2002).

Circle time may therefore encourage socio-emotional learning, and may thus also be linked to relational aspects education. In several decades, early childhood researchers have noted the inherent communication in the language of music, recognizing that "[o]ur musicality serves our need for companionship" (Malloch & Trevarthen, 2009b, p. 6). Also, according to the current and previous FWP, "[e]xperiencing cultural events together and doing or creating shared activities foster cohesion" (Ministry of Education and Research, 2011, p. 37).

Accordingly, a relational perspective is important for inquiries about the quality of music education in Norwegian ECEC. We have pointed to the general critique of the scale for lacking focus on interactional qualities, and the emotions and relations missing from ITERS-R's definition of music. Moreover, ITERS-R seems to underestimate toddlers' social competence, specifically with peers. When ITERS-R argues for a large number of musical instruments, it is partly to avoid conflicts (Cryer et al., 2004), without fully taking into consideration toddlers' capacity for sharing and negotiating (Alvestad, 2010; Løkken, 2000), nor the potential for music to "encourage children's (...) social-emotional (...) development" (Cryer et al., 2004, p. 237). Could this line of argument be a result of the aforementioned remnants of 20th century's discourses in developmental psychology?

Although relational qualities are sparsely assessed in the investigated item, terms like *staff initiative*, *children's participation* and *nap time music* do exist (Harms et al., 2006).

Furthermore, in other items, in which music is not the educational focus, the relational qualities of music become more explicit (e.g. in Item 8. Nap, Item 31. Group play activities, Item 23. Use of TV, video and/or computer, and Item 24. Promoting acceptance of diversity (Harms et al., 2006)). Does this suggest that intersubjective or relational aspects are not seen as relevant in music *education* in ITERS-R? Based on contemporary aesthetics (Bourriaud, 1998/2002), communicative musicality (Malloch & Trevarthen, 2009a) and the aforementioned importance of interaction, we suggest that intersubjective relations be emphasized in scales assessing music education. We further suggest that such indicators should assess how staff initiate musical communication, how they respond to children's musical expressions, and even assess staff sensitivity and competence in musical expressions and in facilitating children's musical creativity. However, evaluating staff on such measures presupposes observers who are sufficiently qualified in music.

Closing discussion on meaning and validity

In the introduction we claimed this article contributed to a discussion around what perspectives on quality in music education ITERS-R affords. Later we asked if ITERS-R actually covers the complex music-related interactions in culturally different ECEC worlds. If observations are seen as discursive practices (Jensen, 1989), *we* also represent a discourse. If validation is “to continually to questioning the interpretations” (Kvale, 1989b, p. 80), what about *our* interpretations? Critiques of the scale for being out of date and out of (our Norwegian) context could be turned back toward us and our study. If the Norwegian curriculum and ITERS-R define music and the value and meaning of music differently, our results might be valid in comparison with the ITERS-R scale, but less valid in the Norwegian context they are supposed to inform. Bluntly put, if music is defined as playing instruments in one culture and singing in another, the validity of the results is affected.

From the previous discussion, do we need another scale? We are not sure that such scales are our best option. The meaning and *value* that we claim music to have might not be consistent with the content and validity such quantitative tools can allow. Furthermore, are the observers sufficiently able to perceive the typical infant and toddler expressions in the field of music defined within relational terms? As mentioned, none of our observers were music educators. Could there be aspects of musical expression and communication that were not seen by these observers? Did all the observers agree on what should be considered music or singing in an ECEC context? According to Reese’s study, music teachers with special training in early childhood music were able to detect and identify children’s musical expressions to a much greater degree than teachers trained in child development and professional musicians. The music teachers seemed to be a lot more sensitive to vocalisations that could be considered musical expressions (Reese, 2013). The ITERS-R tool might be reliable in some musical issues, but, in our opinion, scoring creativity or relational details in music interaction and musical expression requires special skills and sensitivities.

From a slightly different perspective, observations in a natural setting do not guarantee ecological validity. The restricted timeframe of ITERS-R observations gives short glimpses into the day care world, and hence does not capture the quality provided over time (Lambert et al., 2008). It could be that music activities are taking place in the afternoon (the observations are usually done before lunch), and it is possible that staff avoid initiating their musical activities as usual as an effect of the observer’s presence.

