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## “Music and Me”

### Children’s Affinity for Music and Children’s Drawings in a Longitudinal

### Mixed Methods Study

By

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#### Abstract

*Researchers have acknowledged the perspective and agency of children to be of substantial relevance to the design of educational settings. Still, mixed methods studies delineating children’s perspective on what they experience in music education settings designed for them are rare. Departing from reflections on the theoretical concept of children’s music experience, the present article shares insights into an empirical study approaching children’s affinity for music, a construct integrating experiential qualities of liking and valuing music in a concrete educational setting. Discussed are selected findings of a mixed methods study conducted in the scope of an opera education project involving German elementary schools (n=25). The study integrated the perspective of children (n=282) at a sample of urban and rural primary schools. The article presents findings from the quantitative research and the qualitative, visual data, namely children’s drawings (n=561). Results indicate that sociality and embodiment are central dimensions of children’s situated music experience and potentially contribute to their being open to musical engagement and affinity for music in path-breaking musical experiences. Referring to an ecological situativity framework, the paper concludes with indicating implications for the design of educational settings and future research.*

**Keywords:** children’s perspective; affinity for music; music experience; musical agency; elementary school; situativity; ecological framework; mixed methods; children’s drawing

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## Introduction

### Children's Music Experience In- and Outside the Classroom

Music programs for children quite commonly entitle their activities with signal words such as "Music and Me" when advertising a child-oriented setting. They promote children's affinity for music. What does the 8-year-old Peter<sup>1</sup> experience, however, when participating in a music education project? What does "Music and Me" entail here in the eyes and ears of the 8-year-old? Considering that Peter encounters a hitherto unfamiliar kind of music, it might be of great interest to investigate what actually shapes his experience. In broader terms, what dimensions of music experience (Schmid, 2014, 2015, 2016) are of substantial relevance to children in music education settings? What makes them consider the possible music experience provided for them in a specific context to be worthwhile, what contributes to their being open to a new experience like the music from an opera, for example, which Peter encounters in this case?

Christopher Small's statement of classrooms not being "good places for the gaining of significant music experience" (Small, 2011, p. 288) at all, challenges present day music education. Do "classrooms" and "music" represent realms that require fundamentally opposed habitual modes of experience? Are those musical experiences that are substantial in the sense of promoting an affinity for music in the general music classroom always second-best-experiences? In research on young people's musical identities, Stålhammar (2006) found that music experience in the classroom did not seem "natural" to the students (Davis, 2011, p. 2). Griffin (2011) reveals "wonderings for the relevance of elementary music curricula to children's daily music experiences" (p. 1). Nonetheless, in Germany, there is a strong belief that classroom music does provide a potential momentum for children's individual learning ecologies. Hence, the music classroom, how limited it may be, is considered the realm where opportunity meets the

enhancement of musical (self-)empowerment – and often loses ground in precisely that respect. The slogan of the German music education program *Jedem Kind ein Instrument* (JeKi) [“An instrument for each child”] (Kranefeld, 2015, 2016; Lehmann-Wermser, Busch, Schwippert, & Nonte, 2014) has become a trademark for reaching out to every child by fostering comprehensive musical participation. The accompanying research has been seminal for the German research landscape (Kranefeld, 2015, 2016). Naturally, if “every child matters” (Cheminais, 2009), it is only a small step to featuring more research on children’s specific perspective, taking into account empirical evidences for the experiential qualities a music education setting de facto may provide for children. In her research on children’s in- and out-of-school music experiences, Shelley M. Griffin (2009) asserts that research should center on “children’s thoughts, feelings and sentiments” (p. 173). She claims that still, the music education profession might only be at the threshold of acknowledging children’s perspectives, although it has quite often been stated that “the value of music education ought to be more strongly anchored in the learner’s experience” (Westerlund, 2008, p. 79).

### **Approaching Children’s Situated Perspective**

Research on music experience is wide-ranging. To date, in the German-speaking countries, an extensive theoretical discourse on aesthetic experience (Kaiser, 1993; Rolle, 1999; Rora, 2004), has had a prevalent impact whereas empirical studies on children’s idiosyncratic perspectives are still rarer (Dietrich, 2004; Lehmann-Wermser & Niessen, 2006; Stålhammar, 2004). This is the case concerning the perspectives of elementary school children (Oravec & Weber-Krüger, 2016) – albeit the fact that this age group has been designated to be of particular interest. The replicated evidence for children’s decreasing open-minded attitude at the end of elementary school (Hargreaves & Bonneville-Roussy, 2018; Schellberg & Gembris, 2007) has

added to an international consensus as to how much effort should be put into elementary school music education (Miksza & Gault, 2014). Current research findings underline the importance of supporting children's musical engagement at this formative stage to pave the way to their future engagement (Pitts, 2014). In particular, music educators are called upon to "build bridges with children between their current sound world and experiences and those with which they are not yet familiar" (Daubney, 2017, p. 9). But notwithstanding the fact that fostering children's "openness" early on has become a metaphor for begin omnivorous as a noble education objective (Kraemer & Malmberg, 2016) it has to be stated that in the German-speaking countries, research on children's perspective at the elementary school level has not been a major focus (Oravec, 2016). In contrast to this, studies underpinning effects on self-concept (Busch, 2013; Busch & Kranefeld, 2013; Degé, F., Wehrum, S., Stark, & Schwarzer, 2014; Fiedler & Müllensiefen, 2016, 2017; Fiedler & Spychiger, 2017; Lowe, 2011; Spychiger, 2017) of secondary school children aged 12-14 or older are rather prominent. Internationally, there is a corpus of research on the learning processes (Coulson & Burke, 2013; Harwood & Marsh, 2012) or outcomes like children's competences (Gil, Reybrouck, Tejada, & Verschaffel, 2015; Hasselhorn, 2015; Hasselhorn & Lehmann, 2015; Knigge, 2010). Coulson and Burke (2013) shifted the focus on the assessment of student creativity. Although the study still centers on children's musical skills, the research illustrates how student's perspective can successfully be taken into account (Coulson & Burke, 2013). Constructs like musical self-concept (e.g., Spychiger, 2017), experience of competence (Harnischmacher & Knigge, 2017) musical sophistication (Fiedler & Müllensiefen, 2016, 2017), or motivation (Evans, 2016; Harnischmacher & Knigge, 2017) approach student's perspective, but still the related instruments have so far not been adapted to be suitable for elementary school children. Moreover, they describe dispositions of generalized expectations (Harnischmacher &

Knigge, 2017) and do not necessarily aim at the confluent, interactional/relational dimension<sup>2</sup> (Rimmer, 2017) of younger children's response to music, nor do they map the situatedness of children's response to musical situations in concrete settings (see above; Custodero, Cali, & Diaz-Donoso, 2016).

