

Poster presentation

## Pupils' auditory perception accuracy under different musical and conceptual auditory inputs

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### Background

School classrooms are noisy as a consequence of both internal and external noise. Children's auditory processing abilities in noisy situations are not at the level of the adult ones; hence, it may be getting more difficult for pupils to participate by discriminating verbal and/or musical auditory inputs in the classroom.

### Materials and methods

Pupils' auditory perception accuracy was examined using two different musical pieces P1 and P2 and children aged 9 and 11 years from Grades C and E, respectively. P1 demonstrated a moderate verbal structure (in terms of meaning and word difficulty) and a moderate musical structure (regarding rhythm and melodic patterns). Additionally, P2 introduced more complex verbal and musical structures. Initially, children listened to the pieces entirely. Next, the pieces were divided into verses and children were asked to report what they listened after each verse; this procedure was repeated once more. Children's answers were categorized into three different categories, which consisted of high, moderate and low auditory perception. The data were coded and statistically analyzed using MS Excel 2003.

### Results

Results from Grade C showed that within a classroom of 9 pupils a higher percentage of accurate answers i.e., ~28%, was indicated compared with classrooms with more pupils. Moreover, results after the second listening showed that the accurate answers were interestingly increased up to ~41%. Furthermore, 28 pupils of Grade E,

performed less accurate (~19%) than the ones in classroom with 19 pupils (~68%), indicating inversely analogous to the difficulty level of the auditory and conceptual inputs. Finally, when pupils from different Grades i.e., C and E, listened to the same piece, it was found that children of both Grades presented similar accuracy (17.2%-C, 18.9%-E) at the first listening and yet significantly higher increase at the second listening, of Grade C (48.5%) than Grade E(24.3%).

### Conclusions

Young children's auditory perception accuracy was affected by the number of children in the classroom, classroom noise and the repetitive procedure.

### References

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