Ten semantic differential evaluations of written Japanese vowels in a paper-based survey study

Misa Ando
Hiroshima University, Higashihiroshima, Hiroshima, Japan

Xinyi Liu
Hiroshima University, Higashi Hiroshima, Hiroshima, Japan

YAN YAN
Hiroshima University, hiroshima, Japan

yutao yang
Hiroshima university, Hiroshima, Japan

Shushi Namba
Hiroshima University, Higashihiroshima, Japan

Kazuaki Abe
Hiroshima University, Higashihiroshima, Hiroshima, Japan

Toshimune Kambara
Hiroshima University, Higashihiroshima, Hiroshima, Japan

Abstract

Vowels in words have been associated with specific meanings in sound symbolism (Hamano, 1998; Newman, 1933; Sapir, 1929). The purpose of this study was to examine whether each vowel individually involves physical and emotional meanings. Six-hundred and thirteen participants (482 females; M 16.97) rated 5-point semantic differential scales (size, distance, thickness, extent, weight, height, depth, preference, arousal, and familiarity) to presented Japanese vowels (a, i, u, e, and o). Results showed that the size, extent, and thickness of a, u, and o were significantly higher than i and e, whereas the preference and familiarity of a was higher than the others. These results were consistent with previous findings to which vowels in sound-symbolic words were associated with physical (i.e., size, extent, and thickness) and emotional (i.e., preference) evaluations. Our findings suggest that each vowel itself could individually contribute to specifically physical and emotional evaluations.