

Abstract

This research studies the differentiation and the correlation between emotion (i.e., valenced response to a stimulus) and reward (i.e., stimulus approached which produces a pleasant experience) in the context of music listening as well as the influence of both responses on arousal (i.e., physiological activation). It fills a gap in the literature by assessing the conceptualization of emotion and reward in relation to arousal as well as by providing details on the elements that facilitate emotional responses to music. Emotion intensity and liking subjective ratings were collected both in general and over time by playing extracts of real melodies with a piano, featuring classical, jazz and pop songs, with either high, medium or low complexity and eliciting either happy or sad feelings, while considering familiarity. Arousal subjective ratings were also collected in general and electrodermal activity (EDA) was registered over time. Results showed a positive correlation between emotion and liking as well as an effect of liking on emotion together with predictors such as musical genre, complexity and familiarity. Also, the general subjective ratings of arousal were predicted by a model including emotion intensity, liking and feeling category while EDA data reflected both emotion intensity and liking ratings. Preliminary evidence on the relationship between emotion, reward and arousal is provided as well as about the influence of the melody characteristics on emotional responses to music.

Keywords: emotion, reward, arousal, music, EDA.