

# UNDERSTANDING THE RELATIONSHIP BETWEEN GOAL MAINTENANCE AND DISORGANIZED SPEECH

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## ABSTRACT

Disorganized speech in people with schizophrenia is associated with cognitive control deficits, but the specific nature of the relationship remains unclear. The current research examined whether one specific aspect of cognitive control, goal maintenance, is associated with disorganized speech and whether experimentally increasing goal maintenance demands would result in an increase in disorganized speech. In the present study, the A-X CPT and Missing Letter task were used to measure goal maintenance in people with schizophrenia ( $n = 49$ ) and non-psychiatric controls ( $n = 28$ ). In addition, the autobiographical memory task was used to measure disorganized speech in four conditions: the standard speech condition, the goal maintenance decrease condition (attending to visually-presented goal information during speech), the goal maintenance increase condition (performing the auditory 1-back with distraction during speech), and the control task speech condition (performing the auditory every-X task during speech). In people with schizophrenia, an increase in disorganized speech was associated with impaired goal maintenance performance in both goal maintenance tasks. In addition, both cognitive task manipulations during speech resulted in an increase in disorganized speech when compared to the standard speech and goal maintenance decrease conditions. Overall, these results provide at least partial support for goal maintenance deficits as a cause of disorganized speech in people with schizophrenia.