

School Start Times and Adolescent Behaviors in Kansas

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Introduction. Research shows delaying school start times (STs) for secondary students improves academic performance, leading to recommendations for delayed STs by the American Academy of Pediatrics. This study examined the relationship between STs in Kansas and adolescent behaviors.

Methods. This cross-sectional study explored relationships between STs, attendance, and vehicular crash data among Kansas high school students. Publicly available data from 2021-2022 was used for 85 counties. Pearson's correlation was applied with a significance of $p < 0.05$. All analyses were performed using R Statistical Software (v4.2.764; R Core Team 2021).

Results. The earliest ST was 7:00 am (0.3%, $n = 1$), and the latest 8:35 am (0.3%, $n = 1$). The majority of teen crashes (60%, $n = 1,441$) occurred in counties with STs before 8 am, showing a significant negative correlation ($r = -0.427$, $p = 0.0001$) between average STs and accidents per county. A significant positive correlation was observed between average ST and attendance rates per county ($r = 0.55$, $p < 0.0001$).

Conclusions. This study suggests earlier STs may impact adolescent behaviors. With 60% of teen crashes occurring in counties with early STs, delayed STs may reduce accidents. Furthermore, later STs are linked to improved attendance rates. Despite limitations, these findings demonstrate the need for further research to explore the benefits of later STs for adolescent health and safety in Kansas.