

Analysis of JEB Stuart High School Survey Results on Sleep and School Schedules

Adam Winsler, Ph.D.
Henry Tran
Nate Tatro

George Mason University

September 2005

Adam Winsler, Ph.D.
Department of Psychology - 3F5
George Mason University
Fairfax, VA 22030
(703) 993-1881
awinsler@gmu.edu
<http://classweb.gmu.edu/awinsler/>

Executive Summary

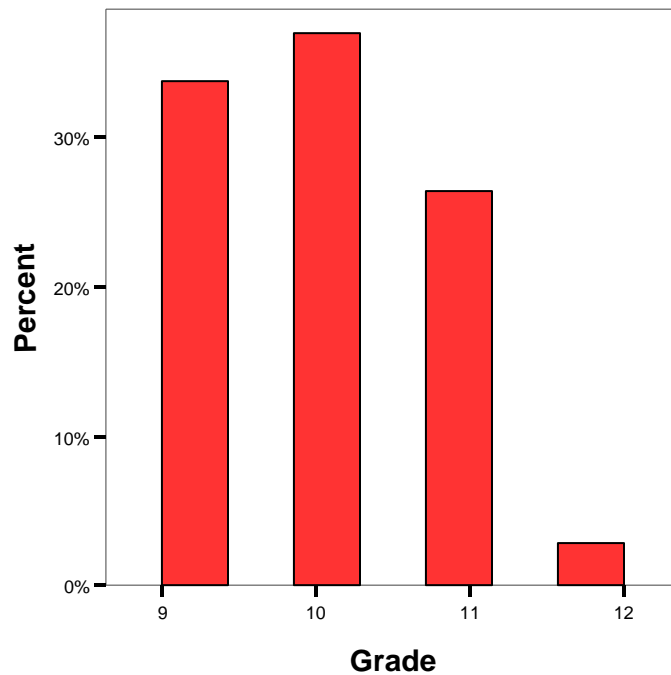
In December 2004, 679 high school students at JEB Stuart High School in Fairfax County Virginia, with support from and collaboration with the principal, school staff, and SLEEP committee volunteers, completed a survey asking them about their actual and preferred sleep schedules, work schedules, and school schedules. The results described in the report that follows give clear evidence that the students dislike the current early bell schedule, that they are considerably sleep deprived, that they don't have time to eat breakfast in the morning, that they often feel tired and actually sleep during classes, that they would prefer a later start time, and that would be even willing to take a summer school course to achieve this goal. This is still true even though the majority of students are engaged in after school extracurricular activities and a significant minority of students are employed.

1) Description of the Sample

AGE

A total of 679 students completed the survey in their English classes. The average age of the student was 15.4 years, with student age ranging from 13 to 19 years of age. Students were comprised of 34% Freshman, 37% Sophomores, 26% Juniors, and 3% Seniors as seen in the graph below.

Grade Level



TRANSPORTATION

Students used the following modes of transportation to get to and from school:

Mode of transportation ¹	To school	To home
Bus	52.7%	43.2%
Drive self or w/friends	16.6%	19.3%
Parents drive	23.7%	14.9%
Walk or bike	10.9%	15.8%
Other transportation	1.8%	1.5%

- *Most students take the bus to get to and from school*
- *A sizable number of students also drive themselves to and from school or have friends and parents who drive them*

¹ %s do not add to 100% because respondents were allowed to select more than one mode of transportation

EXTRACURRICULAR ACTIVITIES

56.8% of students participate in school-related extracurricular activities. The number of days/week that they participate in such activities is as follows:

1-2 days	22.8%
3-4 days	24.4%
5-6 days	52.8%

The season of the year that they participate in such activities is as follows:

Fall	35.6%
Winter	37.4%
Spring	38.7%

• *Over half of students participate in extracurricular activities and this doesn't vary much by season. The majority of such students typically participate in after school activities for more than half of the week*

EMPLOYMENT STATUS AND HOURS WORKED

22.7% of student respondents were currently working while going to school.

