

The UConn Recreation Center Usage Trends:

A Student Led Statistical Analysis

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Abstract

The aim of this paper is to determine trends in the UConn rec center usage. This paper will analyze the occupancy of the rec center both over the course of a day, broken into fifteen minute increments, and over a week, comparing each day. Then, we will explain the trends in the data. Notably, the difference in usage between the days of the week and the periods of growth throughout a day. Finally, we will provide our explanations of these trends, advice to improve the quality of service and potential cost saving measures.

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1. Introduction

What is the topic and why is it worth studying? – the first major section of text in the paper, the Introduction commonly describes the topic under investigation, summarizes or discusses relevant prior research (for related details, please see the Writing Literature Reviews section of this website), identifies unresolved issues that the current research will address, and provides an overview of the research that is to be described in greater detail in the sections to follow.

2. Methods

What did you do? – a section which details how the research was performed. It typically features a description of the participants/subjects that were involved, the study design, the materials that were used, and the study procedure. If there were multiple experiments, then each experiment may require a separate Methods section. A rule of thumb is that the Methods section should be sufficiently detailed for another researcher to duplicate your research.

2.1. Data collection

The server, the script we used, how we found the site.

2.2. Data filtering and cleaning

Removing failed pulls, timezone shift, day light savings time, in hours, weekday vs weekend seperation.

3. Results

What did you find? – a section which describes the data that was collected and the results of any statistical tests that were performed. It may also be prefaced by a description of the analysis procedure that was used. If there were multiple experiments, then each experiment may require a separate Results section.

3.1. Weekly tapering

3.2. Daily growth and stagnation periods

4. Conclusion

What is the significance of your results? – the final major section of text in the paper. The Discussion commonly features a summary of the results that were obtained in the study, describes how those results address the topic under investigation and/or the issues that the research was designed to address, and may expand upon the implications of those findings. Limitations and directions for future research are also commonly addressed.

4.1. Findings

4.2. Limitations

Problems with data collection, limited analysis (no std dev), don't know the number on the app is perfect

4.3. Future Research

Check if occupancy goes up with every time a person taps their IDs. Basically, sit near the entrance to the rec with a counter and see if it matches up. Interview students for a more qualitative approach/information. More data points. Compare to commercial gym usage.