

The Clock is Ticking: How do Americans Spend Their Time?

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Overview

Overview

- **Goal**

- to better understand how individuals in America have spent their time over the last 16 years (2004 - 2019)

Dataset

- Extracted from the *American Time Use Survey (ATUS)* at *IPUMS Time Use*
 - Exported as a coded .csv file
 - 189,866 observations
 - 7 time use response variables, 32 additional independent variables

Challenges & Techniques

- **Categorical variables encoded as numbers**
 - Levels were renamed with appropriate names according to the codebook
- **Large dataset**
 - Each member took a subset of the dataset only with necessary variables

Research Questions

Research Questions

- **Time Usage Over Time**

- How has time usage among individuals changed over the past 15 years?

- **Life Satisfaction & Time Usage**

- How is perceived life satisfaction related to how an individual spends their time?

- **Health & Time Usage**

- How is an individual's time usage related to their general health status?

- **Work-Life Balance**

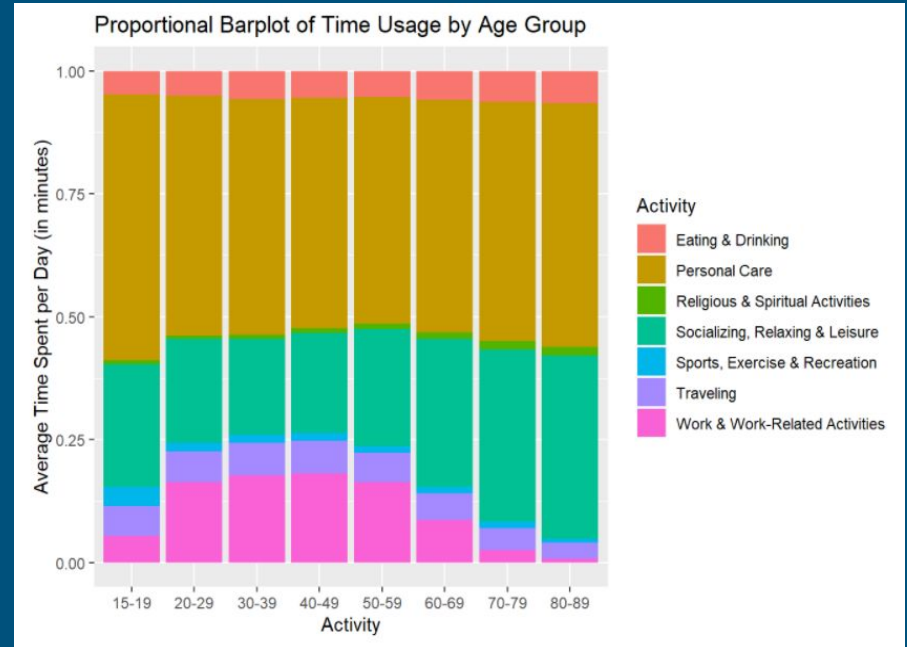
- What factors affect an individual's work and travel time?

Exploratory Analysis

Jaeyeon Won

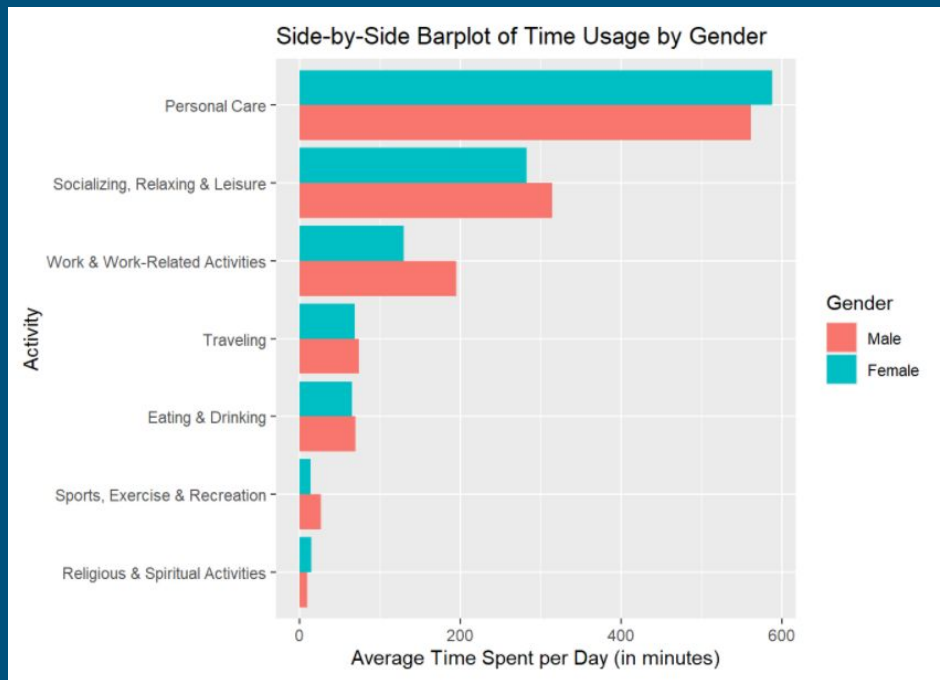
How Does Time Usage Differ By Age Group?