For those who worked, the average number of days/week that they worked was 4 (range = 1-7)

For those who worked, the average number of hours/week that they worked was 20 (range = 1-45)

For those who worked, the average number of hours/day worked on school days was 4.7 (range = 1-10)

For those who worked, the average number of hours/day worked on weekend days was 6.9 (range = 1-13)

For those who worked, the average start time for their job on school days was 4:22pm (range = 2:00 – 9:00pm)

For those who worked, the average start time for their job on weekend days was 11:56am (range = 7:00am – 9:00pm)

TRANSPORTATION TO WORK

5.2% of students reported walking to work, 10.3% indicated that their parents drive them to work, 8.1% drive themselves to work, and 2.8% take public transportation to work

BREAKFAST

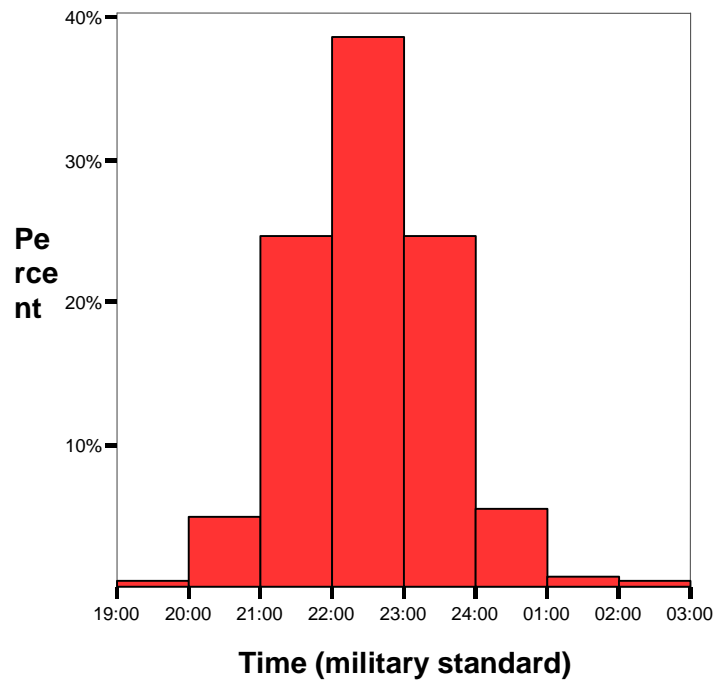
The majority (61.1%) of student do not have enough time to eat breakfast before going to school. Only 39.9% of students eat breakfast before school every day

89.1% of students report that they would eat breakfast if they had time or if it were available during a block of time at school

2) Student Sleep Patterns

AVERAGE TIME THAT STUDENTS FALL ASLEEP ON WEEKNIGHTS

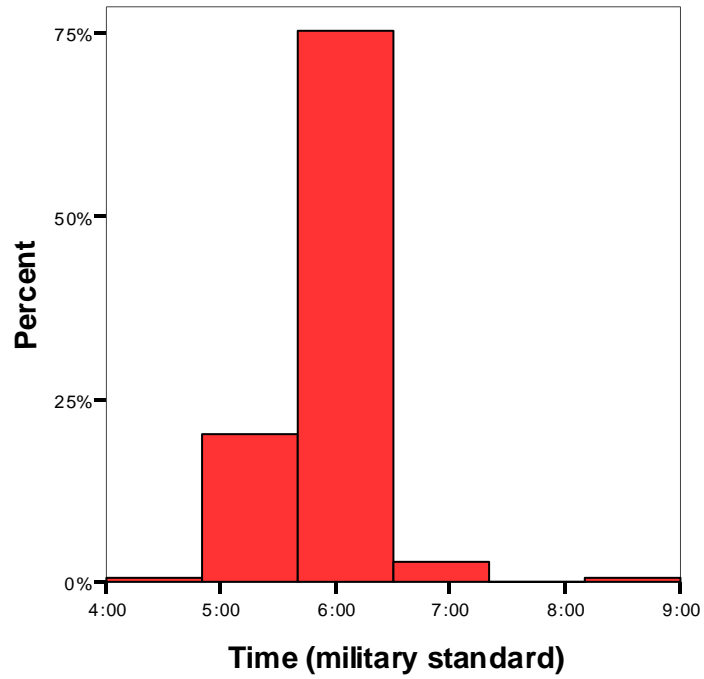
Sleep Time on Weeknights



Mean = 10:51 pm Range (7:30pm -3:00am)

