## Sleep Deprivation in University Student-Athletes

Do college student-athletes get the sleep that they need? Sleep is a vital necessity and many people overlook the importance of sleep. Sleep is essential for a person's overall health in which sleep helps repair your body, reduce stress, improve memory and keep you healthy. For athletes in training the amount of sleep appears to have a large impact on sports performance. Not only does sleep increase your performance on the field and in the classroom, but it also decreases chance of injuries. According to a study by the American Academy of Pediatrics National Conference, student athletes who sleep eight hours per night are $68 \%$ less likely to be injured. Various articles have proven that student-athletes benefit from getting the appropriate amount of sleep. "Just as athletes need more calories than most people when they're in training, they need more sleep, too," Geier, an exercise psychologist from WebMD.

Many college students are at a high risk for not getting enough sleep at night. Studentathletes can easily fail to get regular, consistent hours of sleep. According to sports medicine expert, Elizabeth Quinn, this lack of sleep appears to have a negative effect on sports performance as well as cognitive function, mood, and reaction time. Lack of sleep can literally affect every aspect of life. It hinders you from thinking clearly and will impair your ability to handle stress. Sleep deprivation can have many short term and long term effects including decreased performance and alertness, memory loss, mood disorders, high blood pressure, weight gain, and even diabetes (Grantham, 2014). Much of this can be avoided by making regular sleep as much a priority for athletes as practicing their sport and eating right. Sleep experts recommend seven to nine hours of daily sleep for adults and athletes in training sleep an hour extra. The
following research demonstrates the average amount of hours student-athletes get at the University.

After surveying a total of 30 student-athletes at the University, the results showed that the average number of hours of sleep that student athletes get per night is 7 hours. The most frequent amount of hours of sleep student-athletes get per night is also 7 hours as well as the person in the middle of the distribution answering that they received 7 hours of sleep per night. This data displayed a normal distribution curve. The minimum hours of sleep student athletes reported is six with the maximum hours of sleep is at nine hours. Compared to the number of hours of sleep a person needs to get a night, student-athletes are, in fact, getting the right amount of sleep. However, there are some limitations of this study. One limitation is that we can't generalize to the larger population because the sample is not a probability sample. Another limitation is that the sample is not large enough. According to the central theorem, the sample must be at least equal to one hundred in order to generalize to the larger population.

In order for athletes to be effective and perform efficiently, I feel that a portion of student orientation should be geared towards a discussion on sleep deprivation and why sleep is vital not only for one's health but also for college success. Other suggestions I come up with is inviting guest speakers that specialize in the study of sleep deprivation and student-athlete success and offering classes that teach time management skills. I do realize that these changes are only small steps in helping those students that need it, but it is a very good start. Student-athletes struggling need to personally make some changes on their own by taking action and prioritizing their life. This would greatly increase their college success and reduce sleep deprivation. These small changes could make a difference.

1

## Statistics

Number of hours of sleep that
student-athletes get on average
per night

|  Valid <br>  Missing | 30 |  |
| :--- | :--- | ---: |
| Mean |  | 7.0000 |
| Median | 7.0000 |  |
| Mode | 7.00 |  |
| Std. Deviation | .87099 |  |
| Minimum | 6.00 |  |
| Maximum | 9.00 |  |

2

Number of hours of sleep that student-athletes get on average per night

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| ---: | ---: | ---: | ---: | ---: |
| 6.00 | 9 | 30.0 | 30.0 | 30.0 |
| 7.00 | 14 | 46.7 | 46.7 | 76.7 |
| Valid | 5.00 | 5 | 16.7 | 16.7 |



## Works Cited

Feature, R. Morgan Griffin WebMD. "Can Sleep Improve Your Athletic Performance?" WebMD. WebMD, 13 Aug. 2014. Web. 04 Dec. 2014.

Grantham, Nick. "Sports Sleeping: Lack of Can Effect Performance." Sports Performance Bulletin. Strength Conditioning Journal, n.d. Web. 04 Dec. 2014.

