Seconds Matter: Exploring the Timeframe for Music Preferences

Ankit Anand, Preeti Rao, Vinoo Alluri

BACKGROUND

Studies have shown that individuals can recognise music genres in 250 ms (Gjerdingen & Perrott, 2008), and discern emotional undertones within a second (Vieillard et al,. 2003) providing insight into how quickly listeners interpret musical elements, potentially influencing their preference formation, aligning with our aim of understanding rapid music preference formation.

AIM(s)

This study aims to explore how quickly music preferences form and to evaluate if higher musicality leads to rapid, more consistent music preference decisions.

METHODS

We collected 50 diverse songs, extracted excerpts of different lengths (0.25, 0.50, 0.75, 1.00, 3.00, 8.00 seconds) from their beginnings, and arranged them into six duration blocks, each containing 50 lyric-free excerpts. The sequence of excerpts in each block was randomized.

51 participants (mean age=19.9 years, std=2.56; 35 males) rated preference on a 7-point Likert scale in addition to familiarity rating ('yes,' 'maybe,' 'no') of excerpts. They also undertook the mini-PROMS musicality test (Zentner & Strauss, 2017).

We discarded familiar songs (10 % of the responses across all participants) from our analysis. Considering the ratings of 8-second excerpts as an accurate reflection of the participant's preference, we calculated Spearman correlations between ratings of all duration blocks with those of the 8-second block participant-wise and pooled them to get a group-level aggregate. Then, for each participant, we calculated the standard deviation of ratings for each song across different duration blocks and computed the mean, which represented a preference consistency score (lower score indicates higher consistency). Spearman correlation was performed between preference consistency scores and musicality scores.

RESULTS

The maximum correlation of ratings was found between 3 and 8 seconds block (p-value=0.005). The correlation between musicality and preference consistency score was -0.3829 (p=0.006).

DISCUSSION

The result shows the impact of the first 3 seconds on music preferences. Additionally, higher musicality leads to more consistent preference decisions, indicating musicians' ability to discern nuanced elements that may contribute to their preferences.

REFERENCES

Gjerdingen, R. O., & Perrott, D. (2008). Scanning the dial: The rapid recognition of music

genres. Journal of new music research, 37 (2), 93–100

Vieillard, S., Bigand, E., Madurell, F., & Marozeau, J. (2003). The temporal processing of

musical emotion in a free categorisation task. Proceedings of the 5th Triennial ESCOM

Conference, Hanover, Germany.

Zentner, M., & Strauss, H. (2017). Assessing musical ability quickly and objectively:

development and validation of the Short‑PROMS and the Mini‑PROMS. *Annals of the

New York Academy of Sciences*, *1400*(1), 33-45.