AVERAGE TIME THAT STUDENTS WAKE UP ON WEEKDAYS

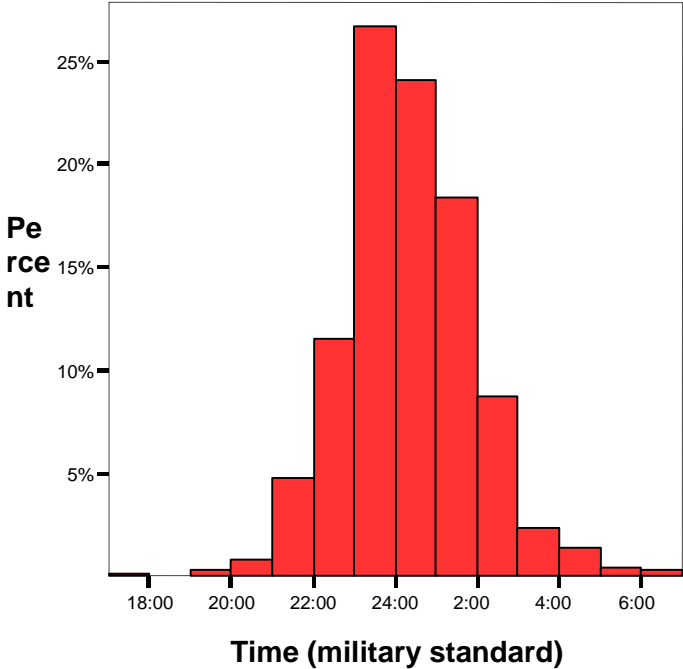
Wake Time on Weekdays



Mean = 5:57 pm Range (4:00am - 9:00am)

AVERAGE TIME THAT STUDENTS GO TO SLEEP ON WEEKENDS

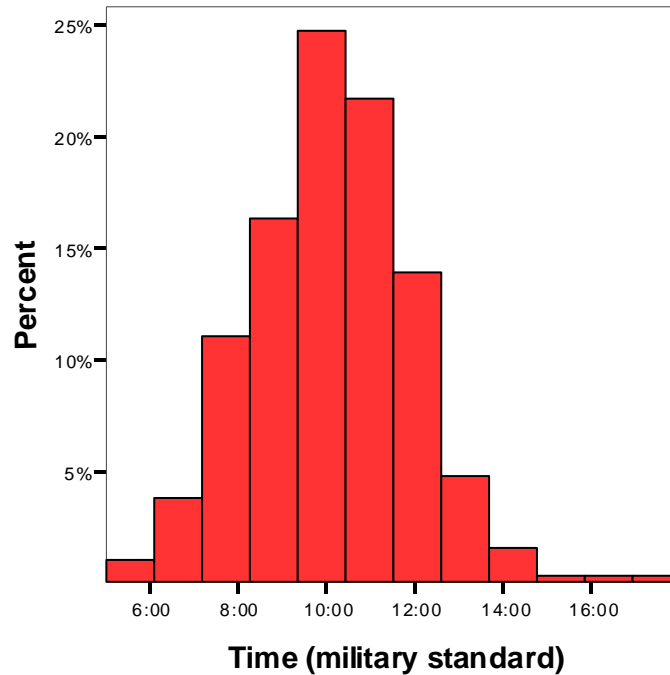
Sleep Time on Weekends



Mean = 12:39am Range (5:00pm – 7:00am)

