A Comprehensive Study on the "Freshman 15"

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Abstract/Question

For most college student going through their freshman year of college, many say the during your first year of college you will gain a significant amount of weight due to a multitude of factors or "The Freshman 15". "The goal of this study is the measure factors that may or may not contribute to fluctuation with a student's weight. In this study we measure the following factors that may contribute to this hypothesis: hours of sleep, measurement of physical activity, distance from home, nutrition, stress level, financial status, and sex and see how these factors correlate to the "Freshman 15".

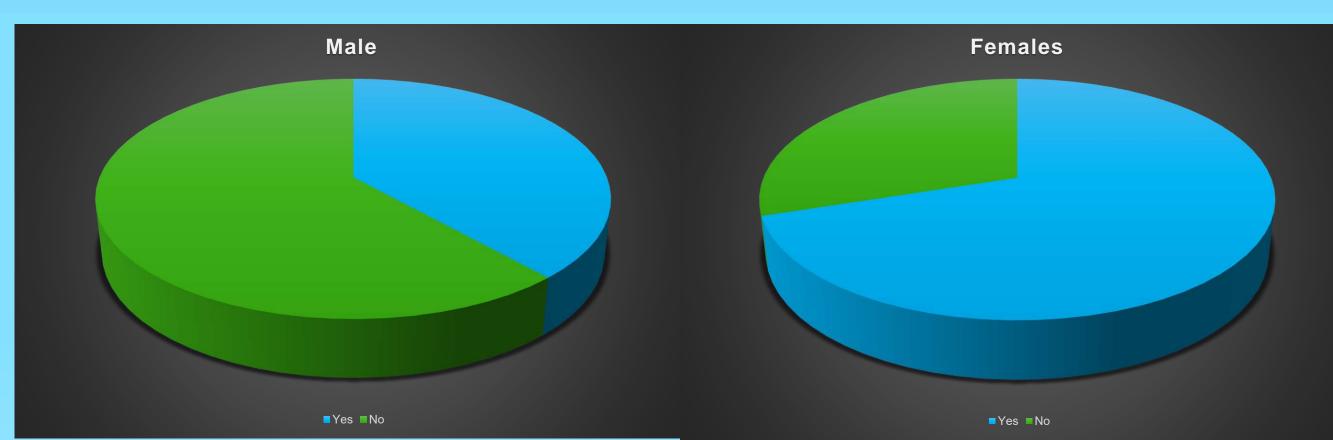
Why

- Why are college students prone to gaining weight? What can we identify as primary factors that may contribute to this.
- Is there data can we interpret that is consistent with all surveys that cause students to gain weight? Are there factors that cause individuals to gain more weight than other factors
- Who are most prone to the "Freshman 15": Males or Females

Methodology

The surveyors will be asked a series of 15 questions that all measure the following factors: hours of sleep, measurement of physical activity, distance from home, nutrition, and stress level. Sex is also categorized as an independent variable to compare males and females in the fields listed. The data will then be compiled into graphs to see which factors contribute most to weight gain.

