

Sleep. Are you getting enough?



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I. Statistical Question

I am a middle school student in Fairfax County. It was announced earlier this year that starting September 2015, middle school would start half an hour earlier to allow the high school to start at a later time to give them more time to sleep. Being a middle school student, I know what it is like to wake up early to go to school, and I wonder how this time change will impact me next school year. While discussing this topic with friends, I realized that some of them were concerned and some were not. I then started to wonder how this might affect the people around me, and if this would be a big or small change for people.

Nowadays sleep has become a major problem for many students around the country. The average amount of sleep teenagers get is between 7 and a half hours. However, they need about 9 and a half hours. I hope to explore the following questions in this study:

- **Gender** - Who is getting more sleep, male or female?
- **Difficulty Waking Up** – Who has harder time waking up, male or female?
- **Exhaustion** – Do the students that have difficulty waking up in the morning feel exhausted during the day?
- **Age** - Who has the most difficulty waking up in the morning, 12 13 or 14 year olds?
- **Grade** – Do 7th or 8th graders sleep more?
- **Academic Performance** - Does sleep duration have any impact on GPA?
- **Electronics** – How much TV do students watch per day? Does this have an effect on their ability to fall asleep?

It is important to analyze this subject because with this kind of information, we can determine whether or not Fairfax County is making the right decision, and possibly help to influence the time changes in other county's around the country. Every kid in this country is smart, it is whether or not they choose to embrace their abilities and apply them where they are needed that you can actually judge a person.

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II. Data Collection

The students who participated in the survey are in 7th or 8th grade at my Middle School in Fairfax County. For my data collection I randomly selected 100 students and I enlisted the help of my science teacher to hand the survey out to random classes. I got back about 80 questionnaires and some of the surveys were incomplete or invalid and had to be removed from the data analysis.

The students were informed that the survey was anonymous and no personal information that could identify the respondent was collected. The survey was made up of 23 multiple-choice questions. The students were told to select only one answer. Raw Data is attached in Appendix A of this document.

III. Survey Questionnaire

Students were asked to fill out the following questionnaire.

1. When do you normally go to bed?
 - A. Before 8 p.m.
 - B. Between 8 and 9 p.m.
 - C. Between 9 and 10 p.m.
 - D. Between 10 and 11 p.m.
 - E. After 11 p.m.

2. How many hours of television do you watch every night?
 - A. None
 - B. Less than an hour
 - C. 1 to 2 hours
 - D. More than 2 hours

3. Are you on your phone or other electronic devices before you go to sleep?
 - A. Yes
 - B. No

4. Do you do any non- electronic activities before you go to sleep (board games, reading, listen to music)?
 - A. Yes
 - B. No

5. How old are you?
 - A. 11 or below
 - B. 12
 - C. 13
 - D. 14+

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6. What is your gender?
 - A. Male
 - B. Female

7. Do you view yourself as a social and adventurous person, or a quiet and reserved person?
 - A. Social, adventurous and outgoing
 - B. Quiet and reserved

8. Do you have difficulty waking up in the morning?
 - A. Yes
 - B. No

9. How long does it take for you to fall asleep?
 - A. I fall asleep immediately
 - B. 10 to 30 minutes
 - C. 30 minutes to an hour
 - D. More than an hour
 - E. I am not sure

10. What time do you wake up in the morning on a school day?
 - A. 5:00 a.m. or earlier
 - B. 5:00 a.m. to 6:00 a.m.
 - C. 6:00 a.m. to 7:00 a.m.
 - D. 7:00 a.m. or later

11. What time do you normally wake up on the weekend?
 - A. Before 7:00 a.m.
 - B. Between 7:00 a.m. and 8:00 a.m.
 - C. Between 8:00 a.m. and 9:00 a.m.
 - D. Between 9:00 a.m. and 10:00 a.m.
 - E. After 10.00 a.m.

12. Do you feel fatigued, exhausted or tired during the day?
 - A. Yes
 - B. No

13. Do you have periods of the day when you have trouble paying attention, remembering things or staying awake?
 - A. Yes
 - B. No

14. How late do you stay up doing homework?

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- A. I don't have to stay up
- B. Just an hour or less
- C. A couple hours
- D. Over 2 hours

15. Do you do any extra- curricular activities on a daily basis?

- A. Yes
- B. No

16. How much sleep do you get on weekends?

- A. Less than 7 hours
- B. 7 to 8 hours
- C. 8 to 9 hours
- D. 9 to 10 hours
- E. More than 10 hours.

17. Do you take a nap when you come back from school?

- A. Yes
- B. No

18. What is your GPA? _____.

Grade 4.0 scale (GPA for this year)

A = 4.0	B+ = 3.3	C+ = 2.3	D+ = 1.3	F = 0.0
A- = 3.7	B = 3.0	C = 2.0	D = 1.0	
	B- = 2.7	C- = 1.7		

19. Reason for not getting enough (8 to 9 hours for teenagers) sleep during weekdays?

- A. Watching television / video games/ etc.,
- B. Home Work
- C. Socializing
- D. Studying for test/quiz
- E. Sports
- F. Other

20. Do you drink coffee or soda or other drinks with Caffeine after 4 p.m.?

- A. Yes
- B. No

21. Which grade are you in?

- A. 6th
- B. 7th
- C. 8th

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22. What do you do when you come home from school?

- A. Anything but homework
- B. Social media along with some homework
- C. Do homework with the music or television on
- D. Extra-curricular activities
- E. Chill off for at most an hour, then do homework
- F. Finish homework asap

23. Which of the following describes your mood on a daily basis?

- A. Depressed
- B. Angry
- C. Energetic
- D. Cheerful
- E. It changes every day

IV. Data Analysis & Display

Out of 80 responses only 65 were usable. The following is the representation of the data analysis.