AVERAGE TIME THAT STUDENTS WAKE UP ON WEEKENDS

Wake Time on Weekends

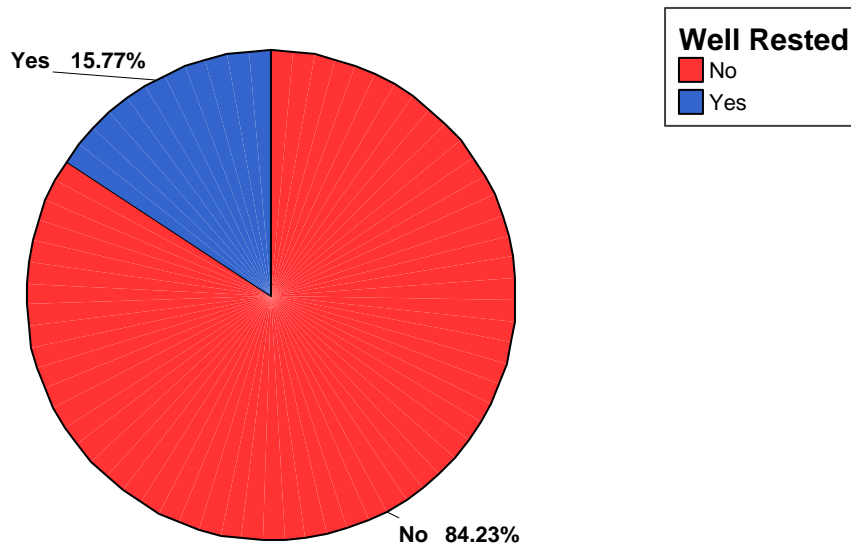


Mean = 10:00am Range (5:00am – 6:00pm)

- *On average, during the school week, students go to sleep around 11:00 pm and wake up before 6:00 am*
- *On average, on the weekends, students go to sleep around 12:30 am and wake up around 10:00 am*
- *The fact that they sleep for about 10 hours on the weekends, and only for about 7 hours on weekdays suggests that they are in fact sleep deprived during the school week*

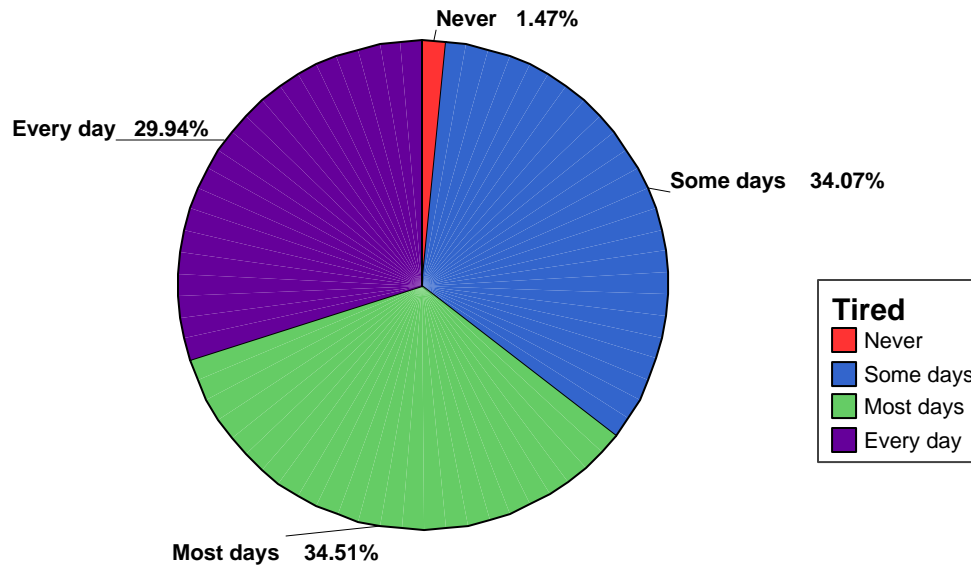
3) Student Restfulness

Percentage of students Who Feel Well-Rested and Alert When Arriving at School



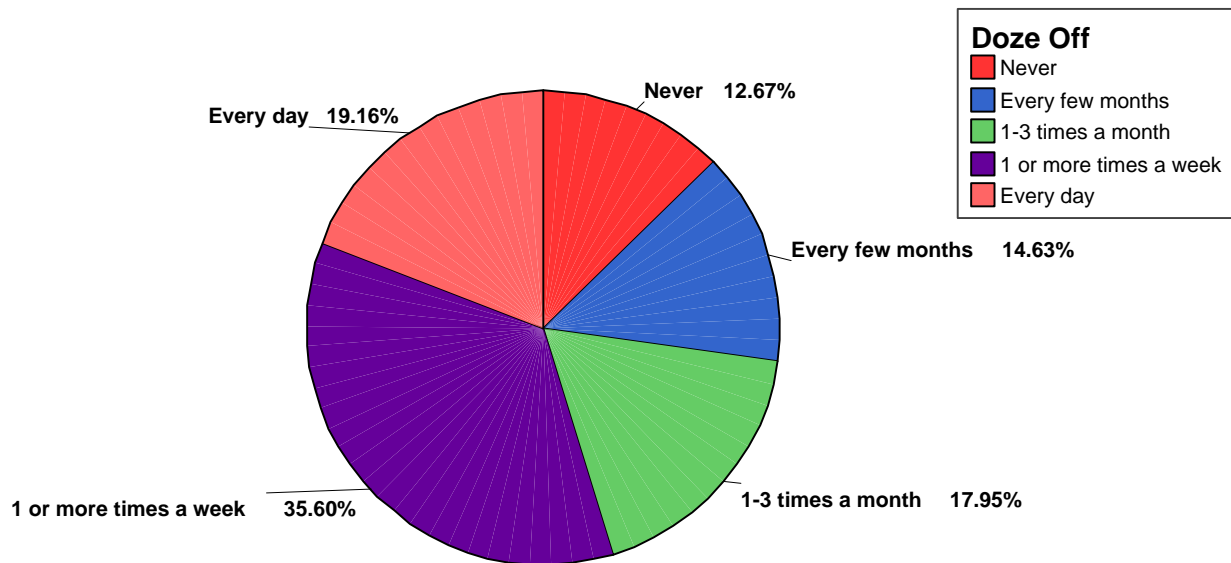
- *Only 15% of students feel well-rested and alert when they arrive at school.*

