The role of emotional mediation in musical and vocal sound-color correspondence

Erin Isbilen
Cornell University, Ithaca, New York, United States

Abstract: This study investigates the role of emotional mediation in sound-color cross-modal correspondence, using two complementary sets of validated stimuli: the Montreal Affective Voices (MAV; Belin et al., 2008), and Musical Emotional Bursts (MEB; Paquette et al., 2013). These stimuli were presented to participants for color associations, emotional associations, and rated for arousal and valence. The results demonstrated that the same pattern of color association applied across both vocal and musical sounds, which strongly correlated with the perceived emotional connotation of the sound. Sounds across both domains that were rated as high arousal/negative valence were associated with red (anger), sounds rated as high arousal/positive valence were associated with yellow (happiness), and sounds rated as low arousal/negative valence were associated with blue (sadness). The results thus replicate previous research indicating that arousal and valence govern sound-color correspondence, suggesting that cross-modal associations may reflect reciprocal interactions between the connotative meanings of different stimuli.