

Text S2

### ***Retrieval of External Song-Level Data***

Whenever participants played music on their smartphones, our custom Android research application *PhoneStudy* created a time-stamped event log containing the title, artist, and album name of the played track. To obtain additional information about the played tracks, we conducted API calls from Spotify.com and Genius.com using the combination of the tracks' logged title-artist-album triples. However, in some cases, the logged track information returned no match, for example, if a song had incorrect titles (e.g., spelling mistakes) or additional information (e.g., “[Bonus CD]”) in the title. To still retrieve external data in these cases, we used several heuristics. First, we removed special characters (e.g., punctuation) and “tags” (i.e., bracketed characters, e.g., “[Bonus CD]”). If this was still unsuccessful, we subsequently tried further modifications, such as searching without an album or with a “split” artist field (sometimes artist data incorrectly contained a list of artists). These modified search titles served to retrieve audio features from Spotify.com and song lyrics from Genius.com. After enriching the music listening records with these external data, we verified the match between the modified search titles and the original logged track titles. We automatically checked for perfect matches via the Levenshtein similarity and manually validated all cases with a similarity score under one to keep only close matches (s., the validated song lists in our repository under <https://osf.io/x7dar/>). This procedure improved the coverage of successfully matched tracks without compromising on the quality. In one additional step, we filtered all correct matches for tracks with a Spotify *speechiness* value greater than .60 to remove non-musical entries (e.g., audiobooks; Spotify, 2022). Starting with a total of 78.165 tracks played in our study, we obtained external Spotify data for 55% and lyrics data for 37% of all tracks. Unmatched tracks either contained non-musical tracks, had incorrect song information, or were not covered by the respective online sources.

### ***Reference***

Spotify. (2022). Get Track's Audio Features, *Spotify for Developers*.

<https://developer.spotify.com/documentation/web-api/reference/#/operations/get-several-audio-features>