

Teens' circadian rhythms are delayed relative to daylight, not relative to clock time [1].

Making Daylight Saving Time permanent is equivalent to starting school yet another hour earlier in winter [2]. We already know that teens' internal circadian clocks run much later than adults, on average, and that early school start times lead to bad outcomes - less learning, more traffic accidents, poor choices (alcohol, etc), and depression.

Conversely, making Standard Time permanent (year-round) would be equivalent to moving bell times an hour later from March to November - and without the problems resulting from changing bus schedules, affecting after-school jobs, or limiting athletic practice.

#### References:

[1] See, for example, "Sunset time and the economic effects of social jetlag: evidence from US time zone borders", Osea Giuntella and Fabrizio Mazzonna. (*J Health Econ* 2019 May, **65**,210-226)

<https://pubmed.ncbi.nlm.nih.gov/31030116/>

[2] "Daylight Saving Time and Artificial Time Zones – A Battle Between Biological and Social Times", Till Roenneberg, Eva C. Winnebeck, and Elizabeth B. Klerman (*Front Physiol.* 2019; **10**: 944)

<https://www.ncbi.nlm.nih.gov/labs/pmc/articles/PMC6692659/>