Lately, accomplished music education researchers have emphasized that a complementary approach is needed (Krupp-Schleußner & Lehmann-Wermser, 2018). In their extensive research on conceptions of musical understanding for instance, Hallam and Papageorgi (2016) make a cause for music education to acknowledge the emotional impact of music. They strikingly place *love and enjoyment* at the center of their theoretical model of musical understanding and envision this to be the foundation for a lifelong engagement with music. In their pledge for an ethical music education, Elliott and Silverman (2014) depart from the notion that educators should thoroughly know and understand the children they serve and aim for an enjoyment of music in the broader context of *eudaimonia* as the ultimate good life. Children's well-being (Koops, 2017; Krupp-Schleußner, 2016) and fostering life-long engagement with music (Pitts, 2016) have become more prominent fields of research lately, reinforcing affective aspects of children's encounter with music. Pitts (2016) reports on musical life histories, among them formative musical experiences. She advocates a musically supportive education, identifying and nurturing students' enthusiasms. Consequentially, she emphasizes the complementary importance of the "imparting of skills" with the fostering of affective aspects. Pitts suggests "that current ways of evaluating the impact of music education are inadequate" (p. 651). The life-history accounts in her research underline the prominence of the "hidden curricula", which provide "invitations or barriers to join the musical world" (p. 651). This indeed makes it necessary to have a closer look at concrete educational contexts as potential thresholds to children's musical worlds.

Alongside early childhood studies on the musical worlds of young children, often ethnographic or phenomenological in nature, are prospering (Barrett, 2016; Custodero et al., 2016; Koops, 2012, 2017; Marsh & Young, 2016; Tomlinson, 2013). Research on children's self-initiated musical activities (Custodero et al., 2016; Harwood & Marsh, 2012; Koops, 2012, 2017; Marsh & Young, 2016) has been substantially researched. In this context, too, interestingly enough, musical enjoyment has recently become a more prominent object of research (Koops, 2017).

Koops sought to examine “the lived experience of children's enjoyment during musical play” (p. 5) and sorted out hallmarks of children's musical enjoyment. In what she calls the *enjoyment cycle*, she pins down remarkable textures and structures of young children's musical enjoyment, namely intersections with learner's agency. Koops pledges for the analysis of musical enjoyment as a concept that professional educators ought to take into account more systematically.

Although providing valuable insights, still, most child-centered ethnological or phenomenological music education research is pursued in the English-speaking countries. Altogether, more insights into “invitations or barriers” (Pitts, 2016, p. 651) from the perspective of children's lived experience (Koops, 2017) in concrete educational settings are mandatory.

### **Investigating Educational Settings and Children's Affinity for Music**

In the past few years, in Germany and elsewhere, participation programs, e.g., in cooperation with opera and concert houses, complementing the elementary school curriculum have been subject to extensive evaluations. This research tends to focus teachers' perspective, general outcomes, or the demonstrations of wide-ranging benefits (Imms, Jeanneret, & Stevens-Ballenger, 2011; Kranefeld, 2015). Only recently, studies on the impact of school music projects also begin to integrate children's perspective more thoroughly (Bunte, 2014; Busch & Kranefeld,

2013; Göllner & Niessen, 2016; Krupp-Schleußner, 2016; Krupp-Schleußner & Lehmann-Wermser, 2018; Lehmann-Wermser & Jessel-Campos, 2013). To do so, however, one has to be aware of children's "mediating between self and environment" as a "creative process" (Custodero et al., 2016, p. 57). Just as Custodero et al. have captured children's self-initiated musical actions in everyday situations, research on children's situated music experience in educational settings should as well be considerate of "ecological, circumstantial...characteristics" (p. 57).

Pitts (2014), for instance, acknowledges and emphasizes children's perspective and their identity formation in the context of a year-long school project involving three UK elementary schools. The study explores "children's musical experience and references" (p.136) by analyzing children's drawings. The drawings elicited the children's musical engagement and musical confidence and they became a veritable "portrayal" of the children's musical identity and perceptions. The research highlights the richness of children's musical experience and also illustrates one may approach these experiences creatively.

Hence, considering the shortage of existing research focusing elementary school children's perspective on educational settings and taking children's voice and agency seriously (Barrett, 2003; Karlsen, 2011; Laurence, 2011; McCarthy, 2010; Rimmer, 2017; Wiggins, 2016), it seems rewarding to inquire into children's lived experience in the contexts of settings educators provide.

However, to figure out what children do experience when participating in an educational intervention is a challenge. Now departing from the theoretical concept of music experience established in the German music education discourse, we ask on what experiential qualities do children actually rely? Frankly, given that educators are intrigued to understand the *quality* of children's experience and vaguely hope for the students to have an intangible *positive* experience

eliciting a mysterious connection between students and music, it is urgent to clarify a few things. St. George, Holbrook and Cantwell (2014) discuss several adjacent concepts referring to the link between music and student. To systematize different approaches they differentiate between an affective quality such as *liking* and abstract attribution such as *valuing* and propose the concept of *affinity for music* to characterize an individual's situated involvement with music. The present study draws on a comparable notion of affinity for music which had arisen as a meta-theme in St. George, Holbrook and Cantwell's research helping to describe the "dimensionality of participants' connection with music" (p. 267). In the present study, though, the construct decisively integrates subjective affective qualities (*liking*) and intersubjective significance (*valuing*). That way it can map children's situated experience in a concrete educational context. It helps to investigate cues that enhance or inhibit children's situated affinity for music in the context of an educational setting at the elementary school level. Before describing such an approach, some theoretical underpinnings are indispensable.

