

higher CES-D scores were associated with higher SCD-Q scores ( $\beta = .43$ ,  $p < .01$ ), but there was no statistically significant group X CES-D score interaction.

**Conclusions:** These findings suggest that individuals who previously experienced a mild to moderate symptomatic COVID-19 infection report greater depressive symptom severity as well as greater subjective cognitive decline. Additionally, while more severe depressive symptoms predicted greater subjective cognitive decline in our sample, the magnitude of this association did not vary between those with and without a previous COVID-19 infection. While the underlying neurobiological and social mechanisms of cognitive difficulties and depressive symptoms in persons who have had COVID-19 have yet to be fully elucidated, our findings highlight treatment for depression and cognitive rehabilitation as potentially useful intervention targets for the post COVID-19 condition.

**Categories:** Infectious Disease (HIV/COVID/Hepatitis/Viruses)

**Keyword 1:** cognitive functioning

**Keyword 2:** depression

**Keyword 3:** infectious disease

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### 53 Healthcare Quality, Race, and Neuropsychological Functioning in Black/African-American Individuals with HIV

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**Objective:** Rates of HIV are disproportionately high among Black individuals in the United States (CDC, 2020). Black individuals are at increased risk for neurocognitive impairment due to HIV (Marquine et al., 2016) and experience

health disparities including increased morbidity and mortality (Asari, 2018; Manly et al., 1998). We sought to examine the relationship between perceived quality of healthcare and neuropsychological functioning among people living with HIV (PLWH) who identify as Black compared to those who are non-Black.

**Participants and Methods:** 151 PLWH in the Los Angeles area (52% Black, age =  $49.85 \pm 10.54$ , education =  $13.23 \pm 2.11$ ; 87% cisgender men, 8% cisgender women, 1% transgender men, 3% transgender women) completed comprehensive neuropsychological (NP) assessments (from which demographically-corrected domain and global T-scores were derived), psychiatric and sociodemographic interviews, and self-report questionnaires, including a measure of perceived healthcare quality (i.e., QUOTE-HIV). Statistical analyses included chi-square, t-test, ANOVA, and stepwise linear regression.

**Results:** Only 14% of Black PLWH had private healthcare insurance (versus Medicare/Medicaid) compared to 33% of non-Black PLWH ( $\chi^2=11.33$ ,  $p<.01$ ). Black participants were significantly older than non-Black participants ( $p<.01$ ), but did not differ on gender, education, income, CD4 count, or HIV viral load. Younger Black participants (based on a median split for age;  $n = 23$ ) reported the lowest perceived quality of healthcare (i.e., QUOTE-HIV total performance score), while older Black participants ( $n = 56$ ) reported the highest perceived care ( $F = 3.80$ ,  $p = .01$ ), but the same relationship was not observed in non-Black participants. In a stepwise multivariate regression model, including demographic and virological factors as well as healthcare quality, only household income and overall perceived healthcare quality (i.e., QUOTE-HIV total performance score) were significantly associated with Global NP T-scores among Black PLWH ( $R^2=.12$ ,  $F(1, 66)=4.46$ ,  $p=.02$ ).

**Conclusions:** When assessing healthcare quality and healthcare experiences among people living with HIV, race and age are important to consider. Private healthcare coverage may be less accessible to people of color, and in a multivariate model, only income and healthcare quality significantly predicted neuropsychological functioning in Black PLWH. When examining HIV and health outcomes, the complex relationships among quality of healthcare and health disparities, neuropsychological functioning, and structural racism warrant further investigation.

**Categories:** Infectious Disease  
(HIV/COVID/Hepatitis/Viruses)

**Keyword 1:** HIV/AIDS

**Keyword 2:** executive functions

**Keyword 3:** neuropsychological assessment

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#### 54 Age-Related Differences in the Associations Between Cannabis Use and Cognition in People Living with HIV (PLWH)

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**Objective:** PLWH report using cannabis for both recreational reasons and HIV symptom management (e.g., nausea, pain, depression/anxiety). Recent literature suggests that cannabis may attenuate HIV symptoms and neuroinflammation, which are strongly related to neurocognition. Additionally, older adults who are particularly vulnerable to cognitive impairment experience a decline in the endogenous cannabinoid system with age. Therefore, the aims of the present study were 1) to determine if cannabis use is associated with cognitive performance in PLWH, 2) to determine if age moderates the relationship between cannabis use and cognition in PLWH, and 3) to determine if there are differences in cognition in cannabis non-users, occasional users, and daily users among PLWH.

**Participants and Methods:** The sample included 225 PLWH (78% undetectable; 51% female, Mean age=49.10) who were classified as non-users (n=52), occasional users (n=53), or daily users (n=120). Cannabis use was measured via the Timeline Follow-back (TLFB). Cognition was examined using the NIH Toolbox Cognition Battery, which included measures of attention, working memory, executive function,

processing speed, and episodic memory, as well as a fluid cognition composite score.

**Results:** Increased frequency of cannabis use was weakly positively associated with episodic memory performance,  $r(224) = 0.15$ ,  $p < 0.05$ . Results of the multiple regression indicate that frequency of cannabis use was not significantly associated with any of the six cognitive domains. However, there was a significant interaction between age and cannabis use in the domains of attention ( $\beta = 0.13$ ,  $p < 0.05$ ), working memory ( $\beta = 0.12$ ,  $p < 0.05$ ), and episodic memory ( $\beta = 0.15$ ,  $p < 0.05$ ), suggesting worse cognitive performance in older adults who use cannabis as compared to younger adults in this sample. When participants were grouped based on use status, there were no significant main effects of group.

**Conclusions:** After controlling for the effects of demographic factors and HIV disease severity, no significant negative associations between cannabis use and cognition were observed, suggesting that cannabis use is not related to cognitive impairment in PLWH. However, results were clarified by a significant interaction, indicating that older adults who use cannabis perform worse in the domains of attention, working memory, and episodic memory compared to younger adults, suggesting synergistic cognitive effects of age and cannabis use. We additionally found preliminary evidence for a potential positive effect of cannabis use on episodic memory in the overall sample. Future studies examining biological and behavioral mechanisms of improvement will be necessary to better examine this relationship.

**Categories:** Infectious Disease  
(HIV/COVID/Hepatitis/Viruses)

**Keyword 1:** cannabis

**Keyword 2:** cognitive functioning

**Keyword 3:** HIV/AIDS

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#### 55 Health literacy mediates racial differences in cognitive functioning among people with and without HIV

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