# Analysing the Gendering of Music in Toy Commercials via Mid-level Perceptual Features <br> Luca Marinelli, Charalampos Saitis 

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## Background

Music can convey ideological stances, and gender is just one of them. Gender-coding in music ensues from the sedimentation of multimodal associations between gendered meanings in language, visual images, and musical structures (Dibben, 2002). This study investigates to which extent gender-coding may be deliberately used when music is secondary to other modalities and serves a clear purpose, such as in advertisements.

Over 40 years of research have found gender polarisation in TV advertising aimed at children in terms of music, language, framing, setting, activities, and colours. Specifically, Welch et al. (1979) found that commercials targeted at boys had more noise, sound effects, and louder music. Lewin-Jones and Mitra (2009) conversely found that music in girls' advertisements was softer and more likely to have a sung narration style.

## Aims

Our research objective is to provide a basis for a theory of the effects that message producers, their decisionmaking, or their gender biases have on the selection and composition of music in toy adverts.

## Method

Unlike previous studies, where western art music excerpts were rated onto a masculine-feminine scale (Sergeant and Himonides, 2016), we analysed music in gendered toy commercials. By inferring the gender target of toy adverts with content analysis, we obtain an objective standpoint from which to analyse the gendering of music. For this goal, we propose an integrative approach combining content analysis, multimodal emotion ratings, and music-focused perceptual ratings.
Musically experienced participants rated the soundtracks of 606 commercials on 15 bipolar scales based on Alluri and Toiviainen (2010) and Whiteford et al. (2018). Another pool of participants rated each commercial (video and audio) onto 7 unipolar emotion scales selected from Schindler et al. (2017).

## Results

Extreme gender polarisation was both found in terms of multimodal emotion scales (e.g., happiness, calm, and anger) and of music-focused scales (e.g., "Distorted/Clear", "Loud/Soft", and "Harmonious/Disharmonious"). In agreement with previous studies, music in boys' commercials was found to be significantly more abrasive than that in girls' adverts. Notably, the music-focused scales were found to correlate well with the emotion ratings.

## Conclusions

Rather than being ascribed solely by listeners onto music (Sergeant and Himonides, 2016), gendered music styles in toy commercials appear to reflect dominant stereotypes in the industry. Our study thus presents an empirical understanding of the gendering of music as constructed within multimodal discourse, and reiterates the importance of the sociocultural underpinnings of music psychology and cognition.

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