

Musical chills: Stimulus properties, stylistic preference and familiarity

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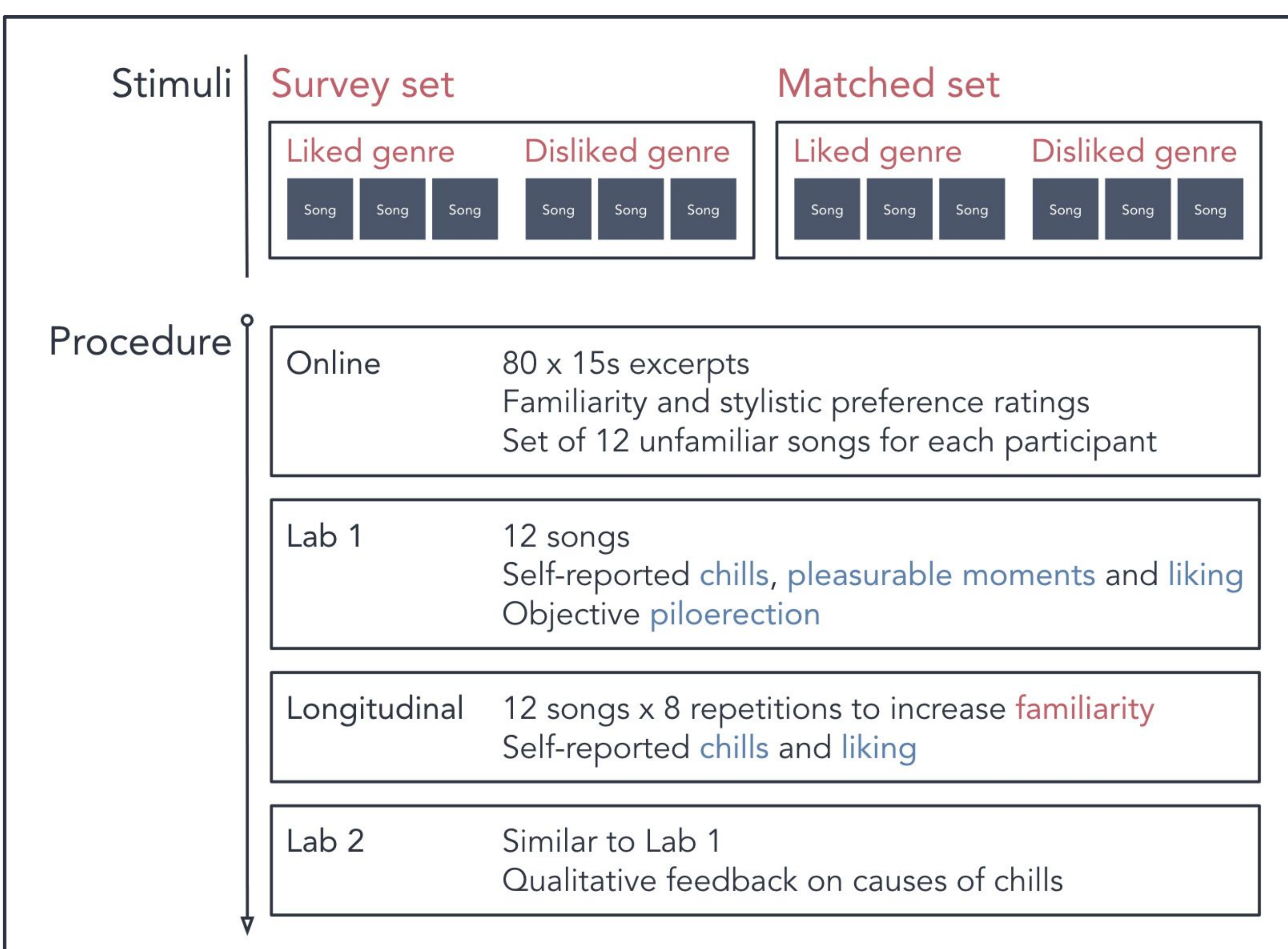
Abstract

Little is known about the effects of stimulus-driven properties, stylistic preference, and familiarity on the occurrence of musical chills. In the present study, participants listened to 12 unfamiliar songs in liked and disliked musical genres. Half were taken from a dataset of songs previously reported as causing chills, while the other half were matched with these songs by artist and popularity. Objective measurements of piloerection and continuous self-reports of the occurrence of chills and intensely pleasurable moments were taken in two lab sessions, separated by a two-week longitudinal phase during which participants listened to the full set of songs another eight times. Preliminary results are explored, in terms of occurrence of chills, intensely pleasurable moments and piloerection across all conditions, and effects of song repetition.

Background

Musical chills consist of a pleasurable tingling sensation, sometimes accompanied by piloerection, and represent an emotionally intense physiological reaction to music. They give a convenient insight into what makes music pleasurable because they are widespread, memorable, and observable. Changes in dynamics, texture, melody, harmony, rhythm, and instrumentation have been linked to chills, but few studies have looked at the causal influence of such factors. More specifically, it is unclear whether chills can be felt when listening to any piece of music, or whether they require a specific combination of stimulus-driven properties. Chills are likely due to an interaction of top-down (e.g. development of expectations) and bottom-up (e.g. fulfillment of these expectations) processes. This would suggest potential effects of stylistic preference and familiarity, but such effects have been sparsely explored as of yet. The present work therefore aimed to investigate the causal influence of stimulus-driven properties, stylistic preference, and familiarity on the occurrence of musical chills, in a longitudinal study using real music.

Methods



Results