Data Distribution

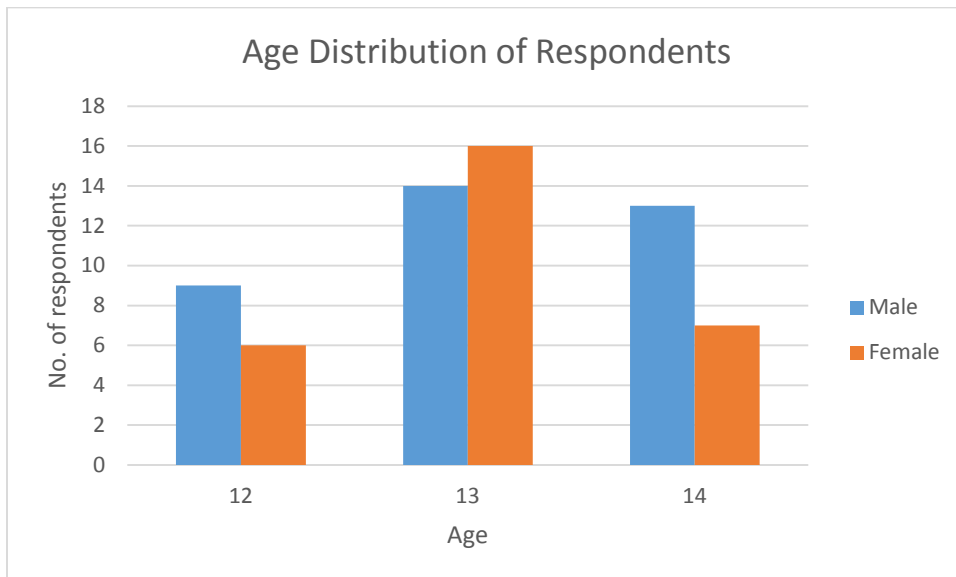
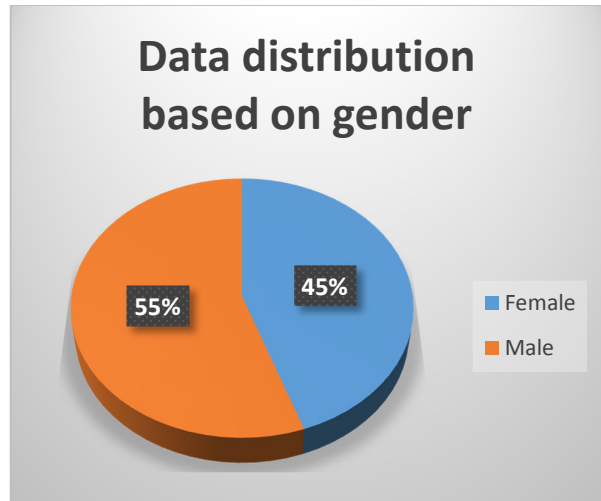
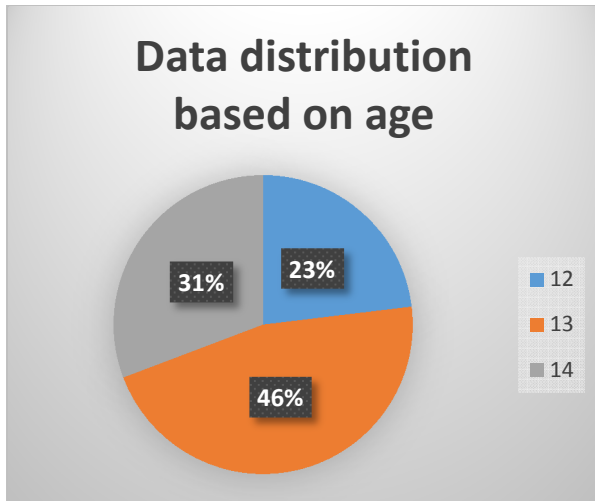


Table 1. Data distribution based on Age

Age	Male	Female	Total	%
12	9	6	15	23%
13	14	16	30	46%
14	13	7	20	31%

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Out of the 65 students surveyed, 23% were 12 years old, 46% were 13 years old and 31% were 14 years old. The sample includes 45% of female compared to 55% male.

