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EXPLORING INCOME AND PHYSICAL ACTIVITY DISPARITIES IN THE US

Presented By : The Outliers

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TOPIC AND RESEARCH QUESTION

- **Understanding the relationship between socioeconomic status and health behaviors is necessary for addressing disparities in public health outcomes.**
- **Do higher-income populations have more time for physical activity than lower income populations?**
 - **We hypothesize that this is true, higher income populations have more free time for physical activity. Therefore, populations will engage in more physical activity as their income level increases (positive relationship).**

DATA

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DATASET

The dataset is from the CDC's Behavioral Risk Factor Surveillance System project

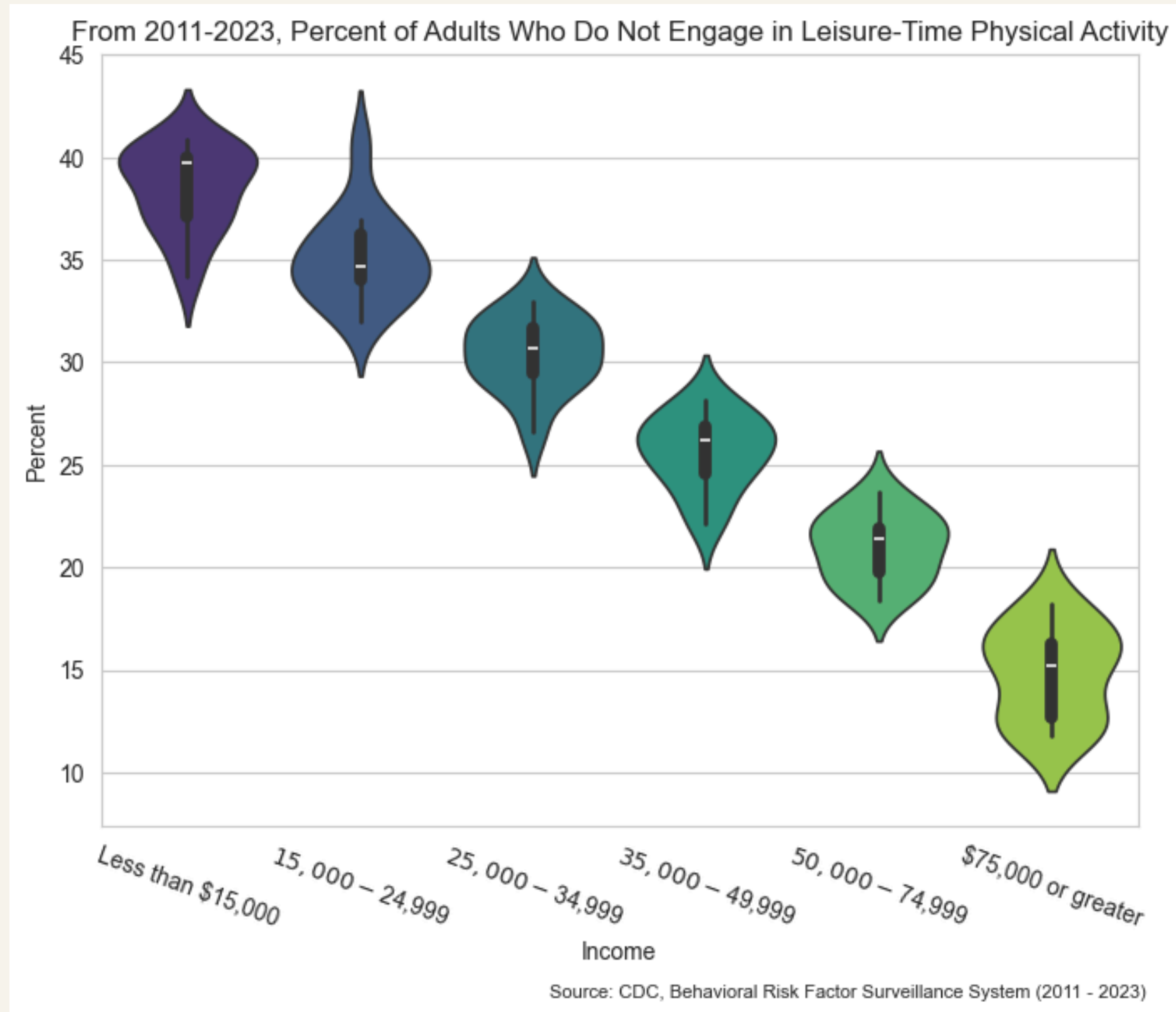
- Obtained from phone surveys conducted between 2011 and 2023.

