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

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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.