Toward the Archiving of Performance Data in Music Therapy and Early Childhood Education

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INTRODUCTION

Systematic Documentation of Performances by "Activity × Intention"

Recent research has accumulated large-scale databases of music performances, ranging from classical and jazz to traditions without fixed notation such as gagaku and folk music. In music therapy, systematic documentation of clients' improvisations has advanced, enabling analytical modeling of therapeutic practices. Building on this trend, the present study focuses on therapeutic and educational contexts, where therapists and teachers adapt accompaniment dynamically to each child's condition and the aims of the activity. This work explores how such adaptive practices can be systematically recorded through the framework of Activity × Intention, contributing to knowledge sharing and future applications.

METHODS

Data Collection :

- Nine sessions recorded in three contexts: nursery, kindergarten, and music therapy
- Total of 41 performances collected on video
- Participants included children aged 2–8, teachers, and a certified music therapist
- All sessions emphasized natural, improvisational practice

Data Analysis :

Developed a dual-layer labeling system: children's activity types × performers' intentions

RESULTS

- Labels were assigned to each performance based on the proposed framework
- A theoretical maximum of 24 label combinations (4 upper × 6 lower categories) was possible
- In practice, 11 types of labels were observed
- Label occurrence trends differed across contexts
- This analysis is based on limited data and is not intended for generalization

CONCLUSIONS

This case study, though limited in scale, demonstrates the potential of an Activity × Intention labeling system to structure decision-making in improvisational performance. The findings emphasize the importance of distinguishing performance changes according to children's states and performers' intentions. Future work will expand data collection for validation and design digital archiving systems and support tools to address context-dependent changes in educational and therapeutic settings.

Table1. Categories of Musical Activities

Initials	Category
S	Singing
I	Instrument Playing
M	Movement / Physical Expression
L	Listening

Table2. Label Abbreviations and Their Meanings

Abbreviation	Meaning
LRN	Learn
ENJ	Enjoy
INT	Interact
EXP	Express
IMIT	Imitate
OBS	Observe

Labeling Examples (Activity × Intention)

- **S-LRN (Singing − Learn):** Performances intended to support children as they try to learn lyrics or melodies.
- **I-ENJ (Instrument − Enjoy):** Performances that encourage spontaneous interaction with instruments for enjoyment.
- **L-OBS (Listening − Observation):** Performances that aim to engage children who are not actively participating but are listening attentively.

Each category alone may be too abstract, but combining them allows for a concrete understanding of how performers' intentions correspond to children's states.

Table3. Number of Performances by Label and Location

Location	Total	I-LRN	I-ENJ	I-INT	S-LRN	S-ENJ	S-INT	S-EXP	M-INT	M-ENJ	M-IMIT	L-OBS
Daycare center	10		2	2	1	2	2	1				
Kindergarten	14	1			2		1	6	4			
Music therapy	17		3	3			2	1	1	1	3	5