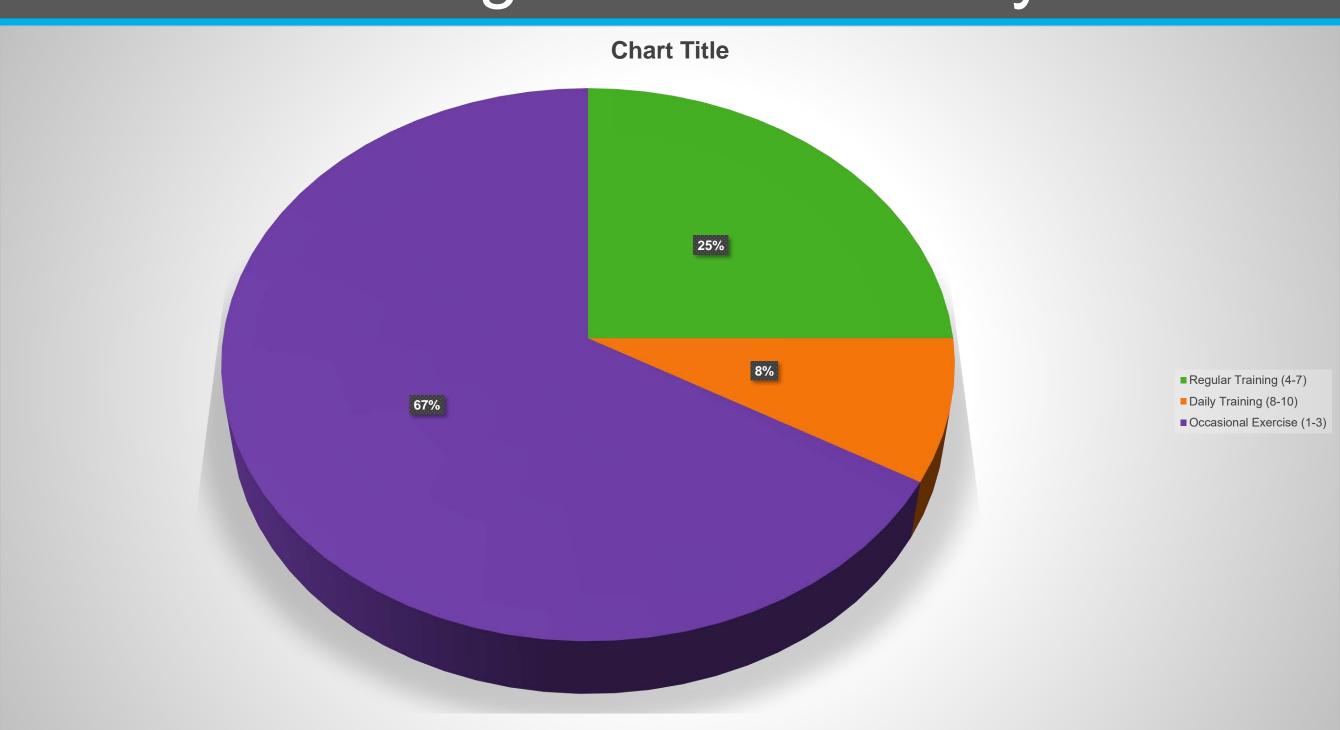
Male/Female Comparison



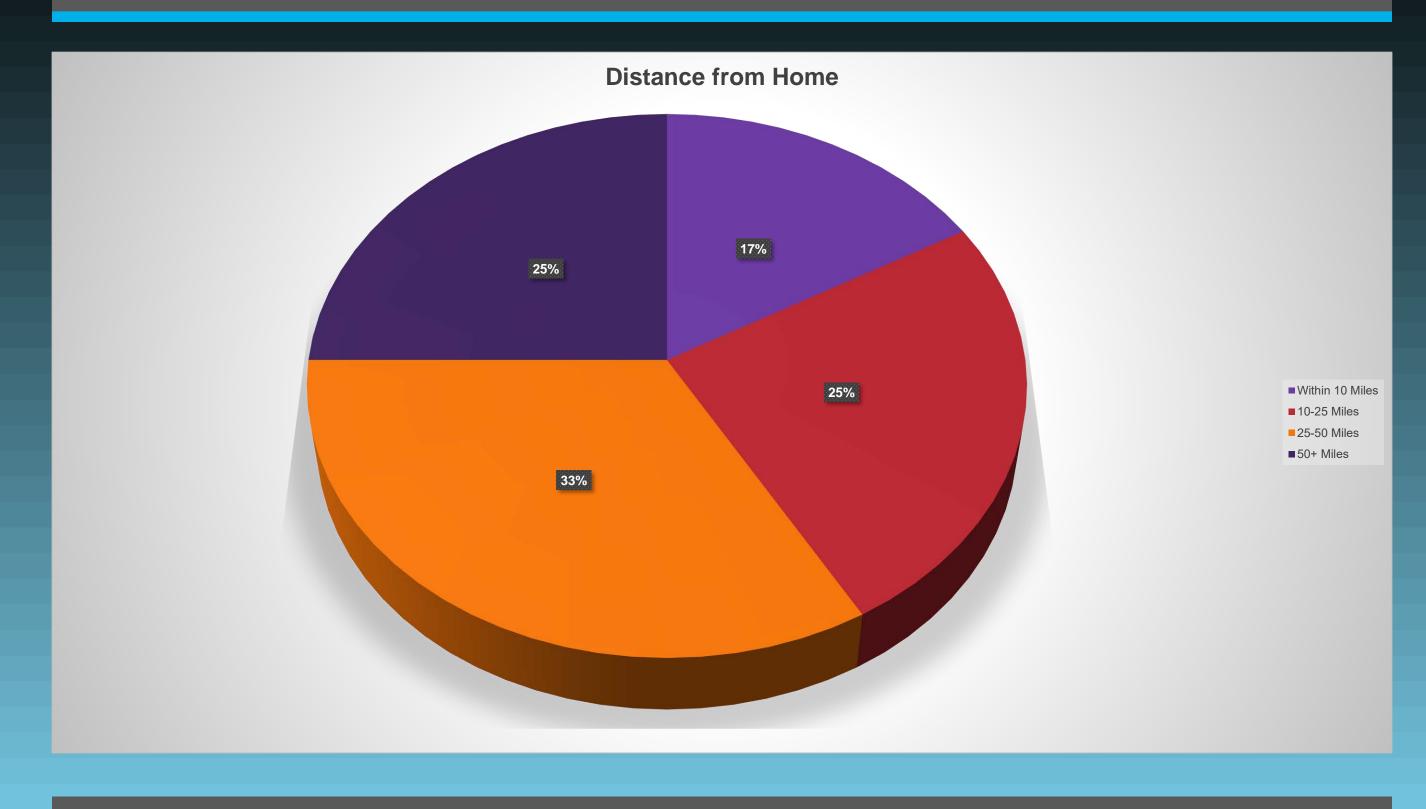
Males: 38% say that they have gained weight since their first semester in college

Females: 70% say that they have gained weight since their first semester in college.

