

SPEECH SYMPTOMS IN SCHIZOPHRENIA AND RELATIONSHIPS WITH WORKING
MEMORY, GOAL MAINTENANCE, AND PROCESSING SPEED

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ABSTRACT

People with schizophrenia exhibit wide ranging cognitive deficits, including slower processing speed (i.e., speed of executing task components). Speech symptoms, such as disorganized speech and alogia, have been associated with cognitive control deficits, but the exact nature of their relationship to specific cognitive deficits is unclear. In the current study, people with schizophrenia ($n = 51$) and non-psychiatric controls ($n = 26$) completed speech interviews allowing for assessment of speech symptoms. Participants also completed two tasks strongly involving working memory and two tasks strongly involving goal maintenance. In addition, measures of processing speed for highly automatic prepotent responses and a measure of general poor task performance were also obtained. For disorganized speech, it was significantly associated with poor performance in all cognitive domains (all r 's $> -.29$), with the largest association found with slower processing speed ($r = -.46$). Further, disorganized speech was even associated with a non-cognitive control measure of poor general task performance (BY errors on the AX-CPT, $r = -.43$). In contrast, alogia was not significantly related to any cognitive domain, with the largest association with goal maintenance tasks ($r = -.24$). Overall, this study suggests that disorganized speech in schizophrenia, but not alogia, is associated with generalized cognitive deficits.