Music and language

At the same time, long acknowledged for universality, power and influence, music has been recognized for its therapeutic and developmental benefits. By age two, most children with typical development experience a burst in their language and play skills. This finding was consistent with Trainor and Heinnmiller (1998) in that participants may have preferred consonant music over dissonant music and felt less inhibited with consonant music playing in the background, which resulted in more communicative interactions. Sallat & Jentschke (2015) concluded that music perception skills may contribute to language learning. Findings support the possibility that pleasant music may be correlated with more language production.

Results and Discussion

Total number of words and different words

Consonant music was associated with the highest number of different words for all three participants. This finding was consistent with Trainor and Heinnmiller (1998) in that participants may have preferred consonant music over dissonant music and felt less inhibited with consonant music playing in the background, which resulted in more communicative interactions. Sallat & Jentschke (2015) concluded that music perception skills may contribute to language learning. Findings support the possibility that pleasant music may be correlated with more language production.

Highest Level of Play

No music condition was associated with the highest level of play acts for all three participants.

Procedures

- Three 20-minute play-based conversational samples (60 minutes total) obtained from each child while interacting with his parent and researcher-supplied age-appropriate toys (e.g., farm set, toy groceries)
- Three different counter-balanced conditions: no music, consonant music, and dissonant music
- Consonant music: J.S. Bach: Goldberg Variations
- Dissonant music: Schoenberg: String Quartet

Research Questions

- Is there an association between type of music (upbeat, major, and consonant music versus subbed minor and dissonant music) for two-year-olds with typical language development on type of play skills observed during a 20-minute play sample?
- Is there an association between type of music (upbeat, major, and consonant music versus subbed minor and dissonant music) for two-year-olds with typical language on type of play skills observed during a 20-minute play sample?

Method

Participants

- N = 3; Ages 24 months to 28 months (M = 26.33, SD = 2.08)
- Identified typical development: (1) Standard score >85 on The Preschool Language Scale-5th edition (PLS-5); (2) Standard score > 15th percentile on the Language Development Survey (LDS)

- For two out of three participants, the consonant music condition was correlated with over twice as many individual play acts as the dissonant music condition.
- Participants played in more complex ways without music present, but played more overall with pleasant music present.
- Findings aligned with Hedon and Bohon (2008), who found music therapy sessions utilizing pleasant music to be more enjoyable than play sessions without music.

Limitations and Future Directions

- Larger sample size
- Modifications to type and volume of music and/or active participant interaction with music stimuli
- Both the consonant and dissonant music selection were fairly complex, a future comparison could contrast simple versus complex music
- Standardize time in-between sessions for all participants

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Selected References