

The popularity of Spotify playlists changes according to the time of day or night

Home > Insights into arts and culture > Consumer behaviour in arts and culture

This research was conducted by **Ole Adrian Heggli, Jan Stupacher** and **Peter Vuust** at **Aarhus University** and **The Royal Academy of Music Aarhus/Aalborg, Denmark**

Summary

Human life is governed by diurnal cycles – the never-ending sequence of day/night, light/dark, wake/sleep. This research analysed the way in which people consumed music on Spotify. It revealed that people's music-listening habits divide into five distinct time blocks: morning, afternoon, evening, night and late night/early morning. These paper outlines how these blocks 'follow the same order throughout the week, but differ in length and starting time when comparing workdays and weekends'. There was more diurnal preference for choice of playlists than for individual tracks.

The research is based on an open data set of more than '2 billion streaming events'

These events come from a random sample of Spotify users over an eight-week period. Attached to each track in every streaming event is a basket of data about the song that was streamed (such as its tempo, the extent of a discernible vocal track, its danceability, etc.). Unfortunately, the researchers were not able to identify any demographic data on the people streaming the music. The fact that all the data relates to Spotify means that the research privileges Western music styles and Western listeners.

Some kinds of music are meant to be performed and consumed at specific times of day

Perhaps the most obvious example is the lullaby, and previous research has specifically looked at the use of Spotify music to aid sleep. A key finding in this paper is that people assign appropriate times of day to playlists but less so to individual tracks. The authors cite previous research to discount the possibility that changing music preferences through the day merely reflect changes in the demographics of distinct user groups on the streaming platform.

Keywords

digital **data** **music** **streaming**

Title	Diurnal fluctuations in musical preference
Author(s)	Heggli, O. A., Stupacher, J. & Vuust, P.
Publication date	2021
Source	Royal Society Open Science, Vol. 8, Iss. 11, 210885
Link	https://royalsocietypublishing.org/doi/10.1098/rsos.210885
Open Access Link	https://royalsocietypublishing.org/doi/10.1098/rsos.210885
Author email	ole.heggli@clin.au.dk

By **Culture.Case** | | **Consumer behaviour in arts and culture** , **Live and digital engagement in arts and culture** |



King's Culture

© Copyright 2025

Designed, developed and maintained by **King's Digital Lab**

Originally built by **weheartdigital Ltd**

Accessibility Statement