Difficulty waking up vs Gender

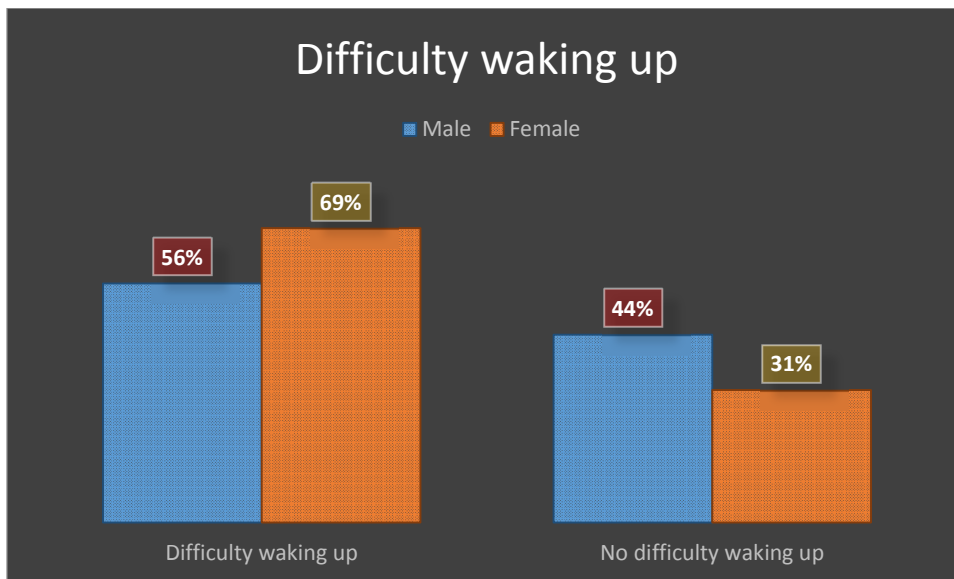


Table 2. Relationship between Gender and Difficulty waking up

Gender	Difficulty waking up	No difficulty waking up
Male	56%	44%
Female	69%	31%

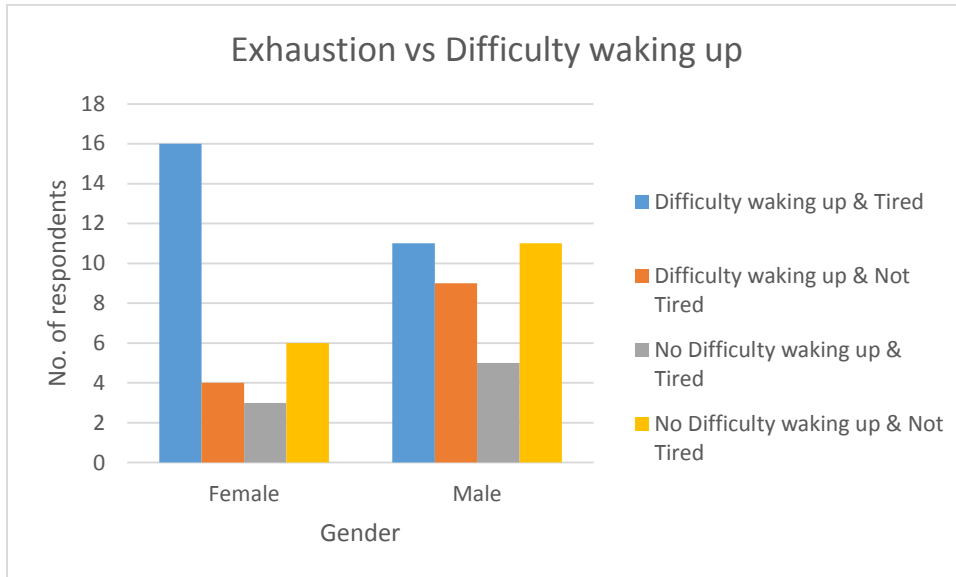
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Question – Who has harder time waking up, male or female?

Hypothesis – Male students will have harder time waking up as they tend to stay by much later than females.

Data Analysis Findings - Data shows that female students have difficult time waking up than the male students. 69% of female students reported having trouble waking up in the morning compared to 56% of male students.

Exhaustion vs Difficulty waking up



$r = 0.45422$ for female students

$r = 0.2375$ for male students

Table 3. Relationship between Exhaustion, Difficulty waking up & Gender

	Difficulty waking up & Tired	Difficulty waking up & Not Tired	No Difficulty waking up & Tired	No Difficulty waking up & Not Tired
Female	16	4	3	6
Male	11	9	5	11

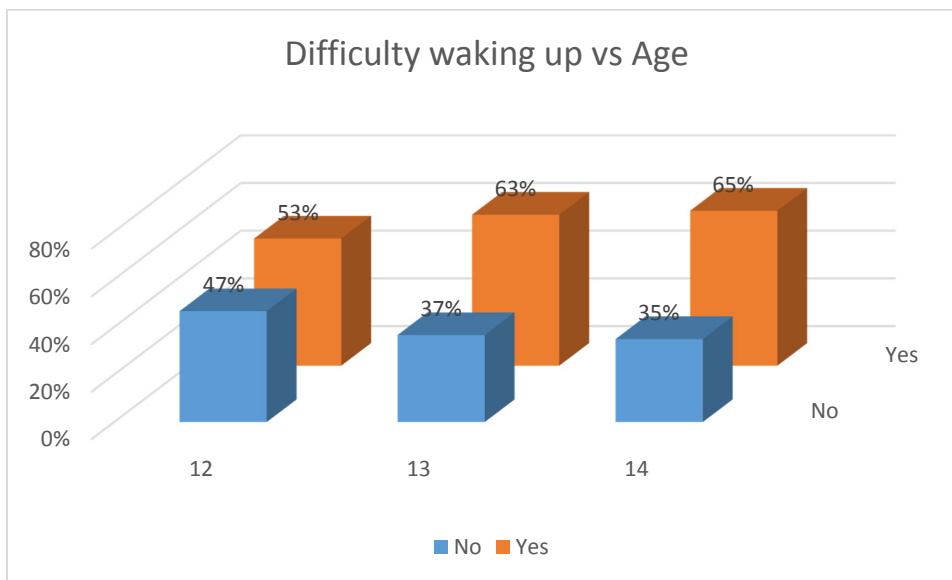
Question – Do the students that have difficulty waking up in the morning feel exhausted during the day?

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Hypothesis – Yes, the students who have harder time waking up in the morning will feel exhausted during the day, probably caused by lack of sleep.

Data Analysis Findings - Analysis confirms the hypothesis. Data shows that 42% of the students had difficulty waking up and also felt tired during the day. Although, 20% of the students had hard time waking up, they were not exhausted during the day. 12% felt tired even though they didn't have difficulty waking up. 26% didn't feel tired and had no difficulty waking up wither. Study also found that there is a positive correlation between difficulty waking up and feeling tired in female students – meaning the students who had difficult time waking up also felt exhausted during the day. No such correlation was observed in male students. Half of the male students who had difficulty getting up felt tired and the other half did not. Correlation coefficient for females was 0.45422 and 0.2375 for males.