- **Amount of time stays in a similar pattern**
 - Personal Care
- **Amount of time increases as getting older**
 - Eating & Drinking
 - Religious & Spiritual Activities
 - Socializing, Relaxing & Leisure
- **Amount of time decreases as getting older**
 - Sports, Exercise & Recreation
 - Traveling
 - Work & Work-Related Activities



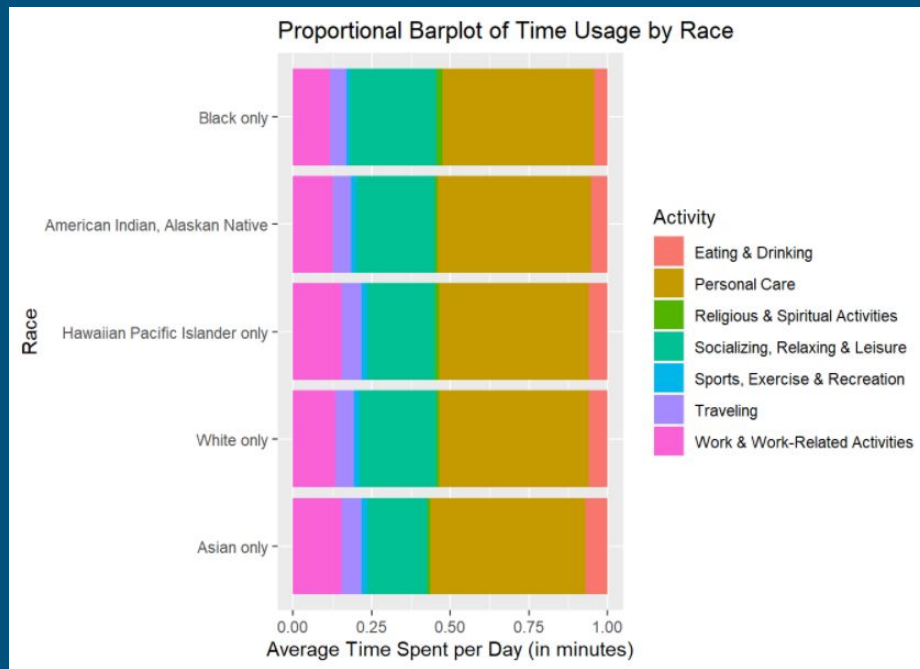
How Does Time Usage Differ By Gender?

- **Overall similar pattern across gender**
 - More time spent on Personal Care
 - Less time spent on Religious Activities
- **Time spent more by Males**
 - Socializing, Relaxing & Leisure
 - Work & Work-Related Activities
 - Sports, Exercise & Recreation
- **Time spent more by Females**
 - Personal Care



How Does Time Usage Differ By Race?

- Overall similar pattern across different races
- Time spent more by Asians
 - Eating & Drinking
 - Personal Care
 - Work & Work-Related Activities



How Does Time Usage Differ By U.S. Region?

