

# Mood detection in ambiguous messages: The interaction between text and emoticons

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Face-to-face communication has several sources of contextual information that enables language comprehension. This information is used, for instance, to perceive mood of interlocutors, clarifying ambiguous messages. However, these contextual cues are absent in text-based communication. Emoticons have been proposed as cues used to stress the emotional intentions on this channel of communication. Most studies have suggested that their role is to contribute to a more accurate perception of emotions. Nevertheless, it is not clear if their influence on disambiguation is independent of their emotional valence and its interaction with text message valence. In the present study, we designed an emotional congruence paradigm, where participants read a set of messages composed by a positive or negative emotional situation sentence followed by a positive or negative emoticon. Participants were instructed to indicate if the sender was in a good or bad mood. With the aim of analyzing the disambiguation process and observing if the role of the emoticons in disambiguation is different according their valence, we measure the rate of responses of perceived mood and the reaction times (RTs) for each condition. Our results showed that the perceived mood in ambiguous messages tends to be more negative regardless of emotion valence. Nonetheless, we observed that this tendency was not the same for positive and negative emoticons. Specifically, negative mood perception was higher for incongruent positive emoticons. On the other hand, RTs for positive emoticons were faster than for the negative ones. Responses for incongruent messages were slower than for the congruent ones. However, the incongruent condition showed different RTs depending on the emoticons' valence. In the incongruent condition, responses for negative

emoticons was the slowest. Results are discussed taking into account previous observations about the potential role of emoticons in mood perception and cognitive processing. We concluded that the role of emoticons in disambiguation and mood perception is due to the interaction of emoticon valence with the entire message. © 2018 Aldunate, Villena-González, Rojas-Thomas, López and Bosman.

Disambiguation

Emoticon

Emotional valence

Mood detection

Text-based communication