The whole dataset offers insights into physical activity, nutrition, and obesity trends among U.S. residents aged 18 and older. For the purpose of this project, we are focusing on the survey questions related to physical activity.

- The data is stratified by factors such as age, education, gender, income, and race/ethnicity.

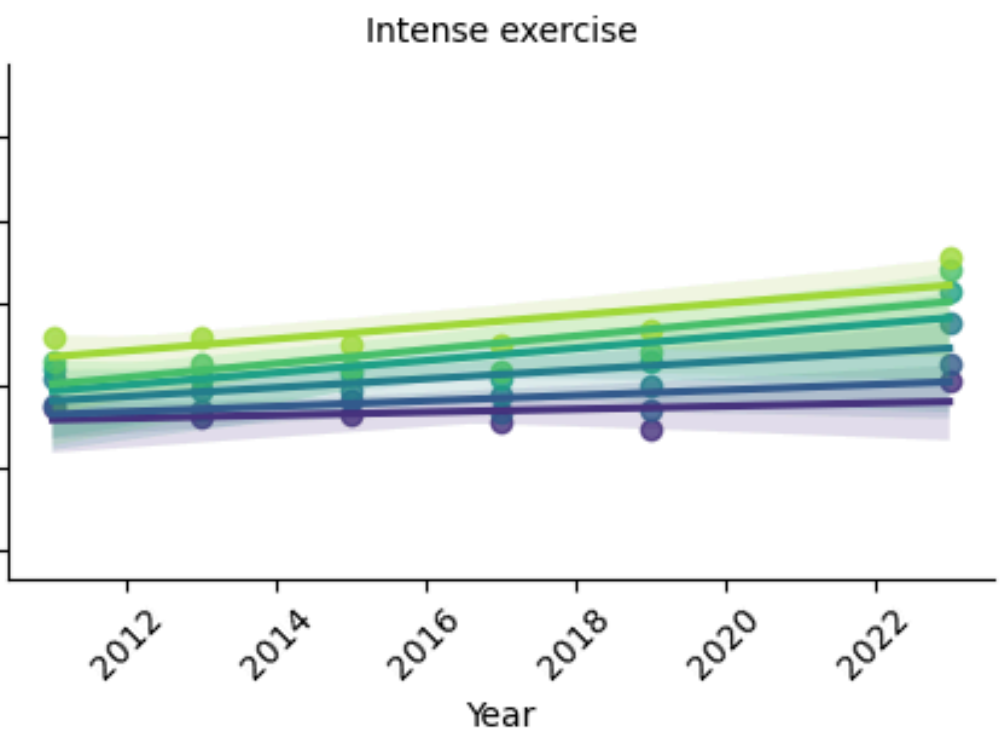