Map of the U.S. Regions with Average Time Spent on Each Activity Per Day (in minutes)

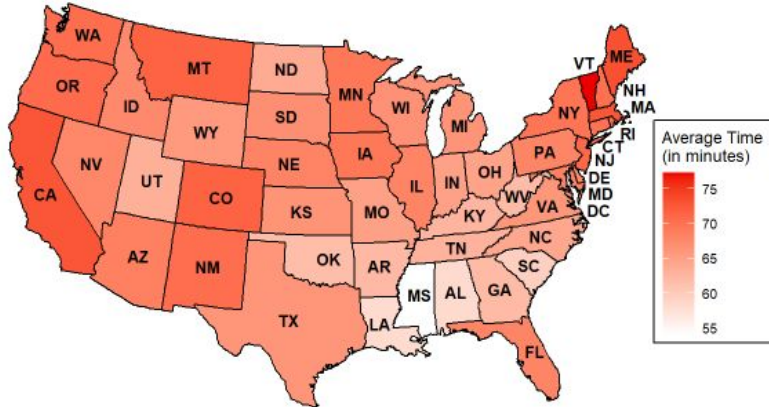


How Does Time Usage Differ By State?

- **Eating & Drinking**

- Most time spent by **Vermont**
- Least time spent by **Mississippi**

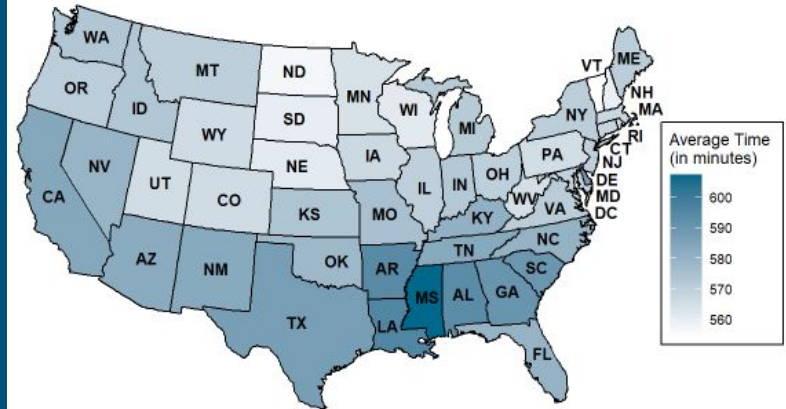
Average Time Spent on Eating & Drinking Per Day (in minutes)



- **Personal Care**

- Most time spent by **Mississippi**
- Least time spent by **Vermont**

Average Time Spent on Personal Care Per Day (in minutes)

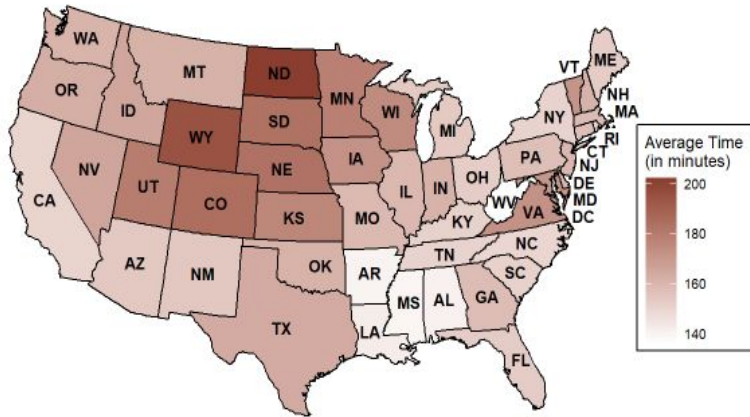


How Does Time Usage Differ By State?

- **Work & Work-Related Activities**

- Most time spent by **ND, WY, UT, and CO**
- Least time spent by **WV, AR, LA, MS, and AL**

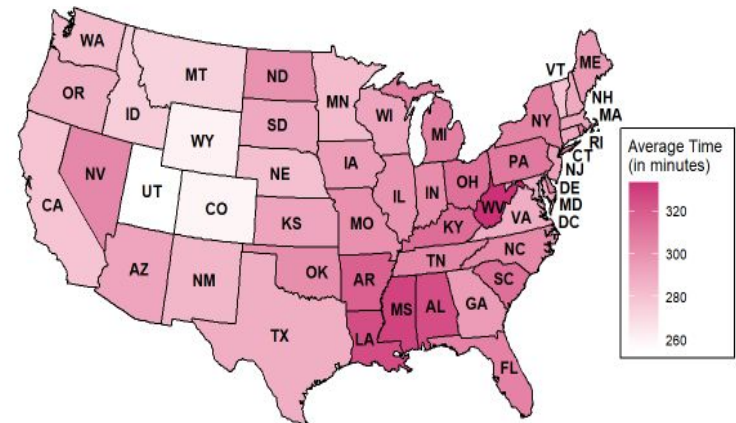
Average Time Spent on Work & Work-Related Activities Per Day (in minutes)



