The impact of speech disfluencies on the believability and recall of sentences

Sarah Bibyk

Air Force Research Laboratory, Wright Patterson AFB, Ohio, United States

Lisa Fazio

Vanderbilt University, Nashville, Tennessee, United States

Duane Watson

Vanderbilt University, Nashville, Tennessee, United States

Abstract

It is well-established that when people process sentences fluently, they are more likely to believe the sentences are true. It has also been shown that sentences which include disfluencies improve peoples memory for the sentences content. We sought to test whether both of these effects were present simultaneously. In Experiment 1, we found that speech disfluencies do not appear to always aid memory, but they do impact participants truth judgments. In Experiment 2 we found that this impact on truth judgments may not be due to processing fluency, but rather due to reasoning about the speakers certainty. We found a similar effect on truth judgments when participants were presented with sentences that were fluent but had rising (i.e. uncertain) intonation in comparison with falling intonation. In both cases, the effect was localized to only the sentences that had the cue, rather than to all sentences that the speaker produced.