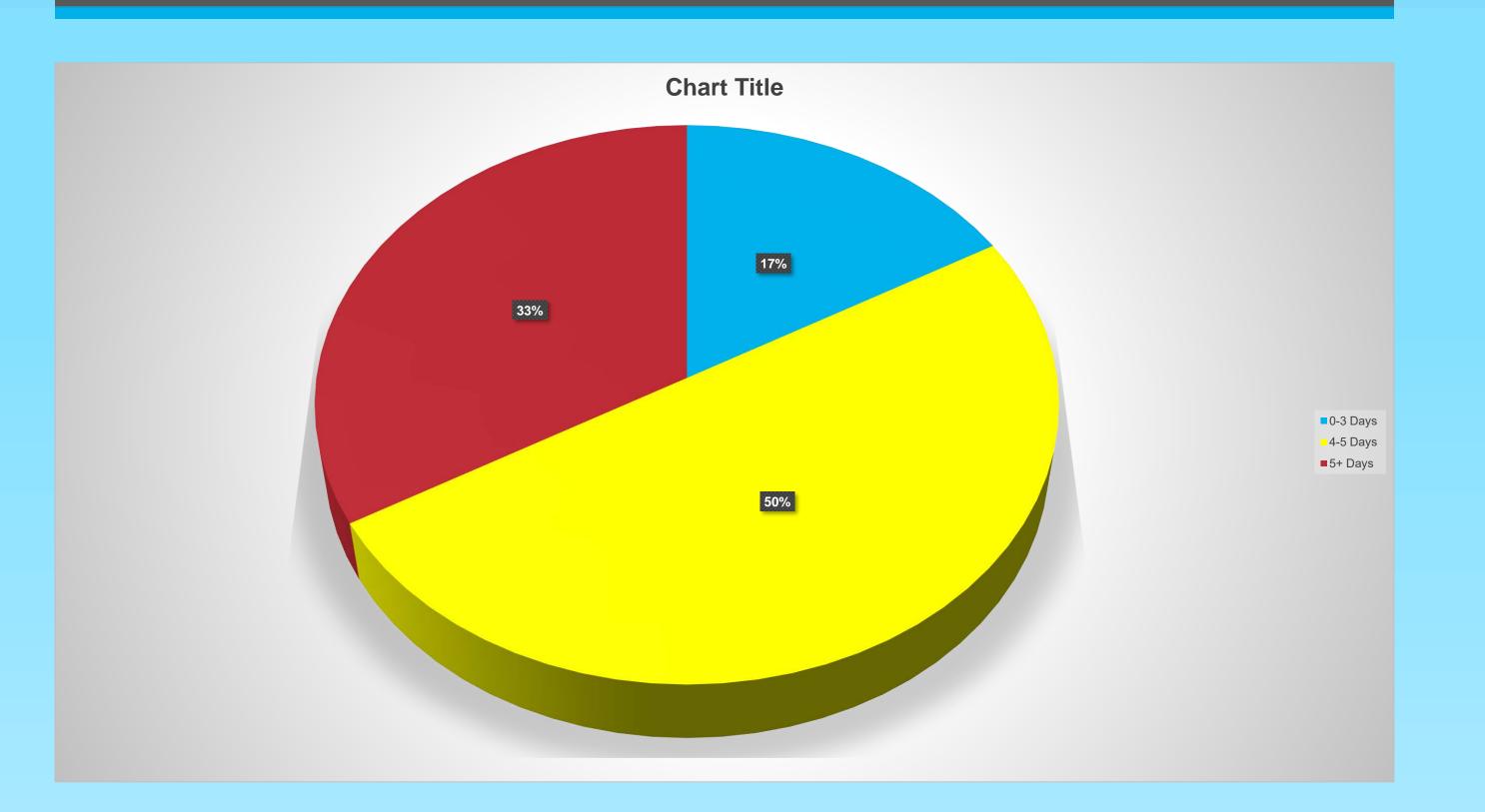
Outstanding Factors- Activity Level



Outstanding Factors- Distance



Outstanding Factors- Cafeteria Consumption



Results

• The result of the study shows that females are more prone to losing weight than males. With 70% of females saying they gain weight during college and in comparison with 38% of males. The three most outstanding factors being activity level, distance from homes, and cafeteria consumption. Individuals who report lower activity are more prone to gaining weight, the farther the distance from home; the more prone an individual is to gain weight, and lastly high consumption of cafeteria food results in weight gain. Although sleep, financial status, and stress do affect an individual's metabolism, and the data did not have a profound impact on an individual's weight.

Future Study

What I learned from this study is with a multitude of factors that result in gaining weight, those that seem to manipulate weight the most is nutrition, fitness, and distance from home. This study taught me to be more cautious on unhealthy behaviors to prevent confming to an unhealthy lifestyle.

Equivalent number of males to females may result in a different result (population size: 13 males and 10 females)

Using sample on multiple campuses

Record athletic background of a student prior for taking the survey

Conclusion

Females are more prone to gaining weight than men. Factors such as activity level, distance from home, and cafeteria consumption cause individuals gain weight more frequently than fast food consumption, lack of sleep, and stress.

Works Cited

- Rocks, Tetyana, et al. "Eating Attitudes and Behaviours of Students Enrolled in Undergraduate Nutrition and Dietetics Degrees." Nutrition & Dietetics, vol. 74, no. 4, Sept. 2017, pp. 381-387. EBSCOhost, doi:10.1111/1747-0080.12298.
- Han, Haijun, et al. "[Survey of the Dietary Status and Physical Activity Level and Fitness of College Freshmen in Chengdu]." Wei Sheng Yan Jiu = Journal of Hygiene Research, vol. 37, no. 4, July 2008, pp. 492-494. EBSCOhost,
- search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=18839540&site=ehost-live.
- Vadeboncoeur, Claudia, et al. "Freshman 15 in England: A Longitudinal Evaluation of First Year University Student's Weight Change." *BMC Obesity*, vol. 3, 03 Nov. 2016, p. 45. EBSCO*host*,
- search.ebscohost.com/login.aspx?direct=true&db=mnh&AN=27826452&site=ehost-live.