**Final report**

**Business Analytics   
Course: Project Big data (X\_400645).**

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Submission date: 28-06-2018



**Introduction**

In this report, we investigated the relationships in data of a bedtime procrastination study. Before analyzing we merged data of the study itself and data from the poststudy questionnaire that participants filled out at the end of the study. There are multiple questions answers in this research:

* Are there significant differences between the control group and the experimental group?
* Which factors could predict the delay\_time the best?

These questions will be answered during this report. Furthermore, a few visualizations will provide extra insight into the data, which could help by better understanding the data.

**Data description and exploration**

**Data analyses**

|  |  |  |  |
| --- | --- | --- | --- |
| **‘Mean time spend in bed’ vs.:** | ‘Bed procrastination scale’ (pearson) | ‘Age’ (kendall) | ‘Daytime sleepiness‘ (pearson) |
| Correlation coefficient | 0.6118 | -0.02746 | 0.08328 |
| p-value | 4.4724e-05 | 0.8107 | 0.6191 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | mean | SD | median |
| Delay nights | Control | 7.0435 | 3.4445 | 7.0000 |
|  | Experimental | 7.4211 | 3.0317 | 8.0000 |
| Sleep time | Control | 28731.8000 | 2914.5239 | 29643.0000 |
|  | Experimental | 28922.8889 | 2770.6521 | 29001.0000 |
| Delay time | Control | 2724.4500 | 1396.4360 | 2828.0000 |
|  | Experimental | 1943.8334 | 1371.0637 | 1620.0000 |

|  |  |  |
| --- | --- | --- |
|  | Statistic | P-value |
| Delay nights | -0.3285 | 0.7425 |
| Sleep time | -0.1462 | 0.8838 |
| Delay time | 1.9295 | 0.05367 |

**Discussion**

**Conclusion**

