Age vs Difficulty waking up



$r = -0.08333$

Table 4. Relationship between Age and Difficulty waking up

Age	Difficulty waking up			
	No		Yes	
	Count	%	Count	%
12	7	47%	8	53%
13	11	37%	19	63%
14	7	35%	13	65%

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Question – Who has the most difficulty waking up in the morning, 12 13 or 14 year olds?

Hypothesis – The older students will have a tougher time waking up in the morning as they have more school work to do.

Data Analysis Findings - Correlation coefficient shows no correlation between age and difficulty waking up in the morning. However, from looking at the data, it is evident that 13 & 14 year olds have more difficulty waking up compared to 12 year olds. Not a significant increase is observed between 13 and 14 year olds. We can conclude that the data sampling is small and better and conclusive results can be achieved with larger sample.

Gender – who gets more sleep?

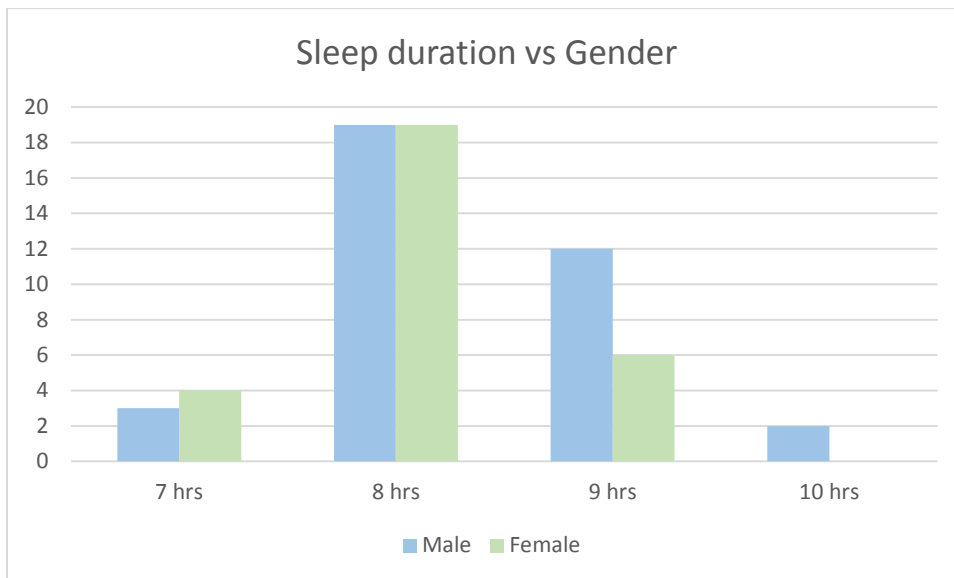


Table 5. Relationship between gender and sleep duration

Gender	7 hours	8 hours	9 hours	10 hours	%
Male	3	19	12	2	92%
Female	4	19	6	0	86%

Question – Who is getting more sleep, male or female?

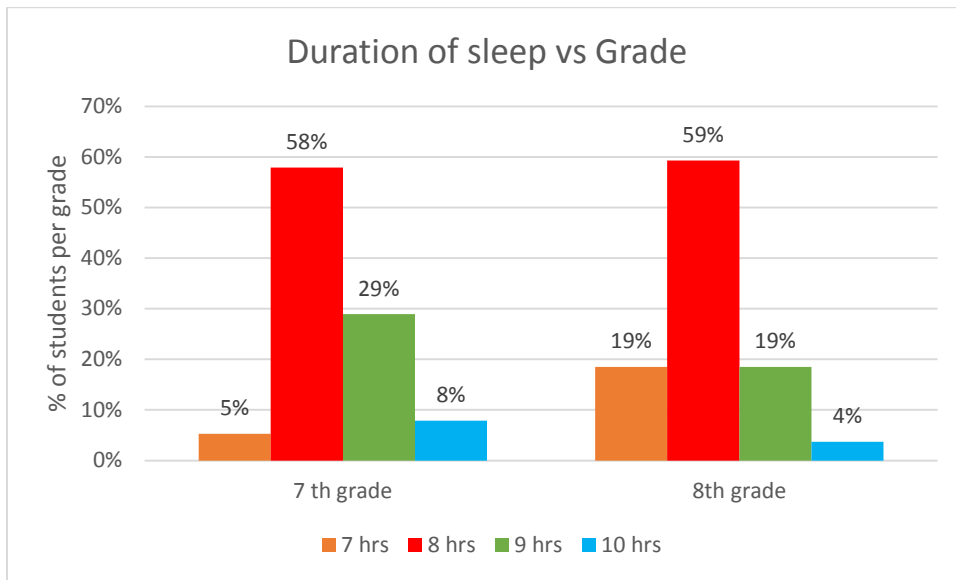
Hypothesis – The female students will sleep more than male students

Data Analysis Findings - The analysis differs from hypothesis. This data shows that male students get a little more sleep than their female counterparts. That could explain why the female students have

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difficulty waking up in the morning. It is interesting to note that even though 86% of female students get 8 or more hours of sleep, 69% report that they have a difficult time waking up in the morning. It is also important to note that only 31% of the students get the recommended 9 or more hours of sleep. This number could be reduced further if the start times are moved earlier for the middle school students.