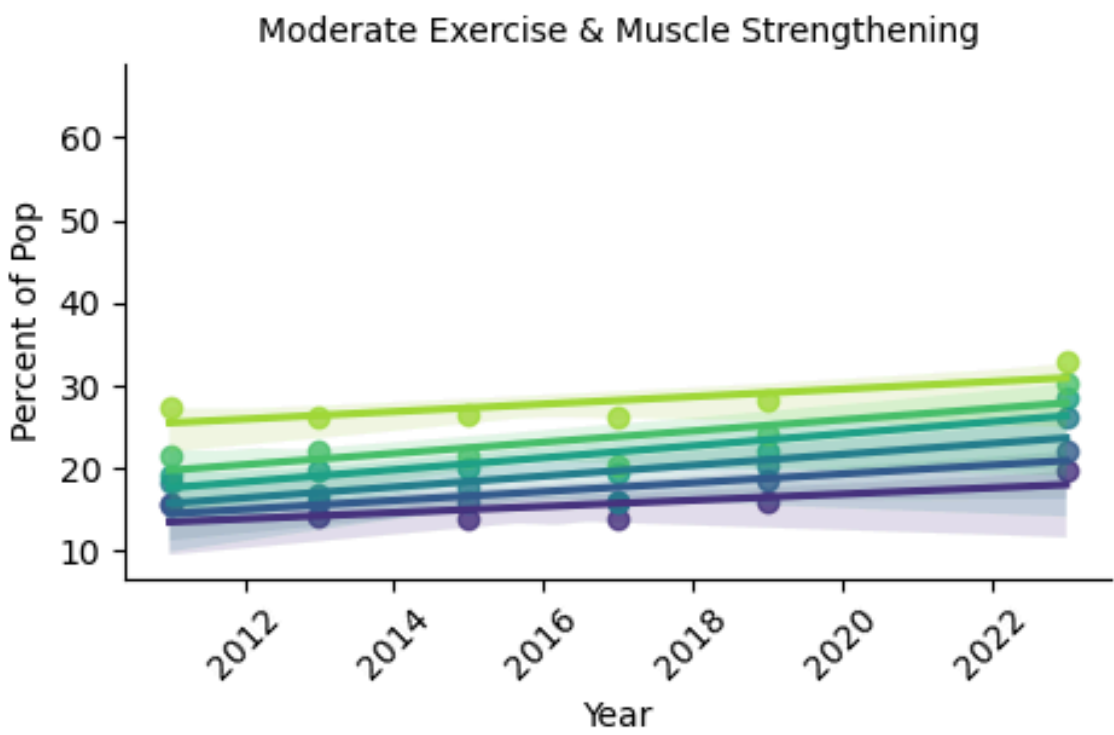
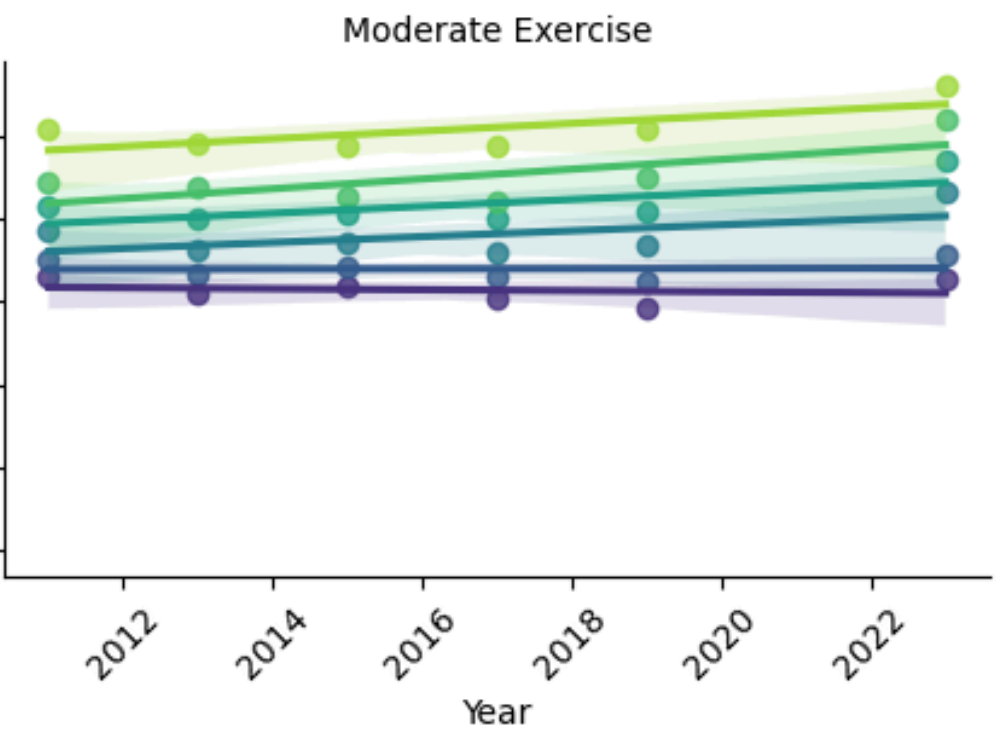
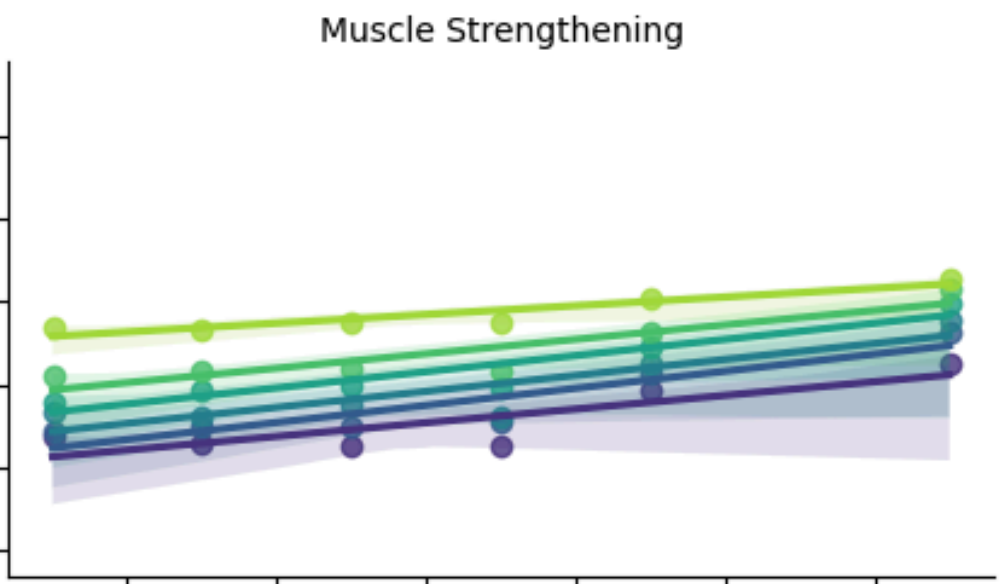
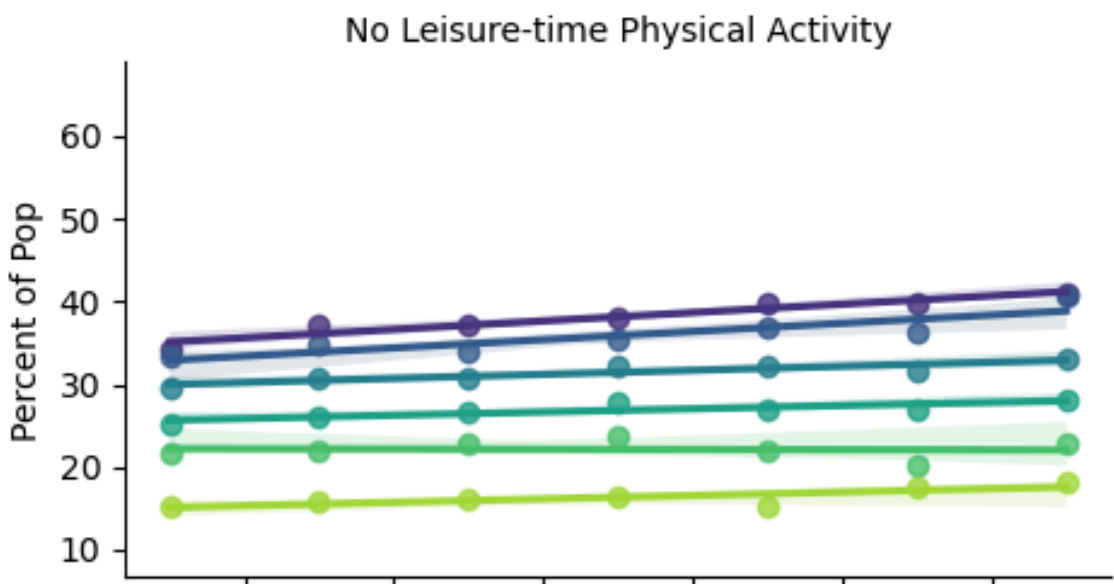
EXPLORATORY DATA ANALYSIS