### **Theoretical underpinnings: A Multidimensional, Ecological Framework**

One prevalent theoretical foundation for investigating children's affinity for music is the conception of music as environment (Reybrouck, 2015). It is vital to establish an ecological framework (Windsor & Bézenac, 2012) which captures musical phenomena in their situatedness (Barrett, 2012; Clarke, 2005; O'Neill, 2017; Reybrouck, 2015; Schmid, 2016). Schmid (2014, 2015, 2016) developed a framework rendering those dimensions of experience which are of relevance to children. It allows for systematically specifying factors that may foster affinity for music. In this framework, music experience is assumed to be a systemic continuum (Schmid, 2016) comprising multimodal dimensions that are closely entangled. They dynamically integrate a multitude of situational references. Four dimensions are considered to be fundamental:<sup>3</sup>

- (1) *Embodiment* refers to music experience in association with body conditions and movements;
- (2) *Narrativity* hints at music experience in association with dramatic or atmospheric qualities (“proto-” or “auto-narrative”);
- (3) *Sociality* pertains to music experience in association with social contact and/or belonging, and
- (4) *Materiality* refers to music experience in association with the sheer physical, sensual appeal of sounding and sound-generating material (Schmid, 2016).

The multidimensional ecological framework was developed as a heuristic, sensitizing concept. According to the framework, it is essential to acknowledge that children “relate their musical interactions to...intermodal schemata, and attribute musical value accordingly” (Schmid, 2016, p. 107; see also Wiggins, 2009). Phenomena like “conceptual blending” and “cross-domain-mapping” (Zbikowski, 2002) are highly relevant for children's music experience. Studies on informal learning (Campbell, 2010; Green, 2008), musical play (Bishop & Burn, 2013; Cassidy & Paisley, 2013; Harwood & Marsh, 2012) or musical creativity (Burnard, 2012; Coulson & Burke (2013), underpinned this conception. In her review of literature, Tomlinson (2013) emphasizes that children’s cognitive structuring relies on a multimodal meaning making when experiencing music. So it can be conjectured that educational settings which take this multimodality into account (Bishop & Burn, 2013; Harwood & Marsh, 2012) foster children’s affinity for music (Krupp-Schleußner & Lehmann-Wermser, 2018). On that baseline, investigating children’s situated music experience in educational settings, researchers have to be aware of its multidimensional, intermodal quality. This conception should permeate the research objectives as well as methodological choices.

## Research Questions and Hypotheses

Departing from the ecological situativity framework, the researcher in this empirical study looked for evidence on how a concrete educational intervention would influence children's affinity for music. Moreover, the aim was to explore the factors that presumably may have fostered or inhibited children's affinity for music in that educational setting, hereafter relating the outcome to the theoretical framework. The two generative questions were:

- (1) What *value* do children themselves attribute to music, and how do their subjective concepts of *liking* music become manifest in the context of the concrete educational setting?
- (2) Which factors may have fostered or inhibited their *affinity for music* in that setting, and which dimensions of music experience do become manifest in the context of these analyses?

In accordance with these questions, the study had two research objectives:

- (1) The evaluation of a music education project focusing children's attributes (*liking*) and concepts (*valuing*) (research strand 1, operationalizing the construct *affinity for music*).
- (2) The mapping of children's lived experience (research strand the 2, explorative investigation into children's situated music experience).

Correspondingly, research objective (2) aimed at a thorough insight into children's subjective frames of reference whereas research objective (1) led to formulating a hypothesis assuming positive dynamics of children's situated affinity for music.

Hypothesis: The children participating will show a greater affinity for music after the

educational intervention than before, indicated by a change of subjective attitude (*liking*) and greater openness for the music, indicated by assigning intersubjective relevance (*valuing*).

This hypothesis was to be tested giving testimony to the quality of the educational intervention concerning the children's increasing or decreasing affinity for the music they encountered in the project<sup>4</sup>. It is important to note that the study was designed to merely depart from the focus on the efficacy of the educational intervention. Notably, the overall research objective was to explore children's idiosyncratic perspectives – shedding light on the factors that may foster or inhibit their affinity for music. The twofold objective called for a research design combining evaluative methods rendering children's attitudes with methods that correspond with children's multimodal approach to music (Schmid, 2014, 2015, 2016).

### **Method**

Overarchingly, the study employs a child-centered approach. This requires a specific methodological sensitivity (Heinzel, 2012). Therefore, to get a better understanding of the contextual factors fostering or inhibiting children's affinity for music, a whole array of methods is needed. Videography and participatory observation of children's interactions afford valuable insights (Koops, 2012, 2017; Kranefeld, Heberle, & Pankoke, 2015; Laurence, 2011; Marsh & Young, 2016), but as a matter of course they cannot highlight children's subjective perspective or frames of reference. Interviews, on the other hand, limit children's responses to verbal output. For these reasons, this study used a mixed methods design integrating child-specific questionnaire, participatory observation, video-graphed interviews, and visual data (Schmid, 2014). The research strategy was to carefully examine children's perspective and their frames of reference and offer them different response formats to support ecological validity (Cicourel, 1996; DeNora, 2013).

### **Mixed Methods Research Design**

The mixed methods design (Creswell & Plano Clark, 2011), namely a longitudinal, pre-post-design employing quantitative and qualitative methods, intertwined two strands of research. An evaluative, outcome-oriented research approach combined an explorative and a phenomenological design (Creswell, 2013; Kurt, 2002). The sample of participating children ( $n = 282$ ) was composed of 130 girls (46.1%) and 152 boys (53.9%) coming from  $n = 25$  elementary schools in the region of Southern Baden, Germany. Sampling included all classes that participated in the project comprising urban as well as rural contexts. Thus  $n = 282$  elementary school children, median aged 8 ( $M = 8.39$ ;  $SD = 1.156$ ), were part of a pre-post-survey via a child-specific questionnaire<sup>5</sup> encompassing the before-after-measurement of children's affinity for music. Among other methods<sup>6</sup>, collecting visual data, i.e., children's drawings ( $n = 561$ ), supplemented the spectrum of methods. This article will concentrate on the triangulation of the quantitative survey data with this qualitative, visual data. It will then discuss implications concerning the theoretical underpinning, i.e., as to how children's frame of references coincides with the multidimensional ecological framework described above. In the complex design, quantitative data functioned as a foundation of qualitative data. The construct *affinity for music* served as a baseline variable for an analysis of visual data.