Grade vs Duration of Sleep



$r = -0.21673$

Table 6. Relationship between Grade and Duration of Sleep

Grade	7 hours	8 hours	9 hours	10 hours
7th	5%	58%	29%	8%
8th	19%	59%	19%	4%

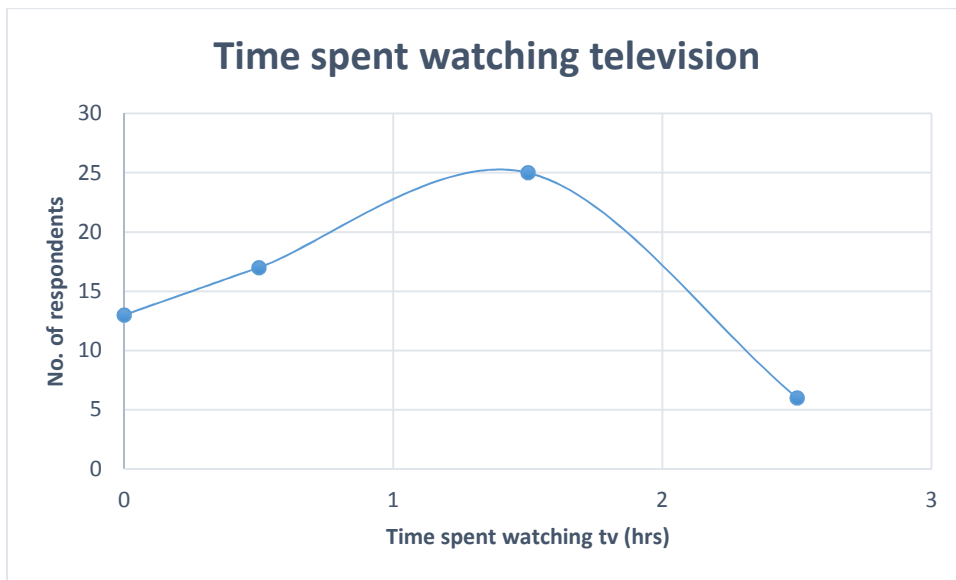
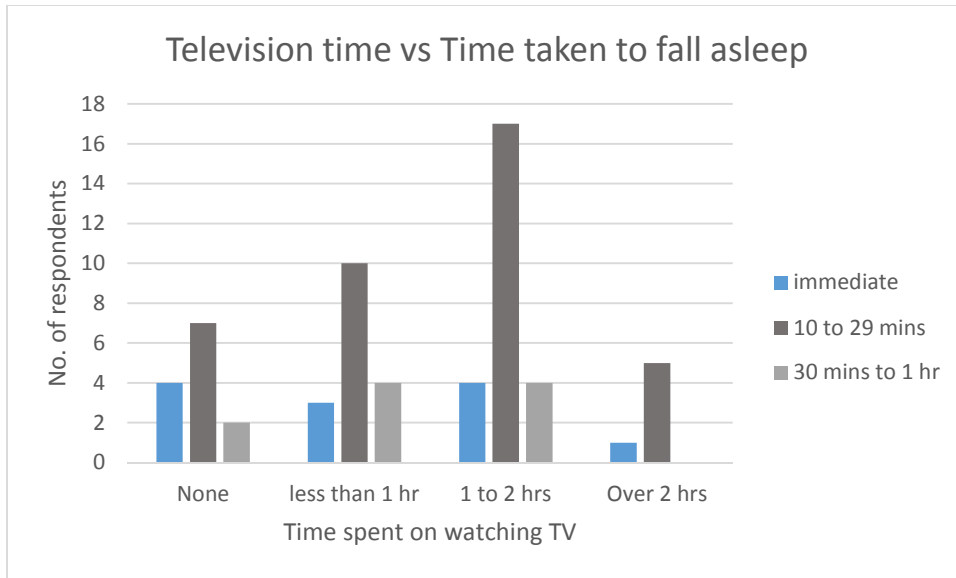
Question – Who is getting more sleep, 7th or 8th graders?

Hypothesis – 7th graders will get more sleep as they have more time and less homework than the 8th graders

Data Analysis Findings - The data shows a weak negative correlation observed between duration of sleep and the grade the students are in. 23% of students in 8th grade get 9 or more hours of sleep while 37% of 7th graders get the same. The overall sleep duration is still well under the recommended amount for a teen.

Academic Performance vs Duration of Sleep

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$r = 0.023176$

Question – How much TV do students watch per day? Does this have an effect on their ability to fall asleep?

Hypothesis – Yes, watching TV will have an adverse effect on falling asleep.

Data Analysis Findings - From the data, we can infer that there is no correlation between time spent watching television and the time it takes to fall asleep. 64% of the students took 10 to 29 minutes to fall asleep followed by 20% of the kids who were able to fall asleep immediately and 16% took 30 minutes to an hour to fall asleep. 41% of the kids spent 1 to 2 hours every night on watching television.

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V. Conclusion

When analyzing the results of the study I observe that there are variations based on gender, age and grade. Data shows that female students have a difficult time waking up than the male students and a positive correlation observed between difficulty waking up and feeling tired in female students.

Age has no significant influence on difficulty waking up. 13 & 14 year olds have more difficulty waking up compared to 12 year olds, but no significant increase is observed between 13 and 14 year olds. No correlation observed between the times spent watching television and the time it takes to fall asleep. There is not enough data to conclusively say that as students who get more sleep get better grades. Slight correlation observed between duration of sleep and GPA. . We can conclude that the data sampling is small, better and conclusive results can be achieved with larger sample.

Male students get a little more sleep than their female counterparts. It is also important to note that only 31% of the students get the recommended 9 or more hours of sleep. This number could be reduced further if the start times are moved earlier for the middle school students.