Percentage of Students Who Feel Tired or Sleepy During School



- *98.5% of high school students report that they feel tired or sleepy during school at least some days each week*
- *64% of students report feeling tired or sleepy every day or most school days*
- *30% of students feel tired and sleepy during school every day*

Percentage of Students Who Doze Off in Class



- *Almost 20% of students fall asleep at some point during school every single day*
- *55% of students fall asleep during school one or more times a week*

SUMMARY:

- *Taken together, these responses show that students do not feel rested or alert while at school, and instead feel tired and sleepy on most school days, leading the majority of them to actually fall asleep at school one or more days during the week*

4) Student Attitudes and Preferences About Sleep Schedules

PERCEIVED SLEEP DEPRIVATION

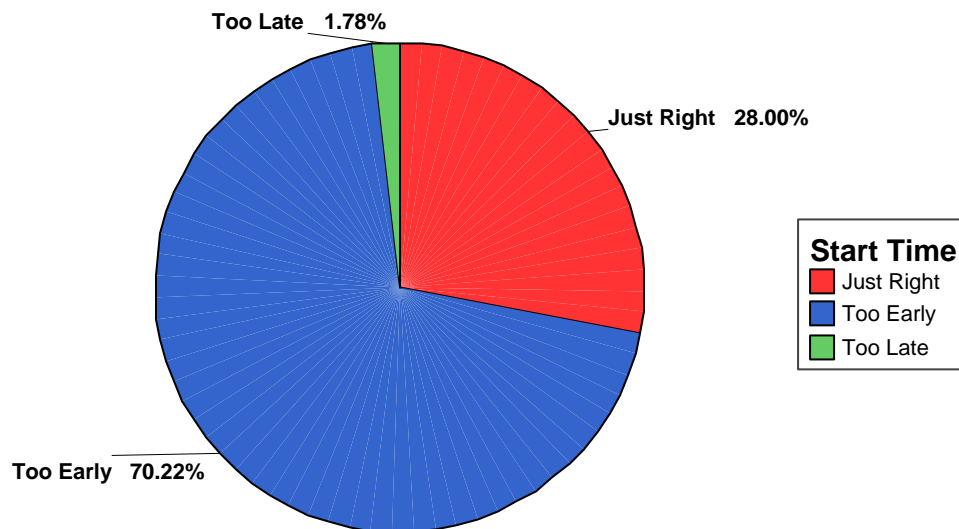
Students, on average, believe that the number of hours of sleep per night that teenagers SHOULD get is 8.5 (Range 3 – 15)

Students, on average, believe that the number of hours of sleep per night that teenagers ACTUALLY get is 6.6 (Range 3 – 15)

The fact that teenagers believe that they get about 2 hrs of sleep fewer than they need is additional evidence that high school students are sleep deprived

