# Deriving Musical Preference Profiles from Liked and Disliked Artists 

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#### Abstract

\section*{Background}

Music preferences are an essential piece of information to understand the musical background of individuals (Delsing, terBogt, Engels, \& Meeus, 2008). A profile of music preferences is typically determined by asking participants to rate the degree of liking for music genres (Rentfrow \& Gosling, 2003). These genre-based measures have certain pitfalls, since specific pieces of music in a genre might be liked more than the genre itself, and musical genres have proved to be transient and context dependent (Gjerdingen \& Perrot, 2008). In contrast, artist names provide a more spontaneous form of expressing music preferences, although such information must be translated to a common language of music specific verbal descriptors (e.g. musical tags) to allow direct comparisons across individuals' profiles (Ferrer \& Eerola, 2011a).


#### Abstract

Aims The aim is to provide a tool that seeks to capture music preferences in an intuitive fashion yet retaining the same possibility for creating music preference profiles that are highly comparable across participants. The tool is targeted to music researchers that require to collect information about the musical preferences of their subjects, to establish connections between their musical taste and any other variables of interest.


## Method

The tool requires that the participant gives the names of three liked and three disliked artists. From these, the tool will construct a profile resembling those traditionally obtained with genre-based measures, to be compatible with tests constructed by a set of items rated with Likert scales. In addition, the output of the tool is not constrained to musical genres, as it is capable of providing other semantic layers (Ferrer \& Eerola, 2011b), such as adjectives, nouns, affect constructs, or music preference factors underlying the given artist names. The algorithm uses online resources (EchoNest and Last.fm) to provide highly agreed and most recent definitions on the items targeted by the researcher. Additional functionalities include the visualization of semantic distances between the selected items to allow the refinement of the end model and its accessibility as a web application. The effectiveness of the tool was evaluated with two surveys ( $\mathrm{N}=346$ and $\mathrm{N}=861$ ) in which both the genre-based preferences and the liked and disliked artists have been obtained (Ferrer, Eerola, \& Vuoskoski, in press).

## Results

Comparisons of the traditional forms of assessing music preferences and the novel method is carried out in two levels:
overall compatibility and individual differences. The concordance between the two alternative measures demonstrates that in over $70 \%$ of the cases, the methods provide highly similar results of the preferences. The remaining cases, analyzed at an individual level, bring out numerous mismatches between the genre-based preferences and the artists.

## Conclusions

The results underline how musical genres may not always reflect the actual choice of liked and disliked artists, because they are a problematic notion for a music preferences measure. On the other hand, the novel tool does infer the genre-based preference profile from the individual labeling of preferred artists and social media. Thus, it is a good solution to reduce genre-based mismatches because all that it is required from the participant is to recall few artist names. Other items than genres can be used to collect preferences as well such as adjectives, affect related terms, musical instruments, or even specific terms relevant to the sampled population. The tool is presented as an alternative to common music preference instruments that assume a homogeneous musical knowledge from part of the participants.

## Keywords

Music preference, Genre, Instrument, Survey, Social media.

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