The Trends in Music and Technology: Prospectives and Approaches for Early Childhood Development

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Film, a key medium for early childhood development, utilizes musical and technical aspects to convey emotions to a young audience. While past studies have established the importance of music for emotional cognizance in children, over the last century, technical innovations have drastically changed the production methods of children's films, shifting the methods for emotional conveyal and their relative efficacies. This study collected and analyzed data from musically relevant animated children's films over the last century to identify the reliance on musical and technical aspects to convey emotions during emotional turning points. One film was chosen from each decade, 1930-2020, and scored for musical and technical aspect usage during five emotional turning points. A codebook was created to quantify the use of six musical and six technical aspects of film during emotional turning points. Data was analyzed using Python modules to visualize trend behavior through linear regression models. Findings indicated a decreased reliance on musical aspects and an increased reliance on technical aspects over time to convey emotions. A negative sloping trendline was identified for the musical to technical score ratio over time with $p<.001$. The effects of decreased musical reliance in films and the relative efficacy of technical aspects for emotional conveyal must be further studied. Utilizing the codebook and foundational automation mechanism, musical and technical reliance levels in the modern film-centered ecosystem can be further studied, thus instilling a foundation for the future and impact of music and film therapy on early childhood development.

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