Young adulthood, important in so many ways in the life course of individuals, is a particularly high-risk period for sustaining firearm-related harm. In 2020, suicide and homicide were 2 of the top 3 leading causes of death among adults ages 25 to 30 years, and approximately 49% of suicides and 89% of homicides in this age group involved a firearm. Elsewhere in *JAMA Network Open*, Sivaraman and colleagues study the longitudinal patterns of firearm access and ownership from childhood (ages 9-16 years) to young adulthood (ages 25-30 years) and examine whether experiences of violence during these 2 developmental periods are associated with initiating or maintaining gun access or ownership in young adulthood. They describe 4 patterns of access and ownership across these 2 periods: never (275 of 1260 participants [25.9%]), adult only (64 participants [7.1%]), childhood only (408 participants [31.9%]), and consistent (373 participants [35.1%]). There were differences in sex, race, urbanicity, and socioeconomic status across these identified patterns. There were also some differences in the experiences of violence across these identified patterns. Adult-only owners were less likely to have experienced bullying but more likely to have witnessed trauma as a child compared with never owners. There were minimal to no differences between consistent owners and childhood-only owners. Overall, the findings of Sivaraman and colleagues provide a heterogenous picture on how violence exposure may be associated with young adult firearm access and ownership decisions.

This study has several strengths. First, much of the existing longitudinal work primarily focuses on youth in urban areas or on certain firearm-related behaviors, like handgun carrying. Sivaraman and colleagues focus on gun access and ownership and include a large proportion of rural youths as well as American Indian or Alaska Native youths, both groups understudied in terms of firearm-related behavior and harm. Second, this study is set in the Southeastern United States, a region with a relatively high rate of gun ownership and a specific gun culture that prior research shows is broadly associated with opposition to firearm registration, permits, and bans. Third, longitudinal evaluations capturing transitions in gun access and ownership from childhood to young adulthood like those by Sivaraman and colleagues are important in understanding opportunities for injury prevention during a period of heightened risk.

The findings of Sivaraman and colleagues build on the existing literature by studying the transition between childhood and young adulthood with results that deserve careful consideration. The existing literature broadly shows strong, positive associations within the same developmental periods, especially in childhood, between experiences of violence (eg, bullying, family violence, and community violence) and firearm ownership, firearm carrying, and other firearm-related or risk behaviors. Sivaraman and colleagues find that experiencing bullying is associated with a lower likelihood whereas witnessing trauma is associated with higher likelihood of initiating gun access/ownership in young adulthood. They find no evidence of differences in experiences of violence among consistent owners compared with childhood-only owners. Why do these findings differ somewhat from those in the existing literature that focused on specific developmental periods, and by what mechanisms may experiences of violence contribute differently to decisions on gun access and ownership in the transition to young adulthood are areas that require further research?

Given the patterns of findings in the study, the constructs used to measure experiences of violence are important to consider. Sivaraman and colleagues study transitional decision-making,
but the lifetime construct used to measure violence exposure does not account for important
variability in these experiences that may matter substantially for decision-making over time and
across people. For example, the intensity or severity (eg, witnessing trauma repeatedly instead of
once or more, experiencing bullying weekly instead of once or more) may have a bearing on the
strength of the association of witnessing or experiencing violence with firearm ownership and access
decisions. Including all forms of exposure and averaging across them using lifetime constructs may
contribute to the lack of associations for consistent compared with childhood-only owners. The
duration of experiences of violence may also contribute to the firearm ownership decision. Short- or
long-term violence exposures may have a dose-response relationship in decision-making.
Furthermore, the generalizability of some constructs may be limited because they use a labeling
approach to identify experiences of violence (eg, do you get teased or bullied). Constructs probing
about behaviors often find higher prevalence rates than constructs labeling forms of violence
exposures.12 In addition, sociological and anthropological research suggests that the need to
maintain an image of toughness or invulnerability for self-protection can make it difficult for Black
youths in particular to identify themselves with labels such as “victim.”13 The different types of
experiences, how they were measured, the chronicity of how they were measured, and the contexts
in which they occur and may all contribute to the findings.

Additional context may also be useful in understanding the findings of Sivaraman and
colleagues.3 Young adulthood is highly formative in terms of identity development, such as in ways
of living and belief systems including gun-related practices and beliefs about guns. Young adults tend
to be mobile—their housing tends to be less permanent than older adults, and they may transition
from rural to urban areas, all of which may reduce the likelihood that they would choose to have long
guns in particular in their homes. Sivaraman and colleagues6 exclude early young adulthood (ages
18-24 years) from this evaluation, a key period of transition when the legal landscape for firearm
purchase and possession changes. Participants in the study were also making decisions about the
inclusion of guns in their homes during a time in which the rate of household gun ownership generally
declined in the United States (ie, 1993-2016). The rates declined from 49% in 1993 to 40% in 2016,
with an even steeper decline in the state (North Carolina) from which the sample for this study was
drawn, from 57% in 1993 to 37% in 2016.6

Building on the work by Sivaraman and colleagues,3 future efforts need to situate these findings
in the existing research to inform prevention. Identifying factors that are associated with gun access
and ownership does not imply that those factors lead to gun access and ownership. Taking any action
based on an assumption of causality may cause challenges in terms of prevention efforts. Instead,
there might be important but unobserved causal factors that need to be considered. Additional
research, particularly qualitative studies that richly explore the firearm access and ownership
decision-making process among young adults, is needed to best inform prevention efforts.
Additionally, disparate experiences of violence across gender and race may play a considerable role
in the choice to possess or own a firearm. These experiences of both systemic and interpersonal
violence and their contribution to the young adult choice to own a firearm must be evaluated
because of the disproportionate burden of firearm-related harm by race, gender, and urbanicity.
Future work should explore the impact that experiences of violence may have on gun access/
ownership decision making in young adulthood across the intersections of race, gender, and
urbanicity.

Living in a home with guns is a complex decision and likely influenced by a range of factors
across the social ecology including cultural and historic factors, community-level norms, family values
and practices, romantic relationships, and individual beliefs and experiences. Sivaraman and
colleagues5 provide valuable empirical evidence on the heterogeneity and fluidity of patterns in
access and ownership across developmental periods, bringing attention to the need to fully
understand the factors that explain these changes over time.
Firearm Access and Ownership in the Transition From Childhood to Young Adulthood

REFERENCES


