For a substantial segment of the older population in the United States, many adverse childhood experiences were seeded by segregation, a longstanding process that restricted the access of Black, Indigenous, and other racialized and ethnically minoritized communities to geographic areas and housing, thus limiting not only access to resources but also the quality of those resources. Consequently, segregation encompasses multiple dimensions of state-sanctioned racial separation—among them, employment, exposure to environmental toxicants by virtue of housing and occupation, health care, and education. It is the collaboration and reinforcement of multidimensional and multilevel racial discrimination that qualify it as a component of structural racism. Structural racism—the aggregate ways racial discrimination is enacted—via segregation can produce social trajectories that beget other risks over the life course that, in turn, influence cognitive function. Conversely, early-life experience with integration may offer access to information and resources that catalyze a protective trajectory. However, integration may create trauma of its own, and both its benefits and harms may leave indelible marks on the cognitive function of Black US residents.

The investigation by Peterson et al focuses on the enduring consequences of attending racially integrated schools on cognitive function in middle and older adulthood. Set in the Study of Healthy Aging in African Americans (STAR) cohort, this study explored the differences in cognitive function across various experiences with integrated schooling for 699 Black US adults living in areas in and around Oakland and Richmond, California, all of whom reported whether they attended school in 1st, 6th, 9th, and 12th grades and whether those schools were racially segregated. Compared with participants who attended only segregated schools, those who attended integrated schools by the 6th grade had, on average, higher scores on tests of semantic memory and executive function. Mean semantic memory and verbal episodic memory performance were also higher among participants who began attending integrated schools between 9th and 12th grade. By contrast, higher scores were not present among participants who began attending integrated schools between the 6th and 9th grades.

Peterson et al reported associations of unusually large magnitude. The mean semantic memory score among participants who attended integrated schools starting by 6th grade was approximately 0.4 SD units greater than the mean score among participants who never attended integrated schools. In a separate population, the Chicago Health and Aging Project (CHAP), cognitive test scores were approximately 0.4 SD units lower per 6-year increment in age. Participants in STAR who switched from integrated to segregated schools had semantic memory scores that, on average, exceeded scores among those who attended only segregated schools by more than 0.55 SD unit; in CHAP, this was similar to the difference in cognitive scores between participants 8 years apart in age. Attention should be paid to differences of such magnitude.

In this study, integrated schooling was positively associated with cognitive function when it began between 1st and 6th grade or between 9th and 12th grade, but not between 6th and 9th grade, hinting that multiple developmental periods may be salient to the latent effects of integrated schooling. In addition, this study explored the intersection of segregation and education, advancing research on the multidimensional and multilevel cognitive effects of the sociopolitical environment and individually experienced education (ie, structural racism)—providing depth far beyond race and ethnicity.
years of education attained. These findings reinforce the idea that early-life environments can cultivate or corrode cognitive function in middle and older age. This idea is not new—for example, the published evidence on years of formal education and dementia-related outcomes is vast—but in the United States, most research (and funding for it) on early life and its association with adult cognition has been given to the experiences of White persons. When Black persons have been included in such studies, the White experience has been designated the standard, explicitly or implicitly. When that is the prism through which we form our inquiries about the determinants of cognitive risk in older adulthood, we risk missing determinants that are both powerful and highly prevalent.

Following the example of the late psychologist James S. Jackson, PhD, and those he mentored, Peterson et al4 examined the cognitive consequences of integrated education among a sample of persons who share the social experience of being racialized as Black. In forming a study cohort of Black US residents in the 1970s, Dr Jackson pointed out that the experiences of this population are not a monolith and within their heterogeneity lie clues about the causes of illness and wellness.6 In conducting studies comprising solely Black US residents, it becomes more evident that experience with structural racism is common but not uniform. Subsequently, had Peterson et al4 conducted a study including mainly non-Black communities, who were less affected by the cognitive toxicity of segregation (except for Indigenous communities), the study would have yielded less depth, insight, and impact. Despite the challenges of recruiting diverse participants into research for a myriad of reasons related to structural racism (eg, exploitation, clinician bias, exclusion criteria), this study was able to leverage the heterogeneity of the STAR sample to probe critical windows and duration of exposure.

Estimating the overall effect of integrated schooling on adult cognition requires a deeper discussion of confounding, mediating, and moderating factors—housing, banking, health care, parental occupation, the legal system, and racism-motivated violence and terrorism. This study sparks a need for a discussion on how, or whether, to distinguish the sequelae of integrated schooling from the determinants of it, particularly those that could themselves affect adult cognition independently from attending integrated schools. These determinants include childhood hunger and family finances, but years of attained education—a potential result of experience with integrated schooling—could be a feature of an estimated total effect of integrated schooling on adult cognition. Similarly, while this study provides a pivotal example of a sensitive and critical period as a fixed time of exposure,7 it beckons further discourse on the confounding role of chronological age. The study reveals a 9-year difference in mean age between those whose schooling occurred prior to integration vs during that period, such that among the oldest participants, there may have been few individuals with extensive exposure to integrated schooling, and among the youngest participants, there may have been few individuals with extensive exposure to de jure segregated schooling.

Being at the vanguard of research that initiates the merging of deep scholarship on structural racism and dementia means that the first studies are just that: a start. These first forays can expose the outlines of a substantial public health issue while also throwing into relief the ways in which subsequent research can build on and refine our understanding, ultimately to contribute to the cognitive well-being of older Black US residents. The authors pointed out that a school could be segregated de jure and/or de facto. Even if de jure segregation is in the past, understanding its effects on adult cognition is part of a larger social obligation of being accountable to the costs of racism and may itself open up pathways to intervening after the fact. With de facto school segregation still very much present,1 understanding its effects on adult cognition could inform interventions that affect the future cognitive health of millions of children.
Corresponding Author: Jennifer Weuve, MPH, ScD, Department of Epidemiology, Boston University School of Public Health, 715 Albany St, Boston, MA 02118 (jweuve@bu.edu).

Author Affiliations: Department of Neurology, Massachusetts General Hospital, Harvard Medical School, Boston (Adkins-Jackson); Department of Epidemiology, Boston University School of Public Health, Boston, Massachusetts (Weuve).

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