VI. Reflection on process

This process has been a good fun learning experience. I have learnt a) how to identify a research question b) how to collect data c) data analysis d) how to draw conclusions from the analysis e) write a report.

There are a few things I would do differently next time:

- Small data sample – The data sample was too small to draw definite conclusions.
- The directions on the survey should be clear and concise. Some of the students didn't complete the survey correctly, resulting in having to discard the survey.
- Some of the questions were open ended resulting in a wide spectrum of results.
- Making the survey online would also make it available for wider audience resulting in a wider samples.

VII. Acknowledgement

I would like to thank Ms. Hudson, my science teacher, for conducting the survey, and I would like to thank the students at my school for completing the surveys.

I would also like my Mum for her guidance and teaching me how to make tables and graphs using Microsoft Excel.

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VIII. Raw Data

Student	Bed Time	TV time (hrs)	Use electronics before bed	Non-electronics before bed?	Age	Gender	Personality	Difficulty waking up	Time to fall asleep
1	10 to 11		Yes	No	13	Male	Social	Yes	10 to 30 mins
2	10 to 11	1 to 2	No	Yes	12	Female	Quiet	No	10 to 30 mins
3	8 to 9	1 to 2	Yes	Yes	12	Male	Quiet	No	10 to 30 mins
4	10 to 11	0	Yes	Yes	14	Female	Social	No	30 - 1 hr
5	8 to 9	Less than 1	Yes	Yes	14	Female	Social	Yes	10 to 30 mins
6	9 to 10	Less than 1	Yes	Yes	13	Female	Social	No	30 - 1 hr
7	9 to 10	1 to 2	Yes	Yes	13	Male	Social	No	10 to 30 mins
8	10 to 11	Less than 1	Yes	Yes	12	Male	Social	Yes	10 to 30 mins
9	After 11	More than 2	Yes	No	13	Female	Social	Yes	10 to 30 mins
10	9 to 10	1 to 2	Yes	No	13	Male	Social	No	Not sure
11	10 to 11	Less than 1	Yes	No	13	Female	Social	Yes	30 - 1 hr
12	After 11	1 to 2	Yes	Yes	12	Female	Quiet	No	Immediate
13	After 11	1 to 2	Yes	Yes	13	Female	Social	No	10 to 30 mins
14	After 11	1 to 2	Yes	Yes	13	Male	Social	Yes	Immediate
15	9 to 10	1 to 2	Yes	Yes	12	Female	Quiet	Yes	30 - 1 hr
16	9 to 10	1 to 2	No	Yes	12	Female	Social	Yes	10 to 30 mins
17	After 11	Less than 1	Yes	No	13	Female	Quiet	Yes	30 - 1 hr
18	9 to 10	1 to 2	Yes	Yes	12	Female	Social	No	10 to 30 mins
19	10 to 11	Less than 1	Yes	Yes	12	Male	Quiet	Yes	10 to 30 mins
20	10 to 11	1 to 2	Yes	No	13	Female	Social	Yes	10 to 30 mins
21	After 11	0	Yes	Yes	13	Female	Social	Yes	10 to 30 mins
22	9 to 10	1 to 2	Yes	Yes	12	Male	Social	No	30 - 1 hr
23	After 11	> 2	Yes	No	12	Male	Social	Yes	10 to 30 mins
24	10 to 11	1 to 2	No	Yes	13	Male	Social	Yes	10 to 30 mins
25	10 to 11	1 to 2	Yes	Yes	13	Male	Social	No	10 to 30 mins
26	9 to 10	1 to 2	No	Yes	14	Male	Social	Yes	Immediate

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27	10 to 11	1 to 2	Yes	Yes	13	Female	Social	Yes	10 to 30 mins
28	9 to 10	1 to 2	No	No	13	Male	Social	No	10 to 30 mins
29	9 to 10	< 1	Yes	Yes	12	Male	Social	No	10 to 30 mins
30	9 to 10	0	No	Yes	12	Male	Social	Yes	Immediate
31	9 to 10	Less than 1	Yes	Yes	13	Male	Social	Yes	10 to 30 mins
32	9 to 10	Less than 1	Yes	Yes	12	Male	Social	No	10 to 30 mins
33	10 to 11	0	Yes	Yes	12	Male	Social	Yes	10 to 30 mins
34	9 to 10	More than 2	Yes	No	13	Male	Social	No	10 to 30 mins
35	9 to 10	0	Yes	No	12	Female	Quiet	Yes	10 to 30 mins
36	After 11	Less than 1	Yes	No	13	Male	Social	Yes	30 - 1 hr
37	9 to 10	0	No	Yes	13	Male	Social	No	10 to 30 mins
38	10 to 11	1 to 2	No	Yes	13	Female	Social	Yes	10 to 30 mins
39	After 11	0	Yes	Yes	13	Male	Social	Yes	30 - 1 hr
40	9 to 10	Less than 1	Yes	No	14	Male	Social	No	Immediate
41	10 to 11	Less than 1	Yes	No	14	Male	Quiet	Yes	Not sure
42	10 to 11	Less than 1	Yes	No	14	Male	Social	No	10 to 30 mins
43	10 to 11	Less than 1	Yes	Yes	14	Female	Social	Yes	10 to 30 mins
44	9 to 10	0	Yes	Yes	14	Female	Quiet	No	10 to 30 mins
45	10 to 11	1 to 2	Yes	Yes	14	Male	Social	No	30 - 1 hr
46	After 11	0	No	Yes	13	Female	Social	Yes	Immediate
47	10 to 11	1 to 2	Yes	Yes	13	Female	Social	Yes	30 - 1 hr
48	10 to 11	0	Yes	No	13	Female	Quiet	Yes	10 to 30 mins
49	After 11	1 to 2	Yes	Yes	14	Female	Social	Yes	10 to 30 mins
50	10 to 11	1 to 2		Yes	13	Male	Social	Yes	Immediate
51	10 to 11	0	Yes	Yes	13	Female	Social	Yes	10 to 30 mins
52	10 to 11	Less than 1	Yes	Yes	14	Male	Social	Yes	Immediate
55	After 11	Less than 1	Yes	Yes	13	Female	Social	Yes	Immediate
57	10 to 11	0	Yes	Yes	14	Female	Social	Yes	Immediate
58	After 11	0	Yes	Yes	13	Female	Social	No	Immediate
59	8 to 9	1 to 2	Yes	Yes	13	Female	Social	No	10 to 30 mins
60	After 11	Less than 1	Yes	Yes	14	Female	Quiet	Yes	10 to 30 mins

