

Doubtful effects of background music in television news magazines

Reinhard Kopiez,^{*1} Friedrich Platz,^{*2} Anna Wolf^{*3}

^{*}Hanover University of Music, Drama, and Media, Hanover Music Lab, Germany

¹reinhard.kopiez@hmtm-hannover.de, ²friedrich.platz@hmtm-hannover.de, ³anna.wolf@hmtm-hannover.de

ABSTRACT

Background

The use of background music in television news magazines (e.g., consumer or political reports) is widespread but assumptions about psychological effects on the spectator seem to be based on intuitive decisions of the editorial office. Experimental data on the effects of background music on cognition, affect or attitude are rare and ambiguous (Boeckmann et al., 1990). Additionally, the music selection in these studies seems to be arbitrary.

Aims

First, we replicated Brosius' study with an improved experimental design: we used background music, selected on the basis of objective evaluations of musical expression; second, the Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986) was used to predict negative effects of music on the central route of processing (recall) but positive effects on the peripheral route (liking) of the ELM.

Method

A television report on toxic substances in energy saving lamps (ESL; duration: 4 min. from a German public TV broadcast) served as the basic stimulus. Five versions of the report were generated: one with no music, and 4 additional versions with high/low valence/arousal background music. Classification of affective characteristics was based upon the music ratings by Kreutz et al. (2008). A five group between subjects design (group size each $n = 100$) was used, and stimuli were rated in an online study. Subjects came from a random selection of "consumers" (Provider: <http://www.mowebresearch.com>; age range: 18-60 years). As the dependent variable, pre-post questionnaires on attitudes toward ESL were given. Additionally, subjects filled in a recall test with 10 items (5 correct, 5 false) each for auditive and visually presented information.

Results

In a first step, the ANOVA showed no differences in recognition of items from the film or in liking between conditions. A pre-post shift of attitude toward a critical evaluation of ESL could be observed, regardless of the condition. Second, the 20 recognition items were analysed with the Rasch model (1 PL) and only those remained in the data analysis which showed conformity with the Rasch model. However, no significant influence of background on recognition could be observed.

Conclusions

Our study could not confirm the widespread assumption of a general positive or negative effect of background music on attitude or recognition. Zero results are discussed within the

framework of a general habituation effect to music in everyday life. For further details see Kopiez, Platz & Wolf (submitted).

Keywords

Music and manipulation - film music - Elaboration Likelihood Model - item response theory.

REFERENCES

- Boeckmann, K., Nessmann, K., Petermandl, M. & Stückler, H. (1990). On the influence of background music on recall and appraisal in educational films. *Educational Media International*, 27(3), 172-180.
- Boltz, M., Schulkind, M. & Kantra, S. (1991). Effects of background music on the remembering of filmed events. *Memory & Cognition*, 19(6), 593-606.
- Kopiez, R., Platz, F. & Wolf, A. (submitted). The overrated power of music: No effects of background music in television news magazines on evaluation, recognition and persuasion.
- Kreutz, G., Ott, U., Teichmann, D., Osawa, P. & Vaitl, D. (2008). Using music to induce emotions: Influences of musical preference and absorption. *Psychology of Music*, 36(1), 101-126.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, 123-205.