

Abstract

Background: Moods have a pervasive impact on various cognition functions, including language comprehension. Preliminary evidence suggests that a happy mood could even modulate language production processes. However, although it has been suggested that a sad mood might modulate language production processes, others argued that happiness and sadness might not be on the opposite end of the same dimension, and that sad mood might not influence language production even if happy mood does. Meanwhile, a sad mood has pervasive influences on cognition. Language production is a fundamental psychological process important for everyday-life functioning. It is thus important to study sad mood's effect on language production. It was found that anxiety level had a differential impact on language production for stimuli with different association strengths between concepts. Similarly, this might also be the case for a sad mood. Therefore, the present study aimed to examine whether a sad mood would interact with the moderation effect of association strengths on language production. **Methods:** Using a mood induction paradigm, 43 participants' moods were manipulated into a sad and a neutral condition and then performed a covert verb generation task, in which they were asked to generate the first verb related to the pictures. **Results:** The response rate for pictures with low association strength in a sad mood was significantly lower than that of a neutral mood. Also, the diversity of response of pictures with low association strength in a sad mood was significantly lower than that of a neutral mood. **Conclusion:** The impaired performance in the task reflects that the language production process in a sad mood is hampered, when compared to a neutral mood. This finding demonstrated that mood and cognition were intertwined.

Keywords: emotion, sad mood, language, production