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61	8 to 9	1 to 2	No	Yes	14	Male	Quiet	No	10 to 30 mins
62	9 to 10	1 to 2	Yes	No	14	Male	Social	No	10 to 30 mins
63	After 11	More than 2	Yes	Yes	14	Male	Quiet	Yes	Not sure
64	10 to 11	1 to 2	Yes	Yes	13	Male	Social	No	10 to 30 mins
65	9 to 10	Less than 1	Yes	Yes	14	Male	Quiet	Yes	10 to 30 mins
66	10 to 11	More than 2	Yes	Yes	14	Male	Social	Yes	10 to 30 mins
67	10 to 11	More than 2	Yes	Yes	14	Male	Social	Yes	Immediate
68	10 to 11	More than 2	No	No	14	Male	Social	Yes	10 to 30 mins

Student	Wake up time (a.m.)	Wake up time - weekend (a.m.)	Tired during the day	Difficulty paying attention	Staying up late doing homework	Extracurricular activities	sleep hrs – weekend	Naps	GP A
1	6 to 7	8 to 9	Yes	Yes	1 hr or less	Yes	7 to 8	No	3.3
2	6 to 7	7 to 8	No	No	1 hr or less	Yes	8 to 9	No	3.3
3	after 7	Before 7	No	No	None	No	9 to 10	No	3.3
4	6 to 7	After 10	No	Yes	None	No	More than 10		
5	5	7 to 8	Yes	Yes	1 hr or less	No	9 to 10		
6	after 7	9 to 10	Yes	No	1 hr or less	No	9 to 10	Yes	3
7	5 to 6	7 to 8	No	No	None	Yes	7 to 8	No	3
8	6 to 7	9 to 10	No	No	1 hr or less	Yes	More than 10		
9	6 to 7	9 to 10	Yes	Yes	None	No	8 to 9	Yes	
10	5 to 6	8 to 9	No	No	None	Yes		No	
11	6 to 7	8 to 9	No	No	None	Yes	8 to 9	No	4
12	6 to 7	9 to 10	Yes	Yes	Over 2 hrs	Yes	Less than 7 hrs	Yes	3.3
13	6 to 7	9 to 10	No	No	1 hr or less	No	7 to 8	No	3.3

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14	after 7	9 to 10	Yes	Yes	None	Yes	9 to 10	Yes	3.7
15	6 to 7	9 to 10	Yes	Yes	1 hr or less	Yes	9 to 10	No	3.7
16	6 to 7	9 to 10	Yes	Yes	Couple hrs	Yes	8 to 9	No	2.7
17	6 to 7	After 10	Yes	Yes	Couple hrs	No	7 to 8	No	3
18	6 to 7	7 to 8	No	No	None	Yes	9 to 10	No	3.5
19	6 to 7	7 to 8	No	Yes	None	No	7 to 8	No	3.3
20	6 to 7	After 10	No	No	Couple hrs	No	8 to 9	No	
21	5 to 6	7 to 8	Yes	Yes	Over 2 hrs	No	7 to 8	Yes	3.3
22	6 to 7	7 to 8	No	No	Couple hrs	Yes	8 to 9	No	3
23	6 to 7	9 to 10	Yes	Yes	Over 2 hrs	No	Less than 7 hrs		1.7
24	6 to 7	9 to 10	No	No	None	Yes	9 to 10	No	3
25	5 to 6	9 to 10	Yes	Yes	Couple hrs	No	9 to 10	No	3.3
26	5 to 6	8 to 9	No	Yes	None	No	9 to 10	No	3.7
27	6 to 7	After 10	Yes	No	Over 2 hrs	Yes	9 to 10	No	4
28	6 to 7	9 to 10	No	No	None	No	More than 10	No	4
29	5 to 6	Before 7	No	No	Couple hrs	Yes	8 to 9	No	4
30	6 to 7	7 to 8	No	No	None	Yes	9 to 10	No	4
31	6 to 7	9 to 10	No	No	None	No	8 to 9	No	4
32	6 to 7	9 to 10	Yes	No	None	Yes	9 to 10	No	4
33	6 to 7	8 to 9	Yes	Yes	Couple hrs	No	9 to 10	No	3.8
34	after 7	8 to 9	No	Yes	None	No	8 to 9		
35	6 to 7	9 to 10	Yes	Yes	None	No	9 to 10	No	3.7
36	6 to 7	8 to 9	No	Yes	1 hr or less	No	9 to 10	No	2.3