### **Educational intervention: The music education project**

The educational intervention to which the study refers is a music education project involving  $n=25$  elementary schools in Baden-Württemberg, Germany. The project was designed as an exposure-to-arts program, both school-based and venue-based (Imms et al., 2011). The music curriculum in German elementary schools is wide-ranging, giving much leeway to elementary school teachers. These ideally are music specialists, but in reality, they are

outnumbered by generalists (Oravec, 2016). Thus the 25 participating classes have heterogeneous musical backgrounds, opera music not being a topic the children are likely to have encountered in school. In the intervention, a team of two music educators of the opera house designed and conducted a two-day teacher training. Participating teachers were generalists ( $n=23$ ) as well as music specialists ( $n=2$ ). In addition to one weekly classroom music lesson as part of their elementary school curriculum the participating children received several workshop lessons ( $M = 7,5$ ) for 45 minutes in a period of about eight weeks<sup>7</sup>. These were incorporated in the regular school curriculum and based on the teacher training and material folders received at the training. Music students and the music educators, who visited the schools, supported the teachers in turn. The teaching materials offered didactic designs for five phases, based on the method of *Scenic Interpretation* [“Szenische Interpretation”] (Kosuch, 2007).

- (1) Phase 1: getting introduced, empathizing with the musical atmosphere and the opera subject e.g., via singing;
- (2) Phase 2: being inspired by silence as the core theme of the opera, inventing own music as para-compositions, dealing with the opera theme without knowing the actual libretto;
- (3) Phase 3: getting to know the opera characters, e.g., rhythmically characterizing the characters. Role cards inspired the children to start playing roles and identifying with the setting;
- (4) Phase 4: creatively developing their own versions of the theme and finding solutions for the course of the piece and the music; and
- (5) Phase 5: (after having attended the opera performance) reflecting the experience from the perspective of the respective roles and then

stepping out of the roles to reflect their own and differing experiences of others.

These school-based workshops took place in conjunction with a venue-based attendance at an opera performance of about an hour in length. There, the children participated by singing along to a central song and partially interacting as “the people” in the plot.

Thus, the project introduced a contemporary children’s opera<sup>8</sup>. The approach primarily characterized a focus on children's self-determined participation, encountering unfamiliar music through quasi-theatrical interaction. The latter incorporates physical response, social role-playing, singing, playing instruments, and musical reconstruction of narrative elements. The approach and the genre of music theater represent a synthesis of inter-modality. Since this study conceptualizes music as situated interaction (Juslin & Laukka, 2004; Shepherd & Wicke, 1997; Small, 1998; Wiggins, 2009), the program provided an ideal context making it easy for the children who participated to refer to concrete musical settings when responding. It also facilitated the comprehension of the children’s contextual attributions when collecting and analyzing data. As a methodological consequence, the central variable affinity for music integrates children’s intermodal descriptions capturing acoustic as well as visual aspects of a musical situation (Schmid, 2015).

### **Data collection**

Embedded in the broader frame of the theoretical study, and the mixed methods design, the summative evaluation of the project played an important role. It served as a baseline to further explore dimensions of children’s situated music experience. For adding such an evidence-based frame of reference, the researcher grounded the project evaluation on the concrete project's specific goals (Wottawa & Thierau, 2003). In this case, the project initiators declared major

project goals were to inspire (a) openness towards the unfamiliar music, and (b) to create substantial memories. Based on the theoretical underpinnings, openness was operationalized in the variable *affinity for music*, defined as a construct that comprises the *subjective* attitude towards the actual opera music (*liking*) as well as the assigning *intersubjective* relevance (*valuing*). Additionally, children's memories were explicitly asked for in an open question format and contextualized with respect to the affective quality of these memories. To allow for such a contextualization, the children were asked to mark their memories with green (positive) and red (negative) crayons corresponding with the affective quality of those memories. Hereafter the memories were correlated with the variable *affinity for music*<sup>9</sup> central for the hypothesis (see above). In the pre-post-design, this hypothesis was tested using inferential statistics. The Wilcoxon signed-rank test validated t-test results.

Furthermore, for the acquisition of the visual data, every child was asked to draw two pictures each: one right before the project and one right after. The specified task for the children was to draw “the opera music and me”, potentially depicting affinity in a literal as well as metaphorical sense. Optionally, the children could also add verbal remarks to explain their drawings. The two time-points of data collection were several weeks<sup>10</sup> apart. In that manner, the researcher collected  $n = 561$  children's drawings.

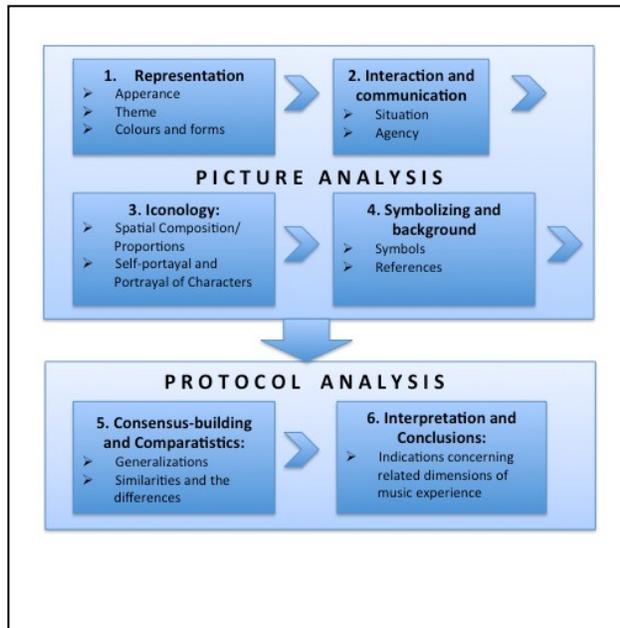
### **Data analysis: Triangulation and Children's Drawings**

