

128 | Emotional effects on auditory word recognition for bilinguals: Differences on L1 and L2 processing

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Visual and auditory word processing differences have been reported on monolinguals; differences between people's first (L1) and second (L2) language are, however, still a developing field in cognitive neuroscience. Previous research shows that word recognition is modulated by the emotional content of the stimuli, since emotional stimuli shows better recognition accuracy and speed than neutral items. The aim of this study was to assess auditory emotional word recognition on L1 vs. L2. Thirty-four bilingual volunteers performed an online auditory lexical decision task in which they had to decide whether a given sound was a word (positive, neutral, or negative) or not, either on L1 or L2. Participants were split into two groups: L1 (n = 18) and L2 (n = 17). Results indicated that participants showed higher sensitivity (d') scores for L1 than L2. Likewise, the L1 group had over all shorter response times. Positive words were recognized faster than neutral and negative words only by the L2 group. Bias index (C) analyses showed higher tendency to answer "word" for positive items in L2 but not in L1; this group showed higher tendency to answer "pseudoword" for neutral stimuli. Therefore, even though word recognition is more efficient in L1, emotionality seems to have a differential effect on L1 and L2 for auditory processing.