Despite these reservations, our study and the results, have been useful in many ways. In Norwegian discourse, traditionally characterized by small-scale qualitative research, this inquiry is an important supplement and corrective to existing research. We have discovered aspects of music education in Norway that need to improve, regardless of whether one agrees with the ITERS-R definition of music. Furthermore, knowledge of such scales also sharpens our qualitative research, and our competence as researchers and readers of other's quantitative research. Finally, and more pragmatically, quantitative tools were expected when we applied for funding. ITERS-R not only afforded us the opportunity for funding, but also the chance to give funders valuable information about such quantitative scales—on several levels.

At the outset of this investigation, we claimed that to benefit from using a tool such as ITERS-R, critical reflections concerning the underlying pedagogical and aesthetical ideas were necessary to avoid adopting an educational philosophy incongruent with one's own paradigm. During the process of working with ITERS-R and musical education, we have raised our own awareness and understanding of ECEC music education through encounters with the scale. This raised awareness has permitted new knowledge and insight into alternate perspectives. Clearly, ECEC discourses and music education discourses have much to learn from one another. We hope that by disseminating such results, we may raise others' awareness as well—thus, encouraging a production of knowledge marked by consciousness of the underlying ideas that shape music education, and not only by what can be scored and quantified. For this reason, we need a variety of approaches to investigate and evaluate quality in early childhood music education in order to provide the best for children in ECEC.

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References

- Alvestad, T. (2010). *Barnehagens relasjonelle verden - små barn som kompetente aktører i produktive forhandlinger [Preschool relationships - young children as competent participants in negotiations]*. (Doctoral dissertation), Acta Universitatis Gothoburgensis, Göteborg studies in educational sciences. Göteborg.
- Barne- og familiedepartementet. (2003). *Barnehagetilbud til alle - økonomi, mangfold og valgfrihet. [Day care for everyone - economy, variation and freedom of choice]*. (Innst. S. nr. 250 2002-2003). Retrieved from <https://www.stortinget.no/globalassets/pdf/innstillinger/stortinget/2002-2003/inns-200203-250.pdf>.
- Barrett, M. S. (2016). Attending to “culture in the small”: A narrative analysis of the role of play, thought and music in young children’s world-making. *Research Studies in Music Education*, 38(1), 41-54. doi:10.1177/1321103X15603557
- Barros, S., & Aguiar, C. (2010). Assessing the quality of Portuguese child care programs for toddlers. *Early Childhood Research Quarterly*, 25(4), 527-535. doi:10.1016/j.ecresq.2009.12.003
- Baustad, A.G. (2012). Using the Infant/Toddler Environment Rating Scale for examining the quality of care for infants and toddlers in Norwegian day care centers. *Nordisk barnehageforskning*, 5(2), 1-21. doi:10.7577/nbf.313
- Bisceglia, R., Perlman, M., Schaack, D., & Jenkins, J. (2009). Examining the psychometric properties of the Infant–Toddler Environment Rating Scale-Revised Edition in a high-stakes context. *Early Childhood Research Quarterly*, 24(2), 121-132. doi:10.1016/j.ecresq.2009.02.001
- Bjørkvold, J.R. (1981). *Den spontane barnesangen - vårt musikalske morsmål: En undersøkelse av førskolebarns sang i tre barnehager i Oslo. [Children's spontaneous singing - Our musical mother tongue: A study of preschool children's singing in three Oslo kindergartens]*. (Doctoral dissertation), Universitetet i Oslo, Oslo.
- Bjørnstad, E., & Os, E. (2018). Quality in Norwegian childcare for toddlers using ITERS-R. *European Early Childhood Education Research Journal*, 26(1), 11-127. doi:10.1080/1350293X.2018.1412051
- Bjørnstad, E., Pramling Samuelsson, I., Bae, B., Gulbrandsen, L., Johansson, J.-E., Løberg, H., & Os, E. (2012). *Hva betyr livet i barnehagen for barn under 3 år? En forskningsoversikt. [What does life in day care mean for children under the age of three years? A research review]*. (Vol. 2012 nr. 9). Oslo: Høgskolen i Oslo og Akershus.
- Boller, K., Del Grosso, P., Blair, R., Jolly, Y., Fortson, K., Paulsell, D., . . . Kovac, M. (2010). *The Seeds to Success modified field test: Findings from the impact and implementation studies*. Princeton, NJ: Mathematica Policy Research, Inc.
- Bonnár, L. (2014). *Life and lullabies. Exploring the basis of meaningfulness in parents’ lullaby singing*. (PhD), Norges musikkhøgskole, Oslo.
- Bourriaud, N. (1998/2002). *Relational aesthetics*. Dijon: Presses du réel.
- Campbell, D. T. (1978). Qualitative knowing in action research. In M. Brenner (Ed.), *The social context of method* (pp. 184-209). London: Croom Helm.
- Campbell, P. S. (1998). *Songs in their heads: Music and its meaning in children's lives*. New York: Oxford University Press.
- Campos, M. M., Esposito, Y. I., Bhering, E., Gimenes, N., & Abuchaim, B. (2011). Quality of early childhood education: a study in six Brazilian state capitals. *Cadernos de Pesquisa*, 41(142), 20-54. doi:10.1590/S0100-15742011000100003 Cryer, D., Harms,