Quinn, Elizabeth. "Do Athletes Really Need Extra Sleep?" About. About.com, 23 May 2014. Web. 04 Dec. 2014
"Student-Athletes Encouraged to Get Enough Sleep ...But Required Naps?" NCSA Athletic Recruiting Blog. N.p., n.d. Web. 04 Dec. 2014.

## Work Sample Evaluation

Subject Area: Introduction to Statistics
Task Title: Sleep Deprived
Student Work Sample Title: Sleep Deprivation in University Student-Athletes

The document was scored using the CCR Task Bank Rubric for Scientific Research Plans and Reports. The final scores are indicated in the following chart.

| Scoring Criteria | Insufficient <br> Evidence | Developing | Progressing | Accomplished | Exceeds |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Hypothesis <br> Development |  | $\mathbf{X}$ |  |  |  |
| Research Plan | $\mathbf{X}$ |  |  |  |  |
| Results and <br> Interpretation |  | $\mathbf{X}$ |  |  |  |
| Communication |  | $\mathbf{X}$ |  |  |  |
| Organization |  | $\mathbf{X}$ |  |  |  |
| Accuracy |  |  | $\mathbf{X}$ |  |  |

Annotations: The following evidence from the work sample and the reviewer's comments support the scores above. Page and line numbers refer to the original work sample.

| Scoring Criteria | Page \# | Line \# | Commentary about the work sample |
| :---: | :---: | :---: | :---: |
| Hypothesis Development: Locating resources in order to develop a thesis or hypothesis | 5 | 1-9 | The author identifies four sources to support his/her hypothesis development, but includes popular and collective sites such as About.com and WebMD and blogs that could contain unreliable information and are not considered scholarly sources. |
|  | 1 | 7-8 | The author refers to a study from the American Academy of Pediatrics National Conference, but this study is not included in the Works Cited page. |
|  | 1 |  | The introduction of the paper hints at a hypothesis and states a central question to be explored, but does not clearly state a hypothesis. |
| Research Plan: Planning, conducting, and describing an experiment or study | 2 | 3-4 | The work sample is incomplete in this category. While the work sample mentions a survey of student athletes, no details of the sampling methodology are present. |
| Results and Interpretation: Describing and interpreting results in relation to the hypothesis | 2 | 3-7 | The work sample includes limited evaluation of data results. |
|  | 2 | 11-13 | The author includes a major conceptual error with regard to the Central Limit Theorem (referred to incorrectly as the central theorem by the author). |
|  | 2 |  | The author demonstrates integration of evidence from reading materials to support the central idea, but does so at a basic level. |
| Communication: <br> Using subject appropriate language and considering audience | 1-2 |  | The work sample includes discipline specific-language at a basic level. |
|  | 1-2 |  | The author switches the point of view throughout the paper (starts in $3^{\text {rd }}$ person, switches to $2^{\text {nd }}$ person (page 1 , lines 16-17), and then $1^{\text {st }}$ person (page 2 , lines 10-11), which portrays an unclear understanding of audience. |
| Organization: <br> Structuring main ideas and incorporating supporting information | 3-4 |  | Integrating the tables and graphs into the text (instead of at the end of the paper) or providing in-text references to tables/graphs would allow the reader to see that there are data associated with the with the survey to accompany the text. As written, there is no reference to the data; it is just tacked on at the end of the paper. |
| Accuracy: <br> Attending to detail, grammar, spelling, conventions, citations, and formatting | All |  | The author demonstrates some attention to detail, but paper includes numerous inconsistencies in grammar and conventions. |
|  | 1 | 1-8 | Refers to term "student athletes" inconsistently throughout the paper. For example, student-athletes (with a hyphen on line 1) and then student athletes (with no hyphen on line 8) |
|  | 2 | 4-8 | Author switches between spelling out numbers and writing them numerically (six, 7, nine, etc.) |
|  | 2 | 16 | Incorrect grammar, "Other suggestions I come up with is..." |

