

Abstract

The brain response to word-voice incongruity has been investigated with a specific stimulus-locked component of electroencephalogram. Here we show that this response is moderated by the listener's social orientation, i.e., his or her preparedness to engage in social relations. Participants judged verbal meaning of emotionally spoken emotional words while ignoring the vocal tone. As predicted, we found a greater negative event-related potential between 450 and 900 milliseconds after the stimulus onset when the verbal content was incongruous with the vocal tone, relative to when the two were congruous. Of importance, this effect was larger when participants were unobtrusively exposed to schematic human faces while listening to the stimulus words, for females than for males, and for those with higher levels of chronic social orientation.