

MEMORY FOR POPULAR MUSIC IN ELDERLY AND YOUNG ADULT LISTENERS

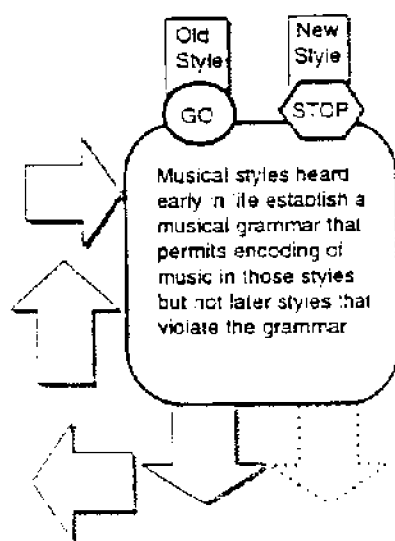
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Background

Although research on music perception has accelerated over the last two decades, most of this research has involved young adult listeners. The present research, however, compares young and older adults on a musical memory task. Its purpose is to test a theory of the acquisition of musical knowledge or grammar. Consistent with evidence that the brain is more plastic early in life, we propose that musical grammar or knowledge about musical style can be acquired best early in life. Moreover, this grammar provides a framework for encoding music throughout the rest of life. It follows that music which is consistent with this style is easily retained in memory but music which violates this style is less easily retained (see Figure below).



Much research on music perception has used highly controlled tone sequences which may not "begin to do justice to the range of patterns and relationships inherent in real music" (Sloboda, 1985). The present study avoids this problem by using excerpts from actual music.

Present Study

Fifteen undergraduate students (mean age=19.8 years) from the University of Prince Edward Island and eleven senior adults (mean age=70.5 years) who were attending an Elderhostel conference participated in an experiment

which investigated familiarity and memory for music which differ in decade of popularity from 1900's to 1990's. Subjects listened to 40 short musical excerpts and rated their familiarity of the tunes. This was followed by a test of immediate retention for 20 tunes (two old and two new tunes from each decade, permitting an unbiased recognition measure-- d' --for each decade). All subjects completed the Otis-Lennon verbal intelligence test, and a questionnaire concerning musical experience.

Results and Conclusions

For young adults, familiarity and recency of the excerpt were positively correlated (.74) and differentiation between old and new song excerpts was greatest for music from the 1980's. For senior adults, familiarity and recency were negatively correlated (-.29) and differentiation of old and new songs was greatest for songs of the 1940's.

Thus, for both age groups, the priority in memory is shown for music associated with styles popular early in life. Performance, it is argued, was thus independent of the excerpts themselves and instead dependent on having considerable exposure to music of that style early in life. Listeners have difficulty assimilating tunes from less familiar styles because they do not fit early acquired frames of reference. This idea is also consistent with research on the mental plasticity associated with youth and the decline of mental plasticity with age. However, it does not contradict the fact that much musical learning can nevertheless continue with age.

References

Sloboda, J. (1985). *The musical mind*. Oxford: Clarendon.

Note: The paper is based on an Honours thesis of Lisa D. Clyburn, *Memory for Popular Music in Seniors and Young Adults: How Does Memory for Style Change with Age?* Department of Psychology, University of Prince Edward Island, August, 1996.