- T., & Riley, C. (2004). *All about the ITERS-R: A detailed guide in words and pictures to be used with the ITERS-R*. North Carolina: Kaplan.
- Dagsavisen. (2.10.2015). Frilek best for de minste. [Free play works best for the youngest ones]. Retrieved from <http://www.dagsavisen.no/oslo/frilek-best-for-de-minste-1.425765>
- Dickinson, D. K. (2006). Toward a toolkit approach to describing classroom quality. *Early Education and Development, 17*(1), 177-202. doi:10.1207/s15566935eed1701_8
- Dissanayake, E. (2000). *Art and intimacy: How the arts began*. Seattle, Wash.: University of Washington Press.
- Dissanayake, E. (2001). Antecedents of the temporal arts in early mother-infant interaction. In N. Wallin, B. Merker, & S. Brown (Eds.), *The Origins of Music* (pp. 389-410). Massachusetts: Massachusetts Institute of Technology Press.
- Dissanayake, E. (2009). Bodies swayed to music: The temporal arts as integral to ceremonial ritual. In S. Malloch & C. Trevarthen (Eds.), *Communicative musicality: Exploring the basis of human companionship* (pp. 533-544). Oxford: Oxford University Press.
- Dissanayake, E. (2012). The earliest narratives were musical. *Research Studies in Music Education, 31*(1), 3-14. doi:10.1177/1321103X12448148
- Eide, B. J., Os, E., & Pramling Samuelsson, I. (2012). Små barns medvirkning i samlingsstunder. [Young children's participation in circle time]. *Nordisk barnehageforskning, 5*(4), 1-21. doi:10.7577/nbf.320
- Fenech, M. (2011). An analysis of the conceptualisation of 'quality' in early childhood education and care empirical research: Promoting 'blind spots' as foci for future research. *Contemporary Issues in Early Childhood, 12*(2), 102-117. doi:10.2304/ciec.2011.12.2.102
- Fenech, M., Sweller, N., & Harrison, L. (2010). Identifying high-quality centre-based childcare using quantitative data-sets: What the numbers do and don't tell us. *International Journal of Early Years Education, 18*(4), 283-296. doi:10.1080/09669760.2010.531615
- Forskningsrådet. (11.5 2016) *Hygienen og sikkerheten ikke god nok i norske barnehager [Hygiene and safety - not good enough in Norwegian day care]*
- Garvis, S., & Pendergast, D. (2011). An investigation of early childhood teacher self-efficacy beliefs in the teaching of arts education. *International Journal of Education & the Arts, 12*(9), 1-15.
- Gulpinar, T., & Hernes, L. (2018). The Importance of Aesthetic Activities in Norwegian Kindergartens. In S. Garvis & E. E. Ødegaard (Eds.), *Nordic Dialogues on Children and Families* (pp. 157-172). London: Routledge.
- Hallam, R. A., Fouts, H., Bargreen, K., & Caudle, L. (2009). Quality from a toddler's perspective: A bottom-up examination of classroom experiences. *Early Childhood Research & Practice, 11*(2), 1-16.
- Harms, T., Cryer, D., & Clifford, R. M. (2006). *Infant/Toddler Environment Rating Scales Revised Edition*. New York: Teachers College Press.
- Harms, T., Cryer, D., Clifford, R. M., & Yazejian, N. (2017). *Infant/Toddler Environment Rating Scales Third Edition*. New York: Teachers College Press.
- Helmerhorst, K. O. W., Riksen-Walraven, J. M., De Kruif, R. E. L., Vermeer, H. J., Fukkink, R. G., & Tavecchio, L. W. C. (2014). Measuring interactive skills of caregivers in child care centers: The Caregiver Interaction Profile Scales. *Early Education & Development, 25*(5), 770-790. doi:10.1080/10409289.2014.840482
- Hernes, L., Os, E., & Selmer-Olsen, I. (2010). *Med kjærlighet til publikum: Kunst for barn under tre år. [With love for the audience: Art for children under the age of three years]*. Oslo: Cappelen akademisk forlag.

