

## EMOTION AND PERFORMANCE IN THE DEVELOPMENT OF **CHILDREN'S SINGING**

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### **ABSTRACT**

Background. In the course of a child's singing development, singing in community becomes the usual practice, whereas singing alone becomes more of an exception. Singing alone is often connected with self-rating emotions. A performance situation can give rise to a range of emotions that influence the outcome of the demanded performance.

Aims. The aim of our research project is to examine the relationship between self-rating emotions and the readiness to sing in an induced stress situation. A second issue is how the attitude toward the singing task is related to the quality of the singing.

Method. A cross-sectional study with longitudinal additions was carried out with 46 children aged 3 to 6 years. The task of reproducing children's songs was embedded in a board game. The song reproductions were categorized as to whether a song was sung immediately on request, after prompting or not at all.

Results. Only four children always refused to sing. The remaining 42 children varied in their reactions according to situation. In the older group (six-year-olds) there are considerably more instances of singing immediately on request than in the younger group of three- to four-year-olds. In the younger group there are far more refusals to sing than in the older group.

Conclusions. Singing in the setting of a competitive game is a task that is manageable by most of the children investigated. Nevertheless, the performance situation of singing alone causes more pressure than e.g. verbal tasks and involves self-rating emotions such as shame or pride. The older children in the investigation seem to have a more differentiated "emotion management in performance situations" than the younger children. Our forthcoming analysis of the song reproductions will provide more knowledge on the relationship between a child's behaviour when confronted with a singing task and the quality of the singing.

## 1. SPEAKING AND SINGING IN CHILD **DEVELOPMENT**

Singing and speaking are universal forms of human expression. Both derive from a single source – the phenomenon of voice. From a phylogenetic point of view there are various models that describe the common properties and also the diversity of these two. According to Brown's model on language evolution (Brown, 2000), language has its origin in the musical aspect of voice, which means that singing was the precursor of language in evolution. The developmental paths of singing and speaking in ontogeny show how tightly theses two forms of communication are interlaced (Deutsch, Sommer & Pischel, 2003; Papoušek, 1994). But already at an early stage of development, spontaneous singing and spontaneous speaking begin to go different ways. In the vast majority of people, speaking eventually gains the upper hand over singing. Although spontaneous singing is encountered much more often in children than in adults in many everyday situations, it is nevertheless difficult to capture these instances in a systematic way (Stadler Elmer, 2002). Children tend to pursue narrative speech-songs and monologues before going to sleep, while looking at a picture book or on their way home from school; but as soon as they notice that they are being observed they usually stop. When they are asked to sing a specific song, they often avoid complying. Singing alone in the presence others is a special situation even at nursery school age, whereas singing in community is a common practice. It is striking that there seems to be a stronger normative factor in singing than in speaking. The spontaneous speech of three-year-olds is still full of grammatical errors but apparently this does not lead to blockades in their verbal interactions. In their singing, however, children do not aim at spontaneous improvisation but at a reproduction that matches the original as closely as possible.

Self-rating emotions and singing behaviour. In the course of a child's development, self-rating emotions do not appear before the child has acquired the ability of self-objectification (cf. Bischof-Köhler, 1989). Examples of self-rating emotions are pride, shame, embarrassment, shyness and humiliation. Children normally begin to experience self-rating emotions in the second half of the second year of life. In the early stage such emotions only appear in the presence of other people. Later on, at about the age of five, children may experience pride or shame even when they are alone (Sroufe, 1996; Holodynski, 2001). Expressions of self-rating emotions are often observed in performance situations in which the child matches his or her skills against a quality standard (Geppert, 1997). It is not easy, however, to pinpoint single self-rating emotions and to distinguish them from one another. A performance situation can give rise to a whole range of emotions that influence the outcome of the demanded performance. The child's experience of success or failure in the



performance situation is a decisive factor shaping the child's future concept of his or her own competence.

The aim of our research project is to examine the relationship between self-rating emotions and the readiness to sing in an induced stress situation. Even for children at nursery school age, singing is not only a musical activity but also one that is influenced by norms and conventions. For instance, norms and conventions determine when to sing and when not. It seems to be of major importance for children to approximate an exact reproduction of a song. This goes to show that three to six-yearold children have already internalised an ideal of the song to be produced. We are examining the question of how children react to the demand of singing a song and how these reactions affect the readiness to sing. A further issue we are pursuing is to find any relationships between children's behaviour toward the task of singing alone and the quality of their song reproductions. We are investigating whether singing immediately on demand yields a better quality of production than reluctant singing after support from others.

