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Facial thermal responses to moodboards: confirming implicit preferences to colors as a function of motivation profiles for physical activity

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Abstract

Facial thermal reactions were measured to confirm individuals preferences for the colors used in moodboards as a function of their motivation profile to leisure physical activity (PA). Forty-five individuals were recruited as primary motivated by Psychological well-being (PSY), beauty appearance (APP) or Physical strength (PHY). Participants performed two tasks sitting in front of a computer screen. In the first, a SMI-eye tracking system was used to measure fixation durations (in ms) when color-patches were presented. In the second task, a thermal camera measured emotional reactions to the presentation of motivation-designed moodboards. Specific eye-tracking patterns and thermal reactions were obtained as a function of motivation profiles. Green, pink and red/black were the preferred colors for PSY, APP and PHY profiles, respectively. Data from the thermal camera confirmed the specificity of the profile groups by indicating that greater emotional changes in face temperature were observed when individuals viewed moodboards that corresponded to their own profile.