- **Socializing, Relaxing & Leisure**

- Most time spent by **WV, LA, MS, and AL**
- Least time spent by **WY, UT, and CO**

Average Time Spent on Socializing, Relaxing & Leisure Per Day (in minutes)

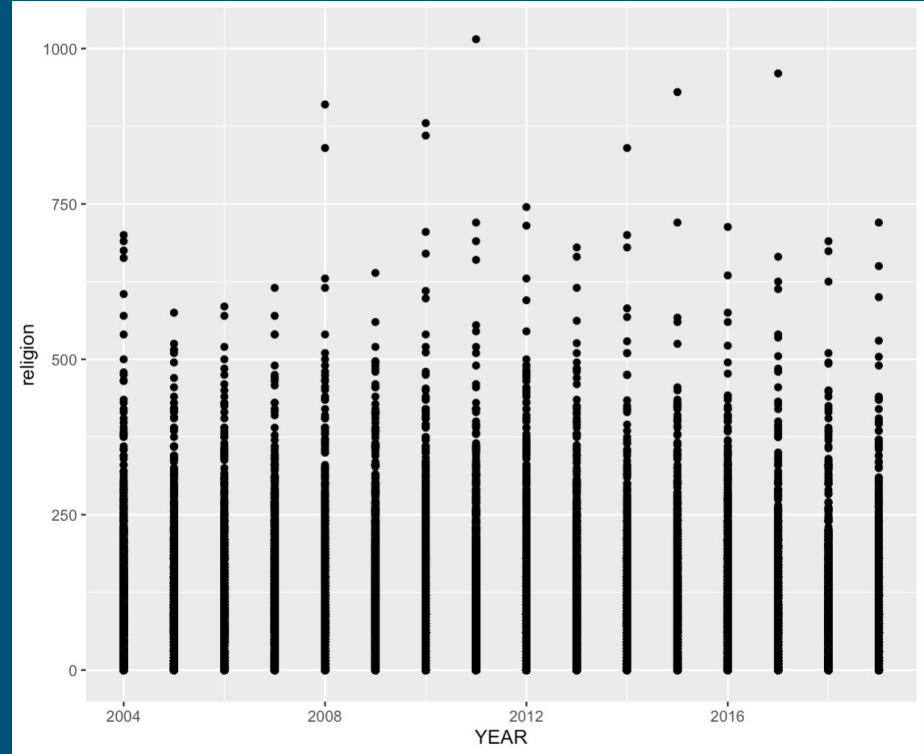


Time Usage Over Time

Becca Barrick

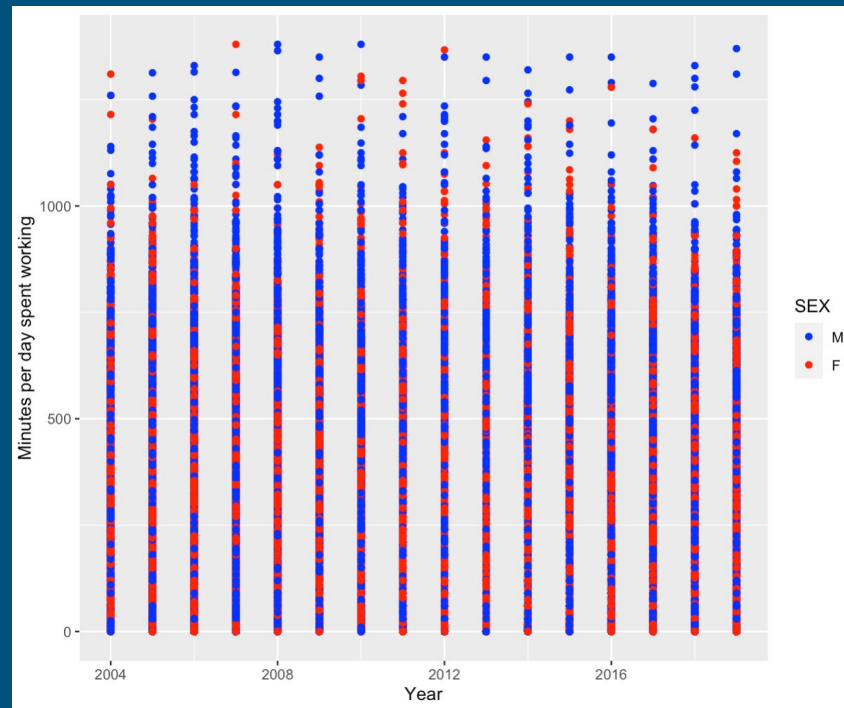
Religious Activities?

