Self-Other Similarity Modulates the Socially-Triggered Context-Based Prediction Error Effect on Memory

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Abstract

The mind is a prediction machine, using prior experiences and current information to constantly make predictions about the future. This feature of the cognitive system has numerous consequences for long-term memory. Here, we are interested in the effects these predictions have on memory when invalidated (i.e., prediction errors) during social interactions with either similar or dissimilar social sources. We designed an experiment in which both similar and dissimilar social sources (speakers) recounted experiences similar with those of the listeners but with a different outcome than those of the listeners. We measured participants memory for both their own and the two social sources experiences. In two experiments, we found that context-based prediction errors triggered during social interactions dont affect the listeners memory for their own experiences but decrease the listeners memory for the similar speakers experiences compared to the dissimilar speakers experiences. This finding has important implications for close relationships.