"During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"



TREND OVER TIME

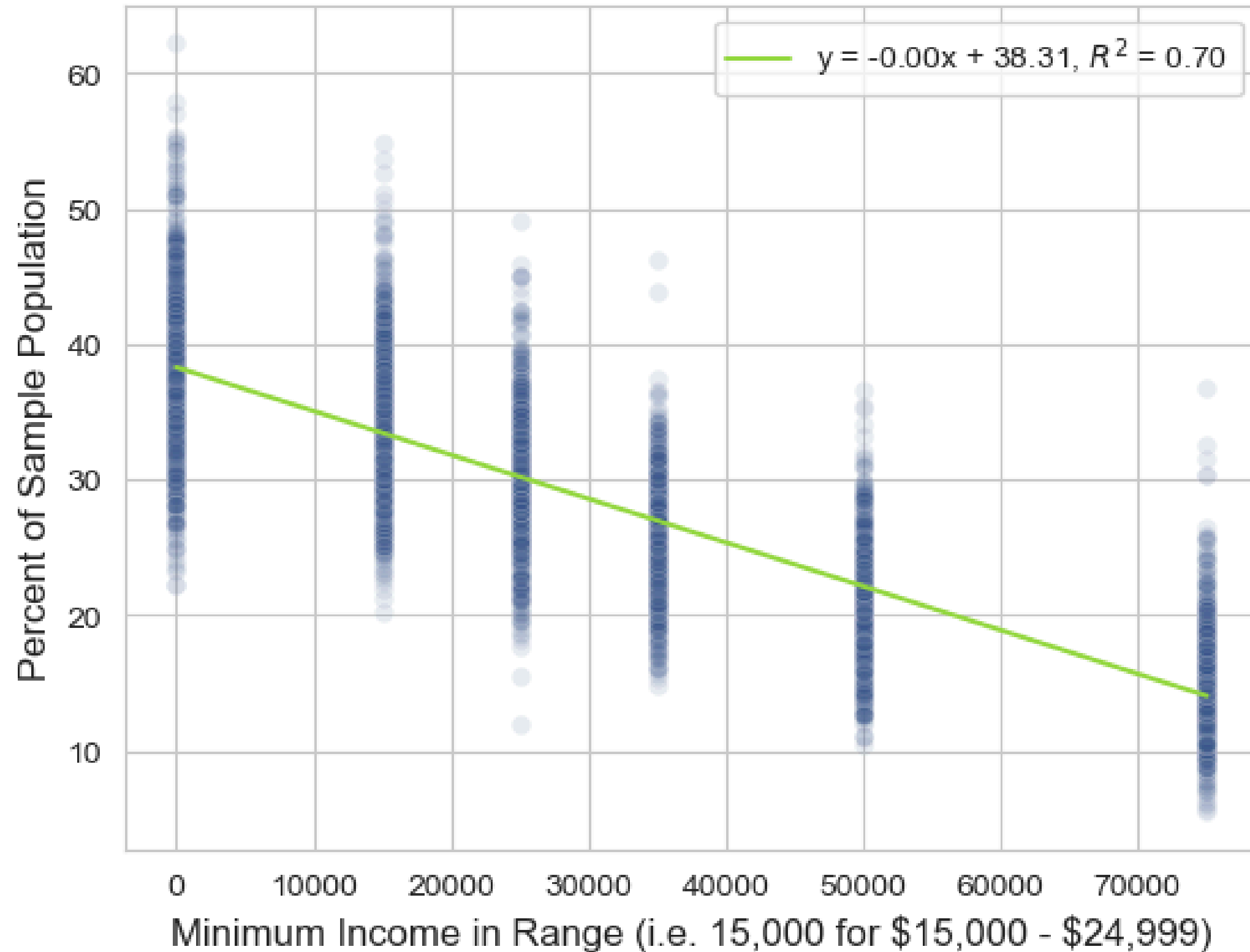
Percent of Population for Each Exercise Class Over Years