- Hestenes, L. L., Cassidy, D. J., Hegde, A. V., & Lower, J. K. (2007). Quality in inclusive and noninclusive infant and toddler classrooms. *Journal of Research in Childhood Education*, 22(1), 69-84. doi:10.1080/02568540709594613
- Hooper, A. (2013). *Exploring the relationship between global quality and child engagement in toddler child care classrooms*. (Master), University of Delaware, Newark.
- Jensen, K. B. (1989). Discourses of interviewing: Validating qualitative research findings through textual analysis. In S. Kvale (Ed.), *Issues of validity in qualitative research* (pp. 93-108). Lund: Studentlitteratur.
- Kelly, S. N. (1998). Preschool classroom teachers' perceptions of useful music skills and understandings. *Journal of Research in Music Education*, 46(3), 374-383. doi:10.2307/3345549
- Knudsen, J. S. (2008). Children's improvised vocalisations: Learning, communication and technology of self. *Contemporary Issues in Early Childhood*, 9(4), 287-296. doi:10.2304/ciec.2008.9.4.287
- Koops, L. H., Kuebel, C., & Smith, S. S. A. (2017). Mama's Turn: A mother's musical journey. *Research Studies in Music Education*, 39(2), 209-225. doi:10.1177/1321103X17711629
- Kulset, N. B. (2016a). Children's participation in ritualized circle time - Ritual in music sessions in the multicultural kindergarten: How does it comply with children's right to participation? *Nordic Early Childhood Education Research*, 13(3), 1-15. doi:10.7577/nbf.1745
- Kulset, N. B. (2016b). "It's you – not the music": Musical skills in group interventions in multicultural kindergartens. In L. Väkevä, E. Georgii-Hemming, S.-E. Holgersen, & Ø. Varkøy (Eds.), *Nordisk musikkpedagogisk forskning: Årbok 16 [Nordic Research in Music Education: Yearbook Vol. 17]*. Oslo: NMH.
- Kunnskapsdepartementet. (2012). Nasjonal forskrift om rammeplan for barnehagelærerutdanning. [Framework plan for early childhood teacher education]. Retrieved from http://www.regjeringen.no/upload/KD/Vedlegg/UH/Rammeplaner/Barnehagelaerer/BLU_rammeplan.pdf
- Kunnskapsdepartementet. (2015). *Tid for lek og læring. Bedre innhold i barnehagen. [Time for play and learning: Better content in kindergarten]*. (Meld. St. nr. 19 2015-2016). Retrieved from <https://www.regjeringen.no/contentassets/cae152ecc6f9450a819ae2a9896d7cf5/no/pdf/s/stm201520160019000dddpdfs.pdf>.
- Kvale, S. (1989a). *Issues of validity in qualitative research*. Lund: Studentlitteratur.
- Kvale, S. (1989b). To validate is to question. In S. Kvale (Ed.), *Issues of Validity in Qualitative Research* (pp. 73-92). Lund: Studentlitteratur.
- Laclau, E., & Mouffe, C. (2001). *Hegemony and socialist strategy: Towards a radical democratic politics*. London: Verso.
- Lambert, M. C., Williams, S. G., Morrison, J. W., Samms-Vaughan, M. E., Mayfield, W. A., & Thornburg, K. R. (2008). Are the indicators for the Language and Reasoning Subscale of the Early Childhood Environment Rating Scale-Revised psychometrically appropriate for Caribbean classrooms? *International Journal of Early Years Education*, 16(1), 41-60. doi:10.1080/09669760801892219
- Lærerutdanningsrådet. (1971). *Rammeplan for førskolelærerutdanning. [Framework plan for early childhood teacher education]*. Oslo: Universitetsforlaget.
- Løkken, G. (2000). *Toddler peer culture: The social style of one and two year old body-subjects in everyday interaction*. Trondheim: Pedagogisk institutt, Fakultet for

