

# The Association Between Lipids and Cognitive function Among African Americans

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## Abstract

The relationship between cardiovascular disease and cognitive functioning has been examined extensively in numerous studies. However, research on the impact of lipids on cognitive functioning, especially among African Americans with high rates of cardiovascular disease and dementia, is limited. Therefore, the current study was conducted to examine this relationship within a middle-aged African American community-based adult sample (mean age = 43.82 years). As a measure of cognitive functioning, the participants (N=122) completed the California Verbal Learning Test-II (CVLT-II). Triglyceride, HDL, and LDL levels were measured. Partial correlations revealed that triglyceride levels were inversely associated with the CVLT-II domains of free recall ( $r = -.23$ ;  $p < .05$ ) and long delayed cued recall ( $r = -.20$ ;  $p < .05$ ). HDL was positively associated with free recall ( $r = .23$ ;  $p < .05$ ). There was no significant relationship between LDL and CVLT-II scores. These results suggest that elevated triglyceride levels negatively impact verbal learning and memory, whereas higher HDL levels may support better verbal learning and memory ability. This study further highlights the importance of maintaining healthy levels of triglycerides and HDL cholesterol. Given the health disparities that face the African American community, the current research presents lipid levels as a possible connection between high rates of cardiovascular disease and dementia. This study suggests that preventive measures for both cardiovascular outcomes and dementia include the healthy maintenance of lipid levels.