The allocation of sub-groups was aimed at a thorough analysis of the factors that potentially fostered or inhibited children's affinity for music. To better understand what may have contributed to the children's ratings in the quantitative survey, the researcher drew subsamples of the  $n = 561$  children's drawings. Although a high number of the children's drawings were rather colorful documents, the sampling strategy did explicitly not rely on visually

manifest criteria but rather on the results of the quantitative analysis. Going beyond mean value formation, the quantitative data on individual response behavior was identified. Thus, it became feasible to relate qualitative data to individual responses in the pre-post-treatment comparison of the quantitative survey. A cross-classified table accomplished this task. This displayed a detailed account of how the individual children's affinity for music had developed during the project. Hence, a subsample could be drawn from the main sample of children, the researcher stratified the sample according to most drastic dynamics of affinity for music (2-3 points on a 5-point Likert-type rating scale). Consequently, there were two subgroups: One with a high increase of affinity for music (positive dynamics), one with a high decrease (negative dynamics)<sup>11</sup>. This research strand (II) pursued research question (II) (see above), which centers on a mapping of children's situated music experience and relevant frames of reference concerning children's affinity for music. The visual data could thus be interpreted based on context information, which is crucial for highly inferential modes of interpretation (Neuß, 1999). In the multi-level analysis of the children's drawings, recurring patterns were inductively filtered as potentially relevant for the particular sub-group. Hereafter, deductive analysis revealed which of the dimensions of music experience (see theoretical framework) had become manifest in relation to children's responses during the project.

The deployed analysis method was an adaptation of acknowledged analysis methods, synthesizing three approaches with different foci respectively. They were modified in compliance with the requirements of the present study i.e., considerate of ecological characteristics of children's perspective (Custodero et al., 2016). (1) Mollenhauer (1996), emphasized the importance of the overall *representation*, (2) Paus-Haase (2001), laid his emphasis on *iconology* e.g., spatial composition and *symbols*, (3) Neuß (1999), systematized *interaction*. Integrating

these three perspectives, the analysis process can be depicted as following (Fig. 1):



*Figure 1.* Visual data: Analysis framework.

A great emphasis was laid on a systematic, controlled, and reliable analysis process, and therefore on consensus building. An interdisciplinary group composed of a psychology major, an arts teacher, a graduate art therapist, and the author provided intersubjective validation. In the analysis process four central notions functioned as guidelines of interpretation: (1) representation and (2) interaction/ communication in the given context (3) the iconology, i.e., the position of the self, its position, the accuracy of portrayal, and agency in relation to the musical situation were considered central, as well as (4) symbols or references.

As figure 1 shows, in the multi-level method, eventually, the analysis proceeded in two main stages: picture analysis and protocol analysis. Three separate iterative analysis sessions were protocolled. Hereafter the protocols were analyzed and condensed isolating inter-rater correspondences, leading to an intersubjective, descriptive system that mirrored noticeable

recurring patterns. Departing from these now, how can the children's perspective be grasped? What general impact did the project have on the children's affinity for music, and what dimensions have potentially enhanced or inhibited their affinity for music?

## Results

Research strand I focused the project evaluation, i.e., an attitudinal survey that served as a starting point for further in-depth investigation of children's perspectives. In this survey, the participating children's answers indicate a positive impact of the project. Means comparison suggests a positive outcome (Fig. 2).

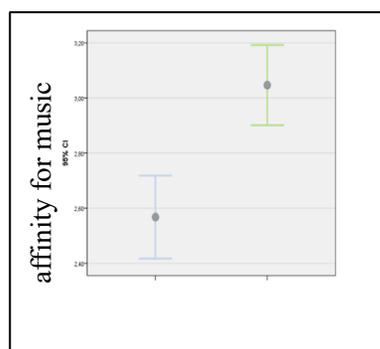
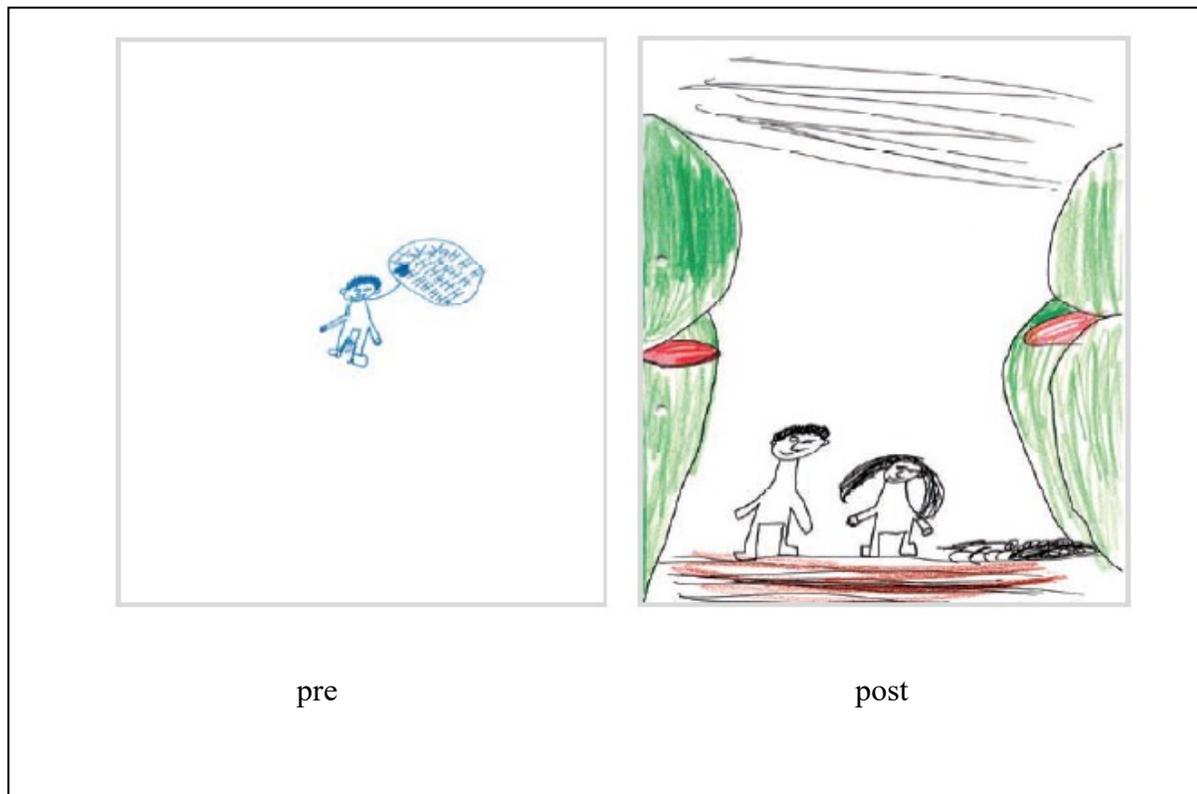