- samfunnsvitenskap og teknologiledelse, Norges teknisk-naturvitenskapelige universitet.
- Malloch, S. (1999). Mothers and infants and communicative musicality. *Musicae Scientiae*, 3(1), 29-57. doi:10.1177/10298649000030S104
- Malloch, S., & Trevarthen, C. (2009a). *Communicative musicality: Exploring the basis of human companionship*. Oxford: Oxford University Press.
- Malloch, S., & Trevarthen, C. (2009b). Musicality: Communicating the vitality and interests of life. In S. Malloch & C. Trevarthen (Eds.), *Communicative musicality: Exploring the basis of human companionship* (pp. 1-11). Oxford: Oxford University Press.
- Mathers, S., Singler, R., & Karemaker, A. (2012). *Improving quality in the early years: A comparison of perspectives and measures*. Retrieved from Oxford: <http://www.education.ox.ac.uk/wordpress/wp-content/uploads/2012/03/Early-Years-Quality-Mathers-et-al-Final-Report-2012.pdf>
- Mazokopaki, K., & Kugiumutzakis, G. (2009). Infant rhythms: Expressions of musical companionship. In S. Malloch & C. Trevarthen (Eds.), *Communicative musicality: Exploring the basis of human companionship* (pp. 185-208). Oxford: Oxford University Press.
- McPherson, G. E. (2006). *The Child as musician: A handbook of musical development*. Oxford: Oxford University Press.
- Ministry of Education and Research. (2011). *Framework Plan for the Content and Tasks of Kindergartens*. Oslo: The Ministry of Education and Research Retrieved from http://www.regjeringen.no/upload/KD/Vedlegg/Barnehager/engelsk/Framework_Plan_for_the_Content_and_Tasks_of_Kindergartens_2011.pdf.
- Måsvær, K. (2005). *Førskolebarns sangpreferanser: En kvantitativ undersøkelse av en gruppe førskolebarns sangrepertoar. [Pre-school children's preferences of songs: A quantitative study of a group of preschool children's song repertoire]*. (Master thesis), Høgskolen i Bergen/Universitetet i Stavanger, Stavanger.
- Nardo, R. L., Custodero, L. A., Persellin, D. C., & Fox, D. B. (2006). Looking back, looking forward: A report on early childhood music education in accredited American preschools. *Journal of Research in Music Education*, 54(4), 278-292. doi:10.1177/002242940605400402
- Os, E., & Bjørnstad, E. (2016). Undersøkelse av støtte til samspill mellom småbarn. Et kritisk blikk på ITERS-R-skalaen. [Investigating support for toddlers' peer interactions. A critical view on ITERS-R]. In T. Gulpinar, L. Hernes, & N. Winger (Eds.), *Blikk fra barnehagen* (pp. 69-96). Bergen: Fagbokforlaget.
- Os, E., & Eide, B. (2013). Småbarn og fellesskap i samlingsstunder og under måltider. [Young children and togetherness in circle time and during meals]. In A. Greve, S. Mørreaunet, & N. Winger (Eds.), *Ytringer om likeverd, demokrati og relasjonsbygging i barnehagen* (pp. 209-226). Bergen: Fagbokforlaget.
- Parncutt, R. (2006). Prenatal development. In G. E. McPherson (Ed.), *The Child as musician: A handbook of musical development* (pp. 1-31). Oxford: Oxford University Press.
- Reese, J. A. (2013). Adult identification of music behaviors demonstrated by young children. *Bulletin of the Council for Research in Music Education*(198), 51-67. doi:10.5406/bulcouresmusedu.198.0051
- Reynolds, A. M., & Burton, S. L. (2017). Serve and return: Communication foundations for early childhood music policy stakeholders. *Arts Education Policy Review*, 118(3), 140-153. doi:10.1080/10632913.2016.1244779
- Schaffer, H. R. (1984). *The child's entry into a social world*. London: Academic Press.
- Schaffer, H. R. (2004). *Introducing child psychology*. Oxford, UK: Blackwell Publishing.
- Schaffer, H. R. (2006). *Key concepts in developmental psychology*. London: Sage.

