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EFFECTS OF EFFORT ON NEUROCOGNITIVE PERFORMANCE OF HIV+ INDIVIDUALS

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Suboptimal effort confounds cognitive performance in healthy individuals and patient populations. The impact of poor effort during cognitive testing is particularly relevant to human immunodeficiency virus infected (HIV+) individuals. Specifically, concerns have been raised with regards to effort as it may confound diagnosis of neurocognitive impairment in HIV+ individuals. We examined effort and cognitive performance in 131 HIV+ individuals and 96 HIV- controls free of substance use disorder, major psychiatric illness, or neurological confounds. Participants completed a neuropsychological battery and an effort measure (Test of Memory Malingering (TOMM)). Global deficit scores (GDS) were calculated to measure cognition. TOMM did not differ between HIV+ individuals and HIV- controls. TOMM did not differ according to level of cognitive impairment for either HIV+ or HIV- groups. Finally, both TOMM performance and neurocognitive impairment did not correlate with clinical variables (CD4 or viral load) in HIV+ individuals. These results suggest that cognitive impairment in HIV+ individuals is independent of the potential confound of suboptimal effort. Future studies are needed to determine critical determinants of HIV-related cognitive impairment, with a focus on viral-host dynamics that occur during acute and early infection.