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#### **Authors**

Sokolov, Mikhail

Logan, John

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# **Disambiguating Disfluencies: What Do Speech Disfluencies Tell Us About Speech Production?**

**Mikhail Sokolov**  
Carleton University

**John Logan**  
Carleton University

**Abstract:** Speech disfluencies occur frequently in spontaneous speech but their source is unclear. Disfluencies can take several forms, most commonly as verbalized disfluencies such as “um”, “uh”, and “so”, as well as silent pauses. In the present exploratory study we examined the relationship between disfluencies as distinct entities, individual differences in working memory capacity, and linguistic markers of complexity. We found that disfluencies diverge in their relationship with these variables. The “um” disfluency was most closely related to working memory capacity and linguistic complexity. The “uh” disfluency was associated with infrequent word production. The “so” disfluency predicted of the number of words produced. Silent disfluencies were not related to working memory capacity. However, micro-pauses were related to word production, and macro-pauses were negatively correlated with the “so” disfluency. Results are discussed in terms of potential relationships between disfluencies and speech production processes.