- Scott-Kassner, C. (1999). Developing teachers for early childhood programs. *Music Educators Journal*, 86(1), 19-25. doi:10.2307/3399572
- Singer, E. (2002). The logic of young children's (nonverbal) behaviour. *European Early Childhood Education Research Journal*, 10(1), 55-65. doi:10.1080/13502930285208841
- Skånland, M. S. (2012). *A technology of well-being: A qualitative study on the use MP3 players as a medium for musical self-care*. Norges musikkhøgskole, Oslo.
- Small, C. (1998). *Musicking: The meanings of performing and listening*. Middletown, CT: Wesleyan University Press.
- Smith, L., & Ulvund, S. E. (1999). *Spedbarnsalderen. [Infancy]*. Oslo: Universitetsforlaget.
- Sole, M. (2016). Crib song: Insights into functions of toddlers' private spontaneous singing. *Psychology of Music*, 1-21. doi:10.1177/0305735616650746
- Sommer, D. (2012). *A childhood psychology: Young children in changing times*. Basingstoke, UK: Palgrave Macmillan.
- SSB. (2017). Barnehager, 2016, endelige tall. [Kindergartens, 2016, final figures]. Retrieved from <https://www.ssb.no/utdanning/statistikker/barnehager/aar-endelige/2017-03-21#content>
- Stern, D. N. (1985/2000). *The interpersonal world of the infant*. New York: Basic Books.
- Trehub, S. E. (2006). Infants as musical connoisseurs. In G. E. McPherson (Ed.), *The child as musician: A handbook of musical development* (pp. 33-49). Oxford: Oxford University Press.
- Tschudi, F. (1989). Do qualitative and quantitative methods require different approaches to validity? In S. Kvale (Ed.), *Issues of Validity in Qualitative Research* (pp. 109-134). Lund: Studentlitteratur.
- Utdanningsdirektoratet. (2017). Forskrift om rammeplan for barnehagens innhold og oppgaver. [Framework Plan for Kindergartens]. Retrieved from <https://lovdata.no/static/lovtidend/ltavd1/2017/sf-20170424-0487.pdf>
- Valerio, W. H., & Freeman, N. K. (2009). Pre-service teachers' perceptions of early childhood music teaching experiences. *Bulletin of the Council for Research in Music Education*, 181(Summer), 51-69.
- Vermeer, H. J., van Ijzendoorn, M. H., de Kruif, R. E. L., Fukkink, R. G., Tavecchio, L. W. C., Riksen-Walraven, J. M., & van Zeijl, J. (2008). Child care in the Netherlands: Trends in quality over the years 1995-2005. *Journal of Genetic Psychology*, 169(4), 360-385. doi:10.3200/GNTP.169.4.360-385
- Vestad, I. L. (2013). *Barns bruk av fonogrammer: Om konstituering av musikalsk mening i barnekulturelt perspektiv. [Children's use of phonograms: About constitution of musical meaning in children's cultural perspective]*. (Doctoral dissertation), Universitetet i Oslo, Oslo.
- VG. (26.10 2015). Stor norsk studie: Barnehagene dårligere enn ventet. [Extensive Norwegian research: Day care worse than expected]. Retrieved from <http://www.vg.no/nyheter/innenriks/foreldre-og-barn/stor-norsk-studie-barnehagene-daarligere-enn-ventet/a/23548840/>
- Vist, T. (2011). Music experience in early childhood: Potential for emotion knowledge? *International Journal of Early Childhood*, 43(3), 277-290. doi:10.1007/s13158-011-0045-7
- Welch, G. F. (2006). Singing and vocal development. In G. E. McPherson (Ed.), *The Child as musician: A handbook of musical development* (pp. 311-329). Oxford: Oxford University Press.
- Yim, H. Y. B., & Ebbeck, M. (2011). Early childhood teachers' professional development in music: A cross-cultural study. *Australasian Journal of Early Childhood*, 36(3), 74-81.