- Relatively stable since 2004
- Average is anywhere below 500 minutes per day



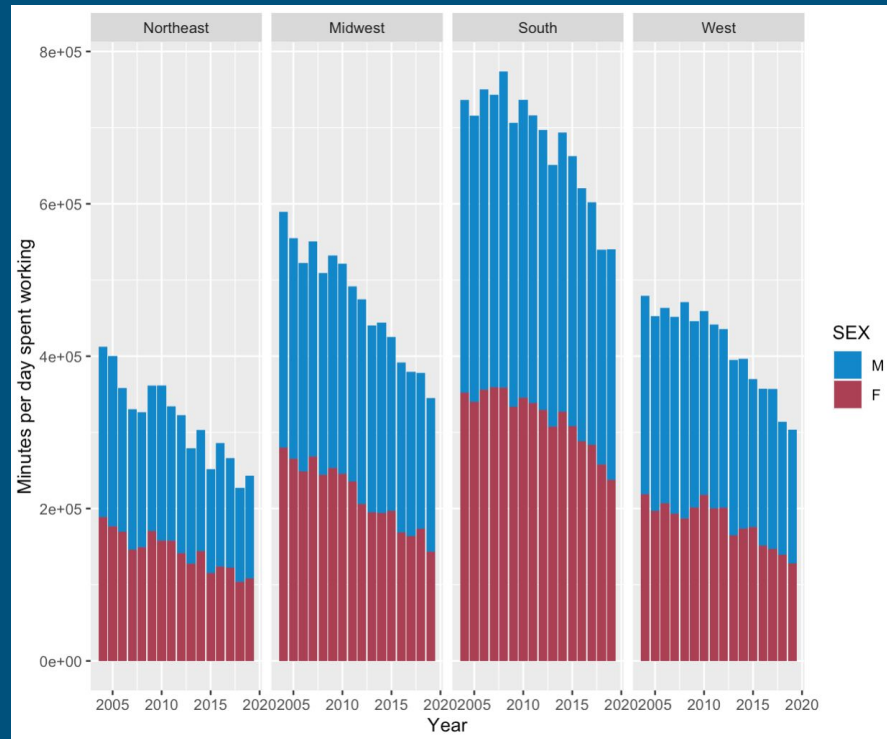
Working?

- The average is anywhere below 1,000 minutes per day (16.5 hours)
- Anyone claiming to work zero minutes per day could either be unemployed or a child
- Data set goes all the way down to 15 year olds



Working across regions?

- Steady decrease in minutes per day spent working since 2004
- Due to technological advances?
- People in the south spend the most time working out of the other US regions

