School Start Time and Teen Sleep

For many adolescents in high school, obtaining adequate sleep can be difficult. One proposed way to increase sleep duration for teens is to delay the school start time. In one study, the school schedule was modified. The study was conducted at a residential boarding school, where students lived at the school site rather than at home. For Fall term (Time 1), the schedule was 8am-6pm on Mondays, Tuesdays, Thursdays and Fridays and 8am-12:35pm on Wednesdays and Saturdays. For Winter term (Time 2), the schedule was changed to 8:25am-5:35pm on Mondays, Tuesdays, Thursdays, and Fridays and 8:25am to 12:35pm on Wednesdays and Saturdays. Boarding students completed surveys at the end of Fall term (Time 1), and at the end of Winter term (Time 2). Figure 1 and Table 1 present the main findings of the study. *Assume any differences between groups are statistically significant.*

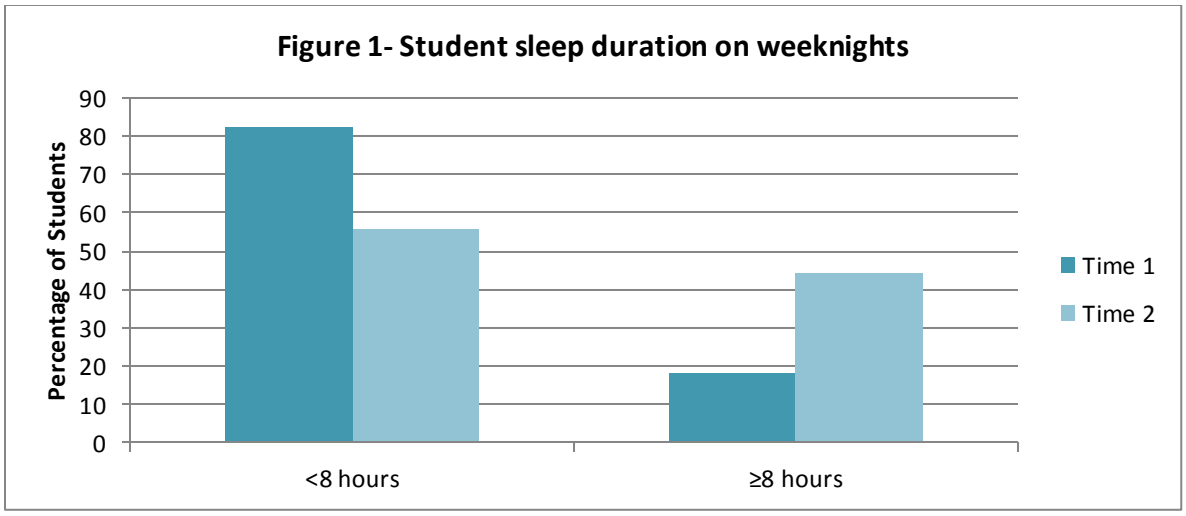

Table 1- Percentages of students reporting daytime sleepiness behaviors

	Time 1 (%)	Time 2 (%)
Napped at least sometimes on school days	44	33
Arrived late to class at least once in past two weeks	25	16
Struggled to stay awake and/or fell asleep in class	72	55
Too tired to do schoolwork somewhat or much of the time	76	61

Discussion Questions

1. In the study described, identify the dependent variable(s) (DV) and independent variable(s) (IV).
2. Can we conclude that the changed school schedule *caused* student sleep patterns to change? Why or why not?
3. What challenges do you see for generalizing the findings from this study to all high school students?
4. How would (or would) you use these, and other, findings to argue for changes in school start times?