Figure 2. Means comparison: Affinity for music pre-post intervention

As can be seen in the chart in figure 2, children's affinity for music<sup>12</sup> had increased highly significantly ( $p < .001$ ) after the project  $t(235) = -5,604, p = .000$ . Yet, that outcome was not an end in itself. As stated above, it served as a specific baseline allowing for a triangulation with the qualitative data. Interesting enough, the results of the quantitative analysis also indicated that there had been a small number of children<sup>13</sup> whose affinity for music had seemingly been impacted negatively. What is to make of that? Departing from the statistical mean value, the aim was now to draw nearer to the children's expression of what they might have experienced in the course of the project. What might have contributed to the positive or negative experiences? Of

special interest were the drawings of those children whose affinity for music had changed the most.

Two of these patterns found in the drawings reflect the children's affinity for music.



*Figure 3.* Increasing affinity for music: Example of positive dynamics in pre/post comparison.

The two pictures differ significantly. They display a recurring pattern in the sub-group with positive dynamics of affinity for music. In this pattern, the before-drawings depict the ego seemingly hanging in the air, small and disconnected (see figure 3). In contrast, in the drawings after the project, the ego is depicted in a more social situation, and it is bodily grounded.

Moreover, in these drawings, the setting is staged in a far more colorful room full of details. In this manner, the drawings manifested a positive change of attitude, which was verified in the survey responses. The drawings expressed an attitude which proved to be consistent with

the attitude the respective children showed in the questionnaire. By this means, the picture analysis additionally validated the quantitative findings, even though that had not been the primary focus.

To contrast these findings, what patterns could be found in the – way smaller – sub-group with negative dynamics of affinity for music?

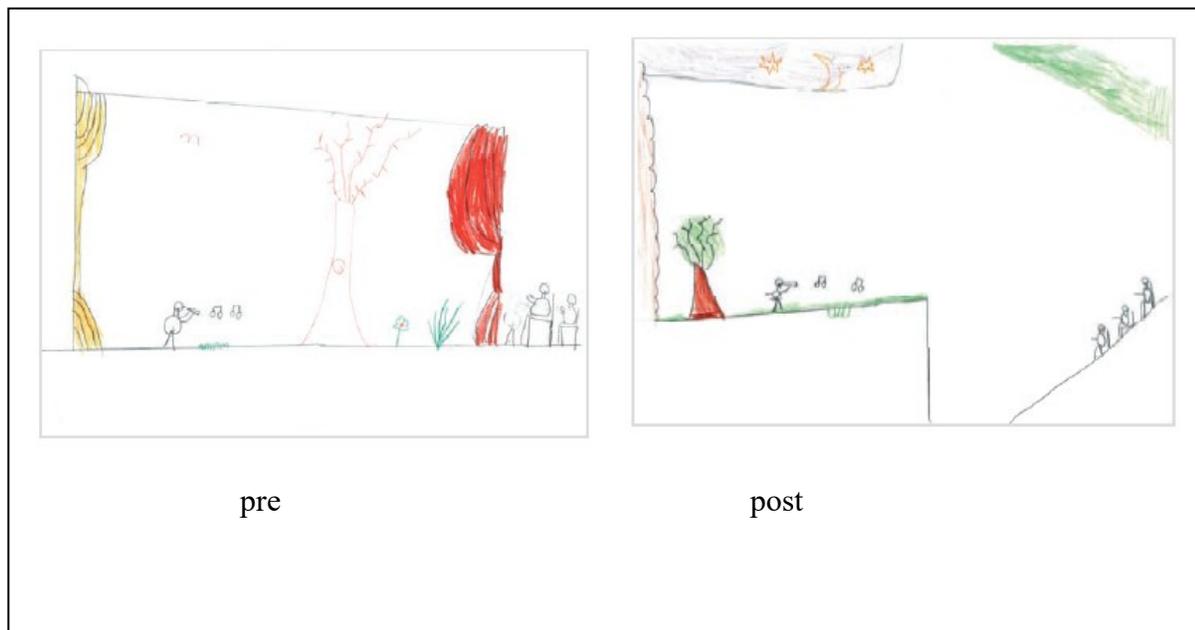


Figure 4. Decreasing affinity for music: example of negative dynamics in pre/post comparison.

In contrast, the drawings of the sub-group, whose response behavior in the survey had indicated a negative dynamic of affinity for music exhibited another recurring pattern. The pattern repeatedly depicted a wide gap between stage and audience. This motive is remarkable since neither during the school workshops nor in the actual opera performance, there had been an actual stage. On the contrary, the opera performance had been staged in a workshop atmosphere, deliberately promoting a participatory setting for the children. They were literally meant to be part of the opera scenery. All the same, figure 4 clearly shows a wide gap between stage and audience in the child's drawing *after* the project. Strikingly, other drawings displayed such a gap

as well. In this finding, the gap mirrors the children's subjective constructions rather than the actual setting. A second pattern found in the drawings of this sub-group was an apparent anonymization of the portrayed persons after the project. In the drawings after the project, all at once, portrayals showed no traces of eyes, nor ears, nor mouths. This noteworthy phenomenon was another distinctive manifestation of the children's situated perspective to be discussed.