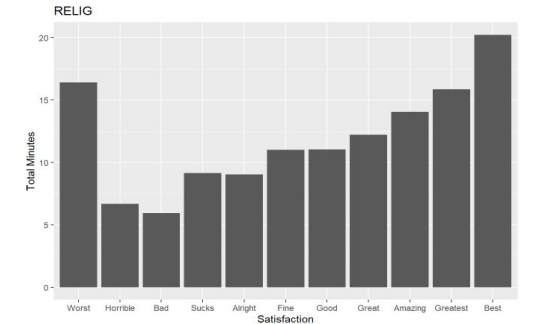
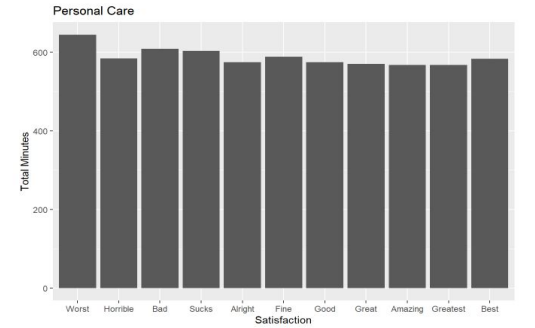
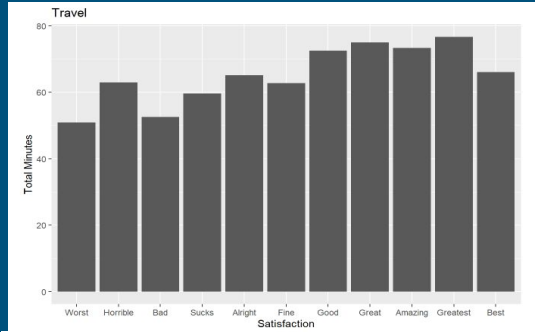
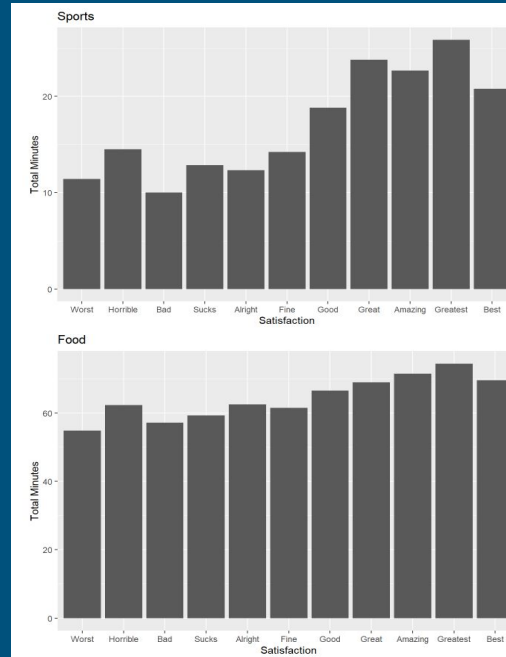


Life Satisfaction & Time Usage

Alec Meyer

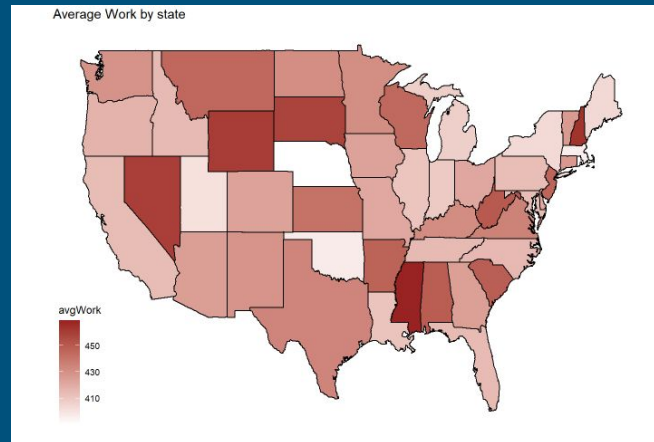
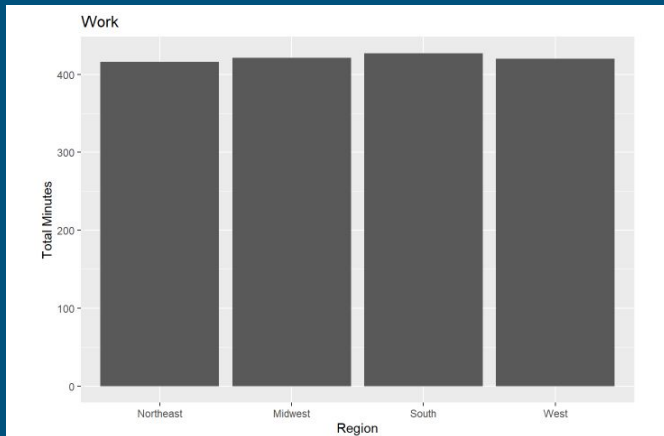
Ways to Spend Time

- Eating food
- Playing Sports
- Taking care of yourself
- Religious activities
- Traveling