- Young, S. (2009). Towards constructions of musical childhoods: Diversity and digital technologies. *Early Childhood Development and Care*, 179(6), 695-705. doi:10.1080/03004430902944908
- Young, S. (2016). Early childhood music education research: An overview. *Research Studies in Music Education*, 38(1), 9-21. doi:10.1177/1321103X16640106
- Østrem, S., Bjar, H., Hogsnes, H. D., Jansen, T. T., Nordtømme, S., & Tholin, K. R. (2009). *Alle teller mer: En evaluering av hvordan Rammeplan for barnehagens innhold og oppgaver blir innført, brukt og erfart [Everyone counts: Evaluation of how The Framework Plan for the Content and Tasks of Kindergartens are introduced, used and experienced]* (Vol. 1/2009). Tønsberg: Høgskolen i Vestfold.

ⁱ Due to the system of maternal leave in Norway, in which one parent is paid his/her regular salary for approximately one year, most infants stay with their parents for the first year.

ⁱⁱ The ITERS-R data is collected in cooperation with the sister project *Better provision for Norway's children in ECEC*.

ⁱⁱⁱ The term *kindergarten*—‘barnehage’ in Norwegian—is used for any day care institution for children below school age.

^{iv} Space and Furnishings, Personal Care Routines, Listening and Talking, Activities, Interaction, Program Structure, and Parents and Staff (Parents and Staff is not a part of this study).

^v After this article was written, a revised edition of ITERS-R was published as ITERS-3. The music and movement scale in ITERS-3 is rather similar to ITERS-R, but ITERS-3 has more emphasis on singing, movement and children's learning (see Harms, Cryer, Clifford, & Yazejian, 2017). To the best of our knowledge, the manual ("All about ITERS-3") is not yet published.

^{vi} “*Much of the day*: Refers to the time materials are accessible to the children. It means most of the time that any child may be awake and able to play.” (Harms, Cryer and Clifford, 2006, p. 7)..

^{vii} The authors emphasize that “a good professional library is one that contains current materials, meaning that most of the books in the library have been published within the last 10 years” (Cryer et al., 2004, p. 464). However, they also claim that older books, “such as the works of Piaget and Erikson are exceptions, since they are classics on which many of our current ideas are based” (Cryer et al., 2004, p. 464).

^{viii} E.g. ‘Vocal or instrumental sounds (or both) combined in such a way as to produce beauty of form, harmony, and expression of emotion’ (<http://www.oxforddictionaries.com/definition/english/music>), Access date 05.10.2015.

^{ix} In the preface of his handbook on musical development, *The child as musician*, McPherson put a lower limit on the years “when children are able to begin formal music instruction...[to] ...around age 3 (...)” (2006, p. v). In the same book, Parncutt (2006), discussing prenatal music education (!), and Trehub (2006), presenting infants as musical connoisseurs, underscore that formal music instruction, even for toddlers, probably has no effect on later musical skills.

^x In line with this wide definition of music education, we naturally should have also included the other items in ITERS-R that briefly mention music (e.g. Item 8, 12, 13, 23, 24, 31). However, due to the article's format, we focus on the ITERS-R item that most explicitly emphasizes music education.

^{xi} There were problems recruiting enough groups to participate. After a request to providers at ECEC institutions, a few—less than five—approached the project and offered their participation.

^{xii} For 4% of the groups. Information about age is missing.

^{xiii} Elisabeth Bjørnstad from *Better provision* and Ellen Os from *Searching for qualities* were responsible for organizing and analyzing data related to ITERS-R scoring. Both participated in the data collection. Music educator and co-researcher Vist, who initiated this article, did not score. She entered the processes of analysis and result development when the SPSS procedure was almost finished, taking primary responsibility for the in-depth analysis of Item 18. Music and Movement, published in this article.

^{xiv} Their reliability scores were within one scale point, meaning that the difference could not be more than one scale point over or under the leading observers on each item to be accepted as reliable. This is compared to Cryer's scores, which were 96%.

^{xv} Except subscale 7. Parents and Staff, which was excluded in this research.

^{xvi}The staff also argued that if instruments are accessible much of the day, the high score on 1.2 would not have been possible (although indicator 1.2 in ITERS-R identifies the 'loud music on much of the day' as primarily recorded music).