### **Discussion**

The mixed methods study incorporated two strands of research. Whereas the quantitative strand (I) implies the evident success of the project, strand (II) was explorative and dug more in-depth into how the children had experienced the project. The outcome of strand I suggests that educators attained their goal. They succeeded in reaching out to children who, without the project, presumably would have had little contact whatsoever with opera music (Schellberg, 2006). This overall positive outcome could partly be because the project employed a method which fostered children's agency in the music classroom (Barrett, 2003; Karlsen, 2011; Wiggins, 2016). For younger children, Koops (2012) found that being able to exert agency, children's musical play is enhanced (Koops, 2012). This could also be true for the affinity for music. The intervention enabled the children to actively construct the meaning the music had for them in a self-determined way, seeing the teachers primarily as process organizers. Concomitantly, role-taking was central in the construction of meaning the children were protected by their respective roles in role-playing. They could act freely. Unfamiliar music could thus become an open projection surface. So social role-playing (Harwood & Marsh, 2012; Schmid, 2016) and the explicit narrative contextualization through an underlying plot (Koops, 2017) may have contributed. However, heretically, it could just as well be conjectured that any kind of music education project does potentially enhance children's affinity for this type of music. Children

might react to them being given any kind of special “treat” whatsoever. This stalemate necessitates further longitudinal studies, preferably integrating control groups (Bongard, Frankenberg, Friedrich, Kreutz, & Roden, 2015).

In the presented study, the gratifying outcome had only been a starting point for further explorations. To substantially be able to draw conclusions concerning factors enhancing or inhibiting children’s affinity for music in this context, children’s drawings as visual data offered an approach to their intricate perspectives (Lehmann-Wermser & Jessel-Campos, 2013). The triangulation of this visual qualitative data with the quantitative data, namely comparing contrasting subgroups proved to be insightful. Following the question of what factors may have contributed to the children’s dynamics of affinity for music, the ecological framework (Schmid, 2014, 2015, 2016) helped detecting children’s potential frames of reference. Results show that the children with a strikingly high increase of affinity for music drew a conspicuously more detailed body portrayal after the project. This finding hypothetically refers to the dimension of felicitous *embodiment*. Embodiment had indeed been an integral part of the project e.g., by consciously experimenting with musical body postures. The children enacted musical gestures and found their own interpretations of the musical piece based on individual sensory perception.

Equally, previous research has considered *embodiment* a central dimension of music experience to be meaningful (Johnson, 2009; Oberhaus, 2006). Research on embodied cognition (Gabbard, 2014), could therefore be an even more integral paradigm for music education research.

Additionally, the fact that musical situations depicted as way more interactive and communicative after the project could be interpreted as a hint at the quality of those situations as a fundamentally *social* experience (Schmid, 2016). So in the subgroup with increasing affinity for

music, the drawings hint at the centrality of the social dimension, which is consistent with previous research literature (Lum & Campbell, 2007; Marsh & Young, 2016; Trevarthen & Malloch, 2012; Young, 2003).

Strikingly, as per the analysis of the drawings, the social dimension appeared to have been unsatisfactory for some children, too. According to their depiction of the situation, the children with a decreasing affinity for music seemingly perceived a veritable barrier. This barrier might point to a lack of direct social contact. Lack of contact can also be perceived in the pattern of anonymized persons in the pictures drawn after the project. Manifestly, the depiction without any sensory organs prodigiously displays the fundamental impediment of any contact. The pictures mostly showed the opera performance. One might interpret this as a hint that the children did not experience the interactions there as sufficiently socially embedded (Schmid, 2016).

Hypothetically, this might be because the opera singers were seemingly overwhelmed with their role as music mediators. They were concentrated on their performance and may have failed to establish real contact with the children in their interactions. We can infer that even a well-designed project featuring creative and participative elements as well as impressive performances might miss reaching out if failing to concentrate on establishing authentic, vital contact with the participating children. This finding can be related to Deci and Ryan's (2002) self-determination theory of well-being, classifying relatedness as one basic psychological need envisioning music education in the context of children's long-term well-being (Koops, 2017; Krupp-Schleußner, 2016).

Altogether, this is in line with research that sees the foundation of musical interaction in "communicative musicality" (Malloch & Trevarthen, 2010)<sup>14</sup>. Barrett (2011, 2016), acknowledges this as the foundation of any musical interaction which aims to be of substantial

relevance for children's identity formation<sup>16</sup>). To be considerate of this also means to integrate children's agency: musical interaction ought to then adequately mirror the mutuality, meaning, and emotion communicative musicality is imbued with identity formation (Barrett, 2016).

Research also indicates that *communicative musicality* can be comprehended as a phenomenon to promote a form of proto-aesthetics (Dissanayake, 2011), current research underlining Young's statement that young children's involvement in music is about interactive, cooperative attunement (Young, 2003).

In sum, therefore, the dimensions of *embodiment* and *sociality* of the theoretical ecological framework (see above) could be explicitly acknowledged as relevant key factors of enhancing – or inhibiting – children's affinity for music.<sup>15</sup> The dimensions of the ecological framework may well serve as future categories of analysis concerning the quality of data collected in educational settings – wherever deductive methods are appropriate.

### Conclusion

The objective to scrutinize children's situated perspective in the context of an actual educational intervention paved the way for valuable insights. The article shed light on evidence-based educational principles concerning dimensions of musical experience that may foster children's affinity for music. So, from a child's perspective, what makes possible music experience worthwhile? When designing educational interventions the importance of two primordial dimensions corroborate answers to this question: (1) *sociality* and (2) *embodiment*. Educational settings should be conceptualized as ecological learning environments. Educators ought to be aware that children's musical worlds are highly responsive ones (Barrett, 2016; Rimmer, 2017).<sup>16</sup> As a conclusion, an even more radical incorporation of the two dimensions of (1) *sociality* and (2) *embodiment* into the music classroom may be even more pivotal than already

generally assumed.