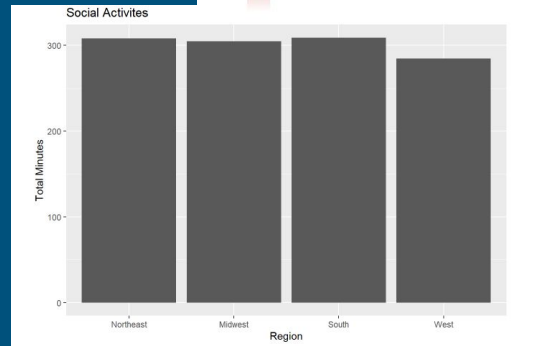
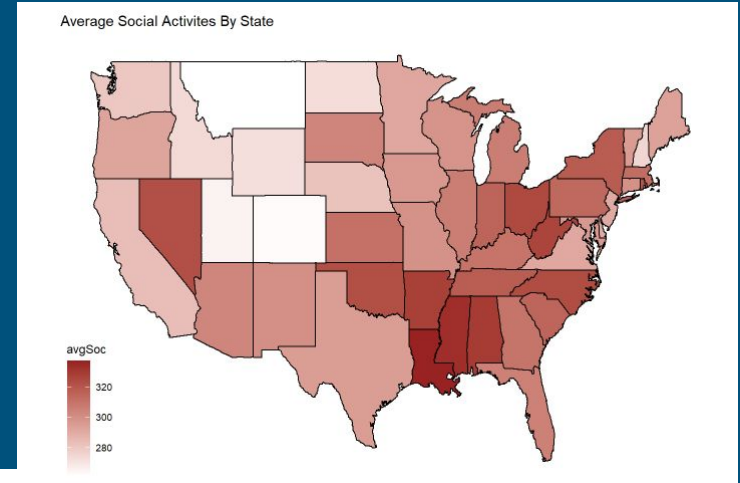
Which Region of the US Works Most?

- Nebraska: 390 minutes per day
- Mississippi: 469 minutes per day
- Regionally the south works slightly more



Which Region is the Most Social?

- Louisiana: 337 minutes per day
- Alaska: 240 minutes per day
- Regionally the west is the least social
- South is the most social

