Abstract
This exploratory research was an attempt to discover what possible factors are preventing more public middle and high schools in Hawaii from implementing later start times. The following were used to gather data for this research: a mix of academic resources, including scholarly articles, news articles, a legislative bill, and statistics from the Centers of Disease Control and Prevention (CDC), along with surveys conducted with Hawaii residents to retrieve input and opinions about later start school times.

Introduction
Sleep affects our overall health and performance. Recently, it seems as though more and more children and adolescents are already experiencing sleep deprivation and its harmful effects. According to CDC, roughly 60% of middle schoolers and 70% of high schoolers do not get enough sleep. To tackle this issue, medical professionals have suggested for schools to implement later start times. Many schools across the nation have put this into action and the results were significant: there was an increase in student attendance, motivation and participation in school activities, higher student attendance, motivation and participation in school activities, higher levels of concentration, and increased performance in school.

Since actual middle or high school students were not surveyed, I was still able to gain input from these perspectives by asking participants questions that had them recall back to when they were middle or high school students:

Research Question, Hypothesis, & Variables
Research Question:
What are the possible factors that are preventing public middle and high schools in Hawaii from implementing later start times?

Hypothesis:
Opposition from parents and guardians due to transportation issues, lack of awareness of sleep deprivation in children and their natural circadian rhythms, as well as lack of support from the public are the factors that are preventing public middle and high schools in Hawaii from implementing later start times.

Dependent Variable:
Level of Support for Later School Start Times

Independent Variables:
• Amount of awareness of sleep deprivation in children
• Commute and transportation issues
• School Start Time (e.g., 8:30am, 9:00am, etc.)

Results
Qualitative and quantitative data was collected using online surveys conducted with Hawaii residents who were 18 years old and above. The survey had two separate sections: a section for those who are currently parents of middle or high school students, and a section for those who are not. This was done to gain input and opinions about later start school times, as the public’s support is a large factor for implementing change. Scholarly articles, news articles, and a legislative bill was used to obtain more qualitative data. Also, statistics from CDC pertaining to children and adolescents’ sleep, provided quantitative data.

Parents:
Only 4 participants were currently parents of middle or high school students.

- Overall, all parents agreed that it is crucial to them that their children get enough sleep.
- 3 out of 4 parents said that their children get enough sleep per school night and are not experiencing sleep deprivation.
- 2 out of 4 parents said that later start times would be an inconvenience to them as it would conflict with their work or school schedule.

General Public:
This category of participants pertains to those who are NOT currently parents of middle or high school students – there were 31 participants.

- When asked, “Would later start times negatively affect you in any way?” various answers were given:
  - Many said that later start times would not affect them.
  - Others were concerned that it would produce more traffic since it would mean that schools would finish later.
  - Some did not exactly answer the question.

Doctors and researchers have recommended that public and middle schools should start at 8:30am or later in order to give students the opportunity to get more sleep. Do you agree with this recommendation?

- 25% Yes
- 50% No
- 25% Maybe/Unsure

Doctors and researchers have recommended that public and middle schools should start at 8:30am or later in order to give students the opportunity to get more sleep. However, since a shift in start times would also cause a shift in school end times to finish later, this is where concern begins to show. Parents are worried of how extra-curricular activities would be affected, as well as how it may conflict their work schedules.

Increase in traffic also seems to be one of the major concerns. These topics are most likely some of the major factors that are hindering more public middle and high schools in adopting later start times. If solutions were introduced, there is a possibility that support for this change would increase. Also, if we were to show participants the positive data that other schools have experienced in changing their start times, this could also influence more for support.

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References