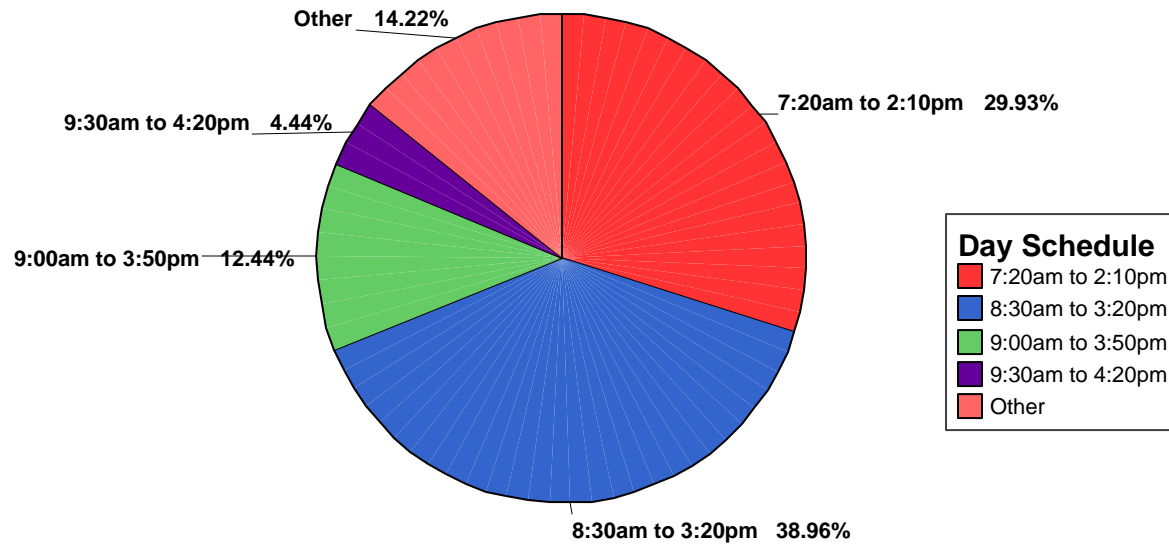
START TIME PREFERENCES

Feelings about school start time of 7:20 am



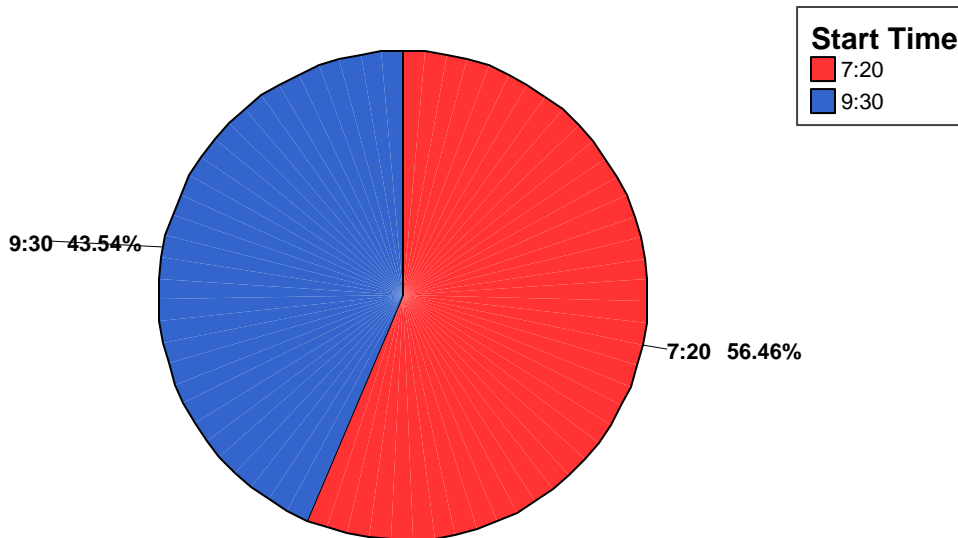
- *The vast majority (70%) of students feel that their current school start time is too early*

Preferred school schedule



- *Only 30% reported preferring the current school schedule (7:20 am to 2:10pm)*
- *The majority of students (56%) students prefer a later school schedule with the most popular schedule desired being from 8:30 am to 3:20 pm (almost 40% of students)*

Preferred school start time if school must start before elementary and middle schools or after elementary schools



- *Given the choice between having school start at the current time (7:20 am) or very late (9:30 am – after elementary schools), a narrow majority (56%) prefer the current time*

SUMMER SCHOOL CHOICE

The majority of students (62%) say they would be willing to take a summer school course in order to be able to start school later and have one less period