## 2. DATA COLLECTION OF SONG REPRODUCTIONS

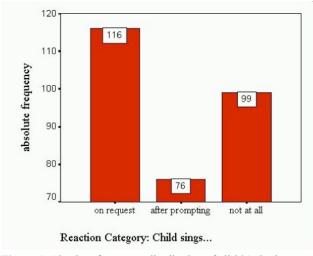
A cross-sectional study (with longitudinal supplements) of children's song reproduction was carried out. The main study was conducted in two nursery schools in Braunschweig. A followup study with a part of the children is currently under way. 46 children aged three to six years took part in the main experiment. An audio CD with selected children's songs was played to the children once a day in the nursery school groups for a period of three months. After this period the children's reproductions of these songs were recorded. The interrogation was embedded in an informal play situation which was enjoyed by the children and allowed them to behave naturally. The younger group (3-4 years; n = 20) played a simple game with coloured puzzle pieces and the older group (6 years; n = 26) played a board game. Both games were specially designed by us. They involved not only singing tasks, but also knowledge tasks, motor activity tasks and sensory perception tasks, creating a diversified and enjoyable game. Two children, one adult player from our team and the interviewer as host took part in each game. The experimental game sessions were recorded on video. Musical and linguistic transcriptions of the song reproductions are in preparation. We have examined the children's behaviour in the situations when they were requested to sing a song. Their behaviour was categorised as to whether a child sings immediately on demand, with prompting or not at all despite prompting.

# 3. REACTIONS TO THE TASK OF SINGING

In the main study, 42 of the 46 participants sang at least one of the songs demanded, whereas four children refused to comply to any singing task. Thus, in the population investigated, the child that constantly refuses to sing is rather an exception. On the other hand, a child that sings every requested song immediately was not found at all. Most of the children varied in their reactions to the singing tasks.

In the following analysis we pooled all reactions to the singing tasks, independent of individual children. A total of 291 singing tasks were put to the children. The results yielded three different outcomes which were categorized as follows:

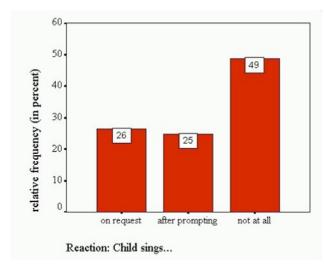
- A = child sings immediately on request
- B = child sings after prompting
- C = child does not sing despite prompting



**Figure 1**: Absolute frequency distribution of all 291 singing tasks for all children over three categories

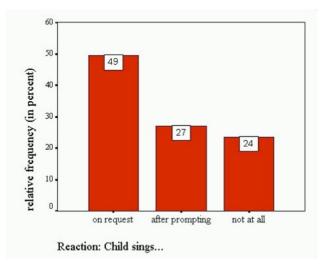
As shown in figure 1, singing immediately upon request is the most frequent reaction.

We then compared the older and the younger group of children. Here, it is apparent that category A (sings immediately on request) is considerably more frequent in the older group (figure 3) than in the younger group (figure 2). Category C, on the other hand, is far more frequent in the younger age group than in the older one.



**Figure 2**: Relative frequency distribution of the 121 singing tasks for the 20 younger children over the reaction categories.





**Figure 3**: Relative frequency distribution of the 170 singing tasks for the 26 older children over the reaction categories.

#### 4. DISCUSSION AND OUTLOOK

The performance of singing in the natural setting of a competitive game is a task that is manageable by most of the children investigated. Singing tasks, however, cause more pressure than other kinds of tasks such as answering a knowledge question or making out an object by touching.

Self-rating emotions we found in the children's behaviour included embarrassment, shame and also pride. We often noticed a discrepancy between the observable verbal and bodily reaction of a child confronted with the task of singing a song and the way he or she fulfilled the task. The verbal and nonverbal reactions to a task of singing are diverse and prone to change in the course of the communicative interaction of investigator and participating child. Our next step will be to carry out a qualitative analysis of the varying course of behaviour between the children's first reaction to a singing task and the eventual outcome. We assume that the older children in the investigation have a more differentiated "emotion management in performance situations" which more often leads to a readiness to sing, whereas younger children more often avoid the stress situation by blunt refusal to sing in spite of support offered by the interviewer.

Interestingly, we noted 51 instances of voluntary singing when a child took over a singing task directed at the other child. We are considering whether these instances of singing constitute a natural control condition and we shall investigate what difference in singing quality can be observed.

### 5. REFERENCES

- 1. Bischof-Köhler, D. (1989). Spiegelbild und Empathie: die Anfänge der sozialen Kognition. Bern: Huber.
- Brown, S. (2000) "Musiclanguage"- Model of Music Evolution. In N. Wallin, B. Merker, S. Brown (eds.), *The Origins of Music*. MIT-Press, Cambridge.

- 3. Deutsch, W., Sommer, G., Pischel, C. (2003). Sprechen und Singen im Vergleich. In G. Rickheit, T. Herrmann & W. Deutsch (eds.), *Handbuch der Psycholinguistik*. Berlin: de Gruyter.
- Geppert, U. (1997). Self-evaluative emotions coding system (SEECS). (Technical Manual). München: Max-Planck-Institut für Psychologische Forschung.
- Holodynski, M. (2001). Die Entwicklung der Leistungsmotivation im Vorschulalter im Spiegel der selbstbewertenden Emotionen Stolz und Scham. Manuscript submitted for publication.
- Papoušek, M. (1994). Vom ersten Schrei zum ersten Wort. Bern: Huber.
- 7. Sroufe, L.A. (1996). *Emotional development: The organization of emotional life in the early years*. New York: Cambridge University Press.
- 8. Stadler Elmer, Stefanie (2002). Kinder singen Lieder: Über den Prozess der Kultivierung des vokalen Ausdrucks. München/Berlin: Waxmann.

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