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37	6 to 7	Before 7	Yes	No	None	Yes	7 to 8	No	4
38	6 to 7	7 to 8	Yes	Yes	Over 2 hrs	No	Less than 7 hrs	No	2.7
39	5 to 6	9 to 10	Yes	Yes	Over 2 hrs	Yes	Less than 7 hrs	No	1
40	6 to 7	7 to 8	No	No	None	Yes	8 to 9	No	3.7
41	6 to 7	After 10	No	No	None	No	9 to 10	Yes	3.5
42	after 7	9 to 10	Yes	No	None	Yes	More than 10	No	3.7
43	6 to 7	9 to 10	Yes	No	None	No	9 to 10	No	4
44	6 to 7	Before 7	No	No	None	Yes	8 to 9	No	4
45	6 to 7	8 to 9	No	No	1 hr or less	Yes	Less than 7 hrs	No	4
46	6 to 7	7 to 8	No	No	Over 2 hrs	Yes	7 to 8	No	4
47	6 to 7	8 to 9	Yes	Yes	Couple hrs	Yes	8 to 9	No	3.7
48	6 to 7	Before 7	Yes	Yes	None	Yes	Less than 7 hrs	No	4
49	5 to 6	8 to 9	Yes	Yes	Couple hrs	Yes	7 to 8		
50	after 7		Yes	Yes	Over 2 hrs	No	More than 10	No	4
51	6 to 7	After 10	Yes	Yes	None	No	Less than 7 hrs	No	3
52	6 to 7	After 10	Yes	Yes	None	No	8 to 9	Yes	
55	6 to 7	8 to 9	Yes	Yes	Couple hrs	Yes	Less than 7 hrs	No	3.3
57	5 to 6	After 10	No	Yes	Couple hrs	No	8 to 9	Yes	3.3
58	5 to 6	9 to 10	Yes	Yes	None	Yes	8 to 9	Yes	0
59	5	7 to 8	No	No	1 hr or less	Yes	8 to 9	No	2.7
60	6 to 7	9 to 10	Yes	No	Over 2 hrs	Yes	9 to 10	No	3.3
61	6 to 7	7 to 8	No	No	None	No	9 to 10	No	
62	5 to 6	8 to 9	Yes	No	None	No	8 to 9	No	3

Sleep. Are you getting enough?

63	6 to 7	After 10	Yes	Yes	Over 2 hrs	No	8 to 9	No	2.7
64	5 to 6	Before 7	No	No	None	Yes	7 to 8	No	2
65	6 to 7	After 10	Yes	Yes	Couple hrs	Yes	More than 10	No	3.7
66	6 to 7	9 to 10	Yes	Yes	Over 2 hrs	Yes	9 to 10	No	4
67	6 to 7	After 10	Yes	Yes	None	No	More than 10	Yes	3.3
68	6 to 7	8 to 9	No	Yes	1 hr or less	No	7 to 8	No	4

Student	Reason for not getting enough sleep	Coffee after 4 p.m.	Grade	Schedule after school	Mood
1	B,E	No	7	F	Changes every day
2	B	Yes	7	E	Changes every day
3	B	No	7	E	Cheerful
4	A	No	7	C	Energetic
5	A	No	7	C	Changes every day
6	F	No	7	C	Energetic
7	C	No	7	E	Energetic
8	C,E	Yes	7	D	Energetic
9	A,C,D,F	No	7	B,C,E	Changes every day
10	E	No	7	C	Changes every day
11	E	No	7	B	Changes every day
12	B	No	7	B,C,D,E	Changes every day
13	B	No	7	F	Changes every day
14	A	Yes	7	A	Energetic
15	D	Yes	7	C	Changes every day
16	F	Yes	7	B	Changes every day

Sleep. Are you getting enough?

17	B	Yes	7	E	Changes every day
18	A,B,C,D	No	7	E	Energetic,Cheerful
19	D	No	7	E	Changes every day
20	C	Yes	7	C	Changes every day
21	B,D,F	No	7	E	Changes every day
22	B	Yes	7	E	Changes every day
23	A	No	7	E	Changes every day
24	B	Yes	7	E	Changes every day
25	B	No	7	A	Changes every day
26	A,B,D	Yes	7	C	Changes every day
27	A,B,C,D,E	Yes	7	D	Changes every day
28		No	7	E	Energetic
29	B,C,D,E	No	7	B,C,F	Energetic
30	B,D,E	No	7	F	Changes every day
31	F	No	7	E	Cheerful
32	A	No	7		Energetic
33	A,B	No	7	D	Changes every day
34	F	No	7	F	Changes every day
35	A	No	7	E	Cheerful
36	A,D,F	No	7	E	Changes every day
37	F	No	7	C	Changes every day
38	B	Yes	7	E	Cheerful
39	B,D,E,F	Yes	8	B	Changes every day
40	E	No	8	E	Energetic
41		No	8	E	Changes every day
42	B	No	8	E	Energetic,Cheerful
43	A,D	No	8	E	Cheerful
44	A	Yes	8	F	Cheerful

Sleep. Are you getting enough?

45	A,B,C,E	No	8	B,C,D	Energetic
46	B	No	8	F	Cheerful
47	A,B,C,D,E	No	8	A,B,C,D,E,F	Changes every day
48	B,D,E	No	8	B,C	Depressed,E
49					
50	A	Yes	8	E	Cheerful
51	B,C	No	8	B	Changes every day
52	B	No	8	E	Changes every day
55	B	No	8	E	Changes every day
57	B	No	8	C	Changes every day
58	F	No	8	E	Changes every day
59	E		8	F	Energetic
60	B	Yes	8	B,C	Changes every day
61		No	8	C	Energetic
62	C	Yes	8	A	Changes every day
63	A,B,C,D	Yes	8	A	Changes every day
64	E	Yes	8	B	Energetic, Cheerful
65	F	No	8	E	Cheerful
66	B	No	8	E	Changes every day
67	A	Yes	8	A	Changes every day
68	D	Yes	8	E	Cheerful