A first implication for practitioners is that primarily it is (1) the dimension of *sociality*, which makes unfamiliar music worthwhile for children. Music is an art of relationships. However, “relationship” seems to be an implicit currency often only dealt on the pedagogical black market (Schmid, 2014). Instead, music educators should rather explicitly conceptualize a *social* dramaturgy of the music classroom for it to be “rooted in reality” (Davis, 2011, p. 57). The *social* dramaturgy of educational settings has to be more concrete. Any kind of musical text (written or oral) is to be seen as a *social* script – and a composition process is to be designed as a *social* process (Schmid, 2016, p. 115).

Secondly, to foster children’s music affinity it also seems indispensable to more consciously focus (2) the dimension of *embodiment*. Possibly, a *Somaesthetics* for elementary school (Shusterman, 2010) is needed. In all likelihood, music affinity has a lot to do with the simulation of body conditions. As a consequence, teachers might be well advised to more consciously make frequent use of body metaphors when talking about music or laying out tasks (Schmid, 2016). Of course, they might also do well to spot the countless instances where implicit motor qualities in the music can be enacted (Schmid, 2016). Not only as ready-made choreographies though, but as creative, “embodied responses to music” (Ilari, 2016, S. 29). After all, the phenomenon of affective entrainment (Ilari, 2016; Phillips-Silver & Keller, 2012) indicates that bodily self-awareness, sociality, and affinity for music are closely entangled.

A third and last recognition in the context of this study is that providing substantial music experiences for children (Small, 1998) might also imply enhancing children’s musical empowerment. Notably, the findings of this study underline the integral role of musical *agency* for the design of classroom music environments. For children to experience a “barrier-free”

musical environment, they have to feel they can also take the initiative. Teachers have to think twice how they can create a protected musical habitat to give room for true musical agency.

Those three conceptions are central if we want to foster affinity for music and to nourish “open ears and open minds” (Kraemer & Malmberg, 2016). Nowadays, to be open to a new musical practice – i.e., to be willing to be part of a social activity that has so far been the cultural practice of another “tribe” – may be a more essential capacity than we music educators have considered it to be in our relatively small universe of research. To promote that openness, educators have to be open themselves and open to the perspectives of children to start with.

In conclusion, the author recommends further research incorporating a more differentiated ecological framework (O’Neill, 2017; Reybrouck, 2015; Schmid, 2016) as a lens to investigate children’s perspective on actual classroom settings. Designing music classrooms that do justice to children’s multimodal, music-social agentic perspective needs more insight. How can the claim of music classrooms as *holistic learning ecologies* considerate of children’s agency be systematically operationalized in concrete settings? The challenge for future research might be to reconcile the seemingly opposed approaches of outcome-oriented, and ethnographic or phenomenological methodologies (Breidenstein & Prengel, 2005) using mixed methods to be able to draw a bigger picture of how children encounter musical situations as substantial musicking experience. Research should more thoroughly center on processes of affiliation in the music classroom and thereby gain systematic insights into the design of immersive educational environments (Johnson-Green, 2018). Ecological music classrooms should offer highly immersive learning opportunities and may, after all, thus still be “good places for the gaining of significant music experience” (Small, 2011, p. 288) – may it be in the context of musical activities children initiate themselves or of music(s) which they have never experienced before.

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<sup>1</sup> Name altered by the author.

<sup>2</sup> Focusing “the deeply interactional nature of all actions” Rimmer (2017, p. 3).

<sup>3</sup> The following dimensions refer to subjective concepts shaping children’s potential affinity for music. Three dimensions (embodiment, sociality and narrativity) were theoretically deduced, a fourth dimension (materiality) was induced empirically in the research process (Schmid 2014, 2015, 2016).

<sup>4</sup> The quasi-experimental design did not supply a control-group since the hypothesis was too specific to apply for non-musical interventions. Particularly, the overall research objective was not to monitor a teaching method in contrast to potential other educational approaches. In accordance with the theoretical underpinning of the study, decisions were made in favor of external rather than internal validity.

<sup>5</sup> The questionnaire surveyed children’s experiences during the project encompassing the before-after-measurement of children’s affinity for music, indicated e.g. by valuing and liking music (see below, as to the construction of the questionnaire see Schmid (2014, p. 168)).

<sup>6</sup> In addition the participating children were also interviewed before, during, and after the project. The interviews were conducted in subsamples and included playful focus groups ( $n = 19$ ) and video-graphed interactive semi-structured pair-interviews ( $n = 24$ )<sup>1</sup>. Participatory observation was also part of the complex design. For the analysis of verbal data see Schmid (2014).

<sup>7</sup> The teachers in the  $n=25$  elementary schools had to have the freedom to adapt the concept to local boundary conditions entailing a differing duration of time devoted to the intervention.

<sup>8</sup> *Der unglaubliche Spotz* by Mike Svoboda, produced at the *Stadtheater Freiburg*, Germany.

<sup>9</sup> For a concise definition of *liking* and *valuing*, and a more extensive description of the design and method of this research aspect please see Schmid (2014, 2015).

<sup>10</sup> The period between points of data collection varied from sample group to sample group due to appointments with the  $n=25$  teachers and their classes depending on exactly when the project started and ended in the respective class. In average the period between  $t_1$  and  $t_2$  was two months.

<sup>11</sup> As pointed out above, the overall outcome showed that a high majority of children exhibited a high increase of

affinity for music in the post condition. But in a next step the objective was to gain insight into the factors that may have inhibited those children that did not show this increase.

<sup>12</sup> Based on 5-point rating scale.

<sup>13</sup>  $n=29$  out of  $n=282$ .

<sup>14</sup> Nonverbal, communicative interaction between infant and care-giver is considered to be a baseline experience for human sociality.

<sup>15</sup> The other two dimensions of the framework (i.e. *narrativity* and *materiality*) played an important role in the analysis of the verbal data (Schmid, 2015), which is not subject in this paper.

<sup>16</sup> On that basis, future research could possibly analyze children's drawings more thoroughly as visualized musical narratives Barrett (2011, 2016).

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