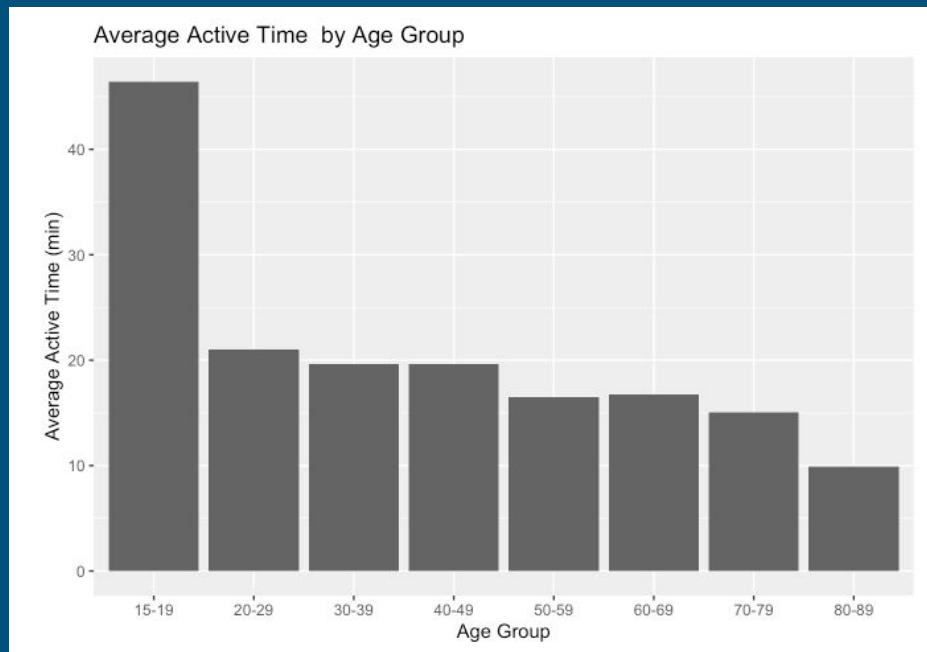


Health & Time Usage

Tessa Mendoza

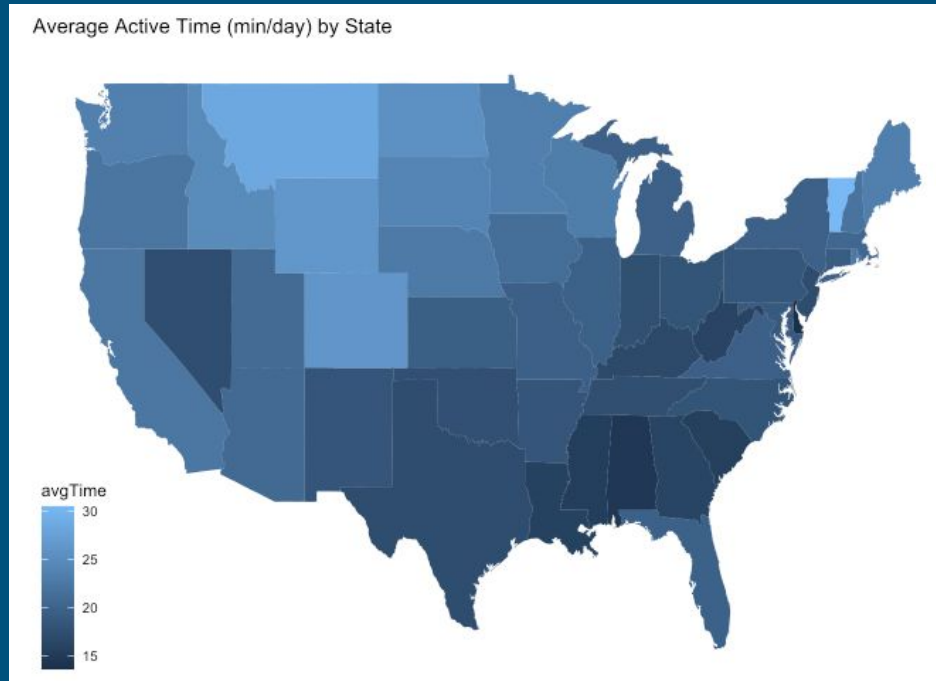
Physical Activity

- “Sports/Exercise/Recreation” time use variable - referenced as physical activity
- Created new ‘agegroup’ column
- Average active time decreases as age increases
 - Expected trend



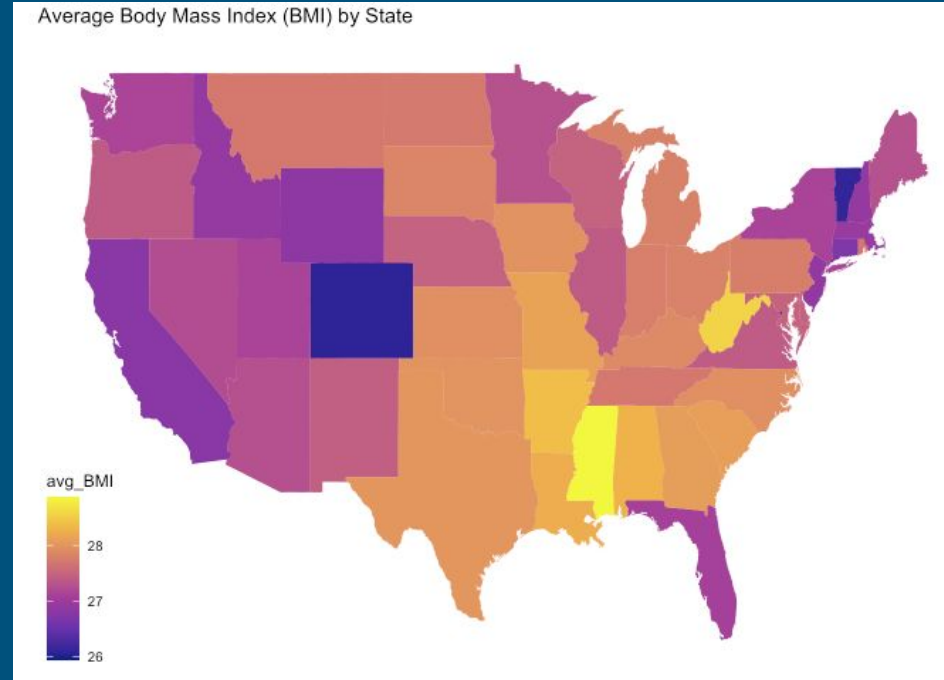
Physical Activity

- Average active time between 15-30 minutes per day for each state
- Highest activity in northwest region



BMI

- Body Mass Index - measure of body fat based on height and weight
- Health care standard measurement
- Healthy BMI range: 18.5 to 25
- Colorado and Vermont healthiest
- Upper midwest (Montana, North Dakota, South Dakota, Nebraska) has higher BMI, despite higher physical activity

