# The Association Between the Self-Administered Gerocognitive Exam (SAGE) and Clock Drawing Test (CDT) in a Suburban Memory Clinic

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OBJECTIVE: We aimed examine if there exists a relationship between Self-Administered Gerocognitive Exam (SAGE) scores and Clock Drawing Test (CDT) scores of patients attending a suburban memory clinic.

BACKGROUND: Both the SAGE and CDT are brief exams which asses a patient's level of cognitive function. Such tests are commonly used evaluations tools in geriatrics and are often useful in identifying patients at risk for cognitive decline. The CDT is often included in larger batteries of tests such as the Montreal Cognitive Assessment (MoCA). The SAGE, which is unique in that it is self-administered by the patient, has been developed recently, while the CDT has been widely established in the clinical setting. Consequently, this study may help provide insight on the potential of the SAGE as a clinical tool when compared to the CDT.

METHODOLOGY: SAGE scores, CDT scores, age, education, gender, and race were collected from 116 patient charts from 2010 to 2016. As data were not normally distributed, Spearman correlation and Kruskal-Wallis tests were used to analyze the relationship between SAGE scores and CDT scores of patients attending the alzcenter.com clinic. For multivariate analyses, linear regression models were used and adjusted for age, education, gender, and race effects.

RESULTS: There was a significant association between SAGE scores and CDT scores (rho = 0.46, $p<0.001$). This relationship persisted after adjusting for age, education, gender, and race ($p<0.001$). Mean age among study patients was $70.24\pm13.19$ years; 51.72% were male; 91.38% were Caucasian. Mean education was $13.53\pm3.14$ years. Mean CDT score was $2.30\pm0.86$ while mean Co-MoCA score was $21.08\pm6.29$. Mean SAGE score was $12.57\pm5.74$.

CONCLUSION: SAGE scores and CDT scores were significantly associated among patients at a suburban neurology clinic, even after adjusting for age, education, gender, and race effects. These results ultimately illustrate the consistency between the SAGE and the CDT.