- Income Bracket
- Less than \$15,000
 - 15,000 – 24,999
 - 25,000 – 34,999
 - 35,000 – 49,999
 - 50,000 – 74,999
 - \$75,000 or greater

LINEAR REGRESSION

Percent of sample population who engage in no leisure time activity



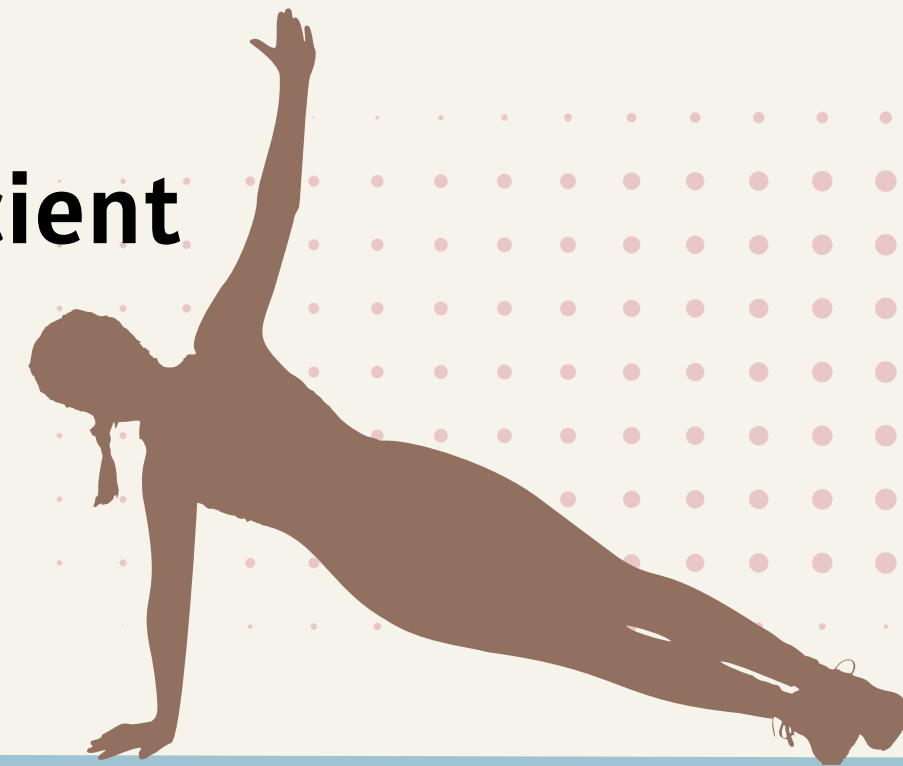
CONCLUSIONS



- **The percent of those not engaging in physical activity has increased in the past 10 years.**
- **The biggest disparity is seen in the lack of leisure time physical activity.**
- **Based on the trends we have analyzed, our work supports the hypothesis that people with higher income have more time for exercise.**

FUTURE WORK

- To further investigate disparities in physical activity, we can further breakdown the data by age, ethnicity, education, and location.
- In future work, it would be insightful to address some of the problems with the dataset such as missing questions for certain years and insufficient sample sizes for some rows.



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THANK YOU