

Is visual identification affected by auditory distractors? Crossmodal Stroop effects with compressed speech distractors

Although there is increased research on crossmodal attention, it is still unclear whether auditory distractors can elicit facilitation/interference of visual objects. Therefore we conducted a Stroop-like experiment using auditory distractors (color words) and visual targets (colored objects). We were interested whether a Stroop-effect was moderated by level of speech compression and by level of visual perceptual load. The color words red, green, blue, yellow were used as auditory distractors. In a blocked design, three compression levels were used: normal speech, compressed but understandable, and compressed close to discrimination threshold. Participants categorized color of targets by key presses. With reference to perceptual load theory, targets were presented in a ringlike arrangement of eight objects. In the low load condition, distractors were presented in different shadings of gray. In the high load condition, distractors were presented in colors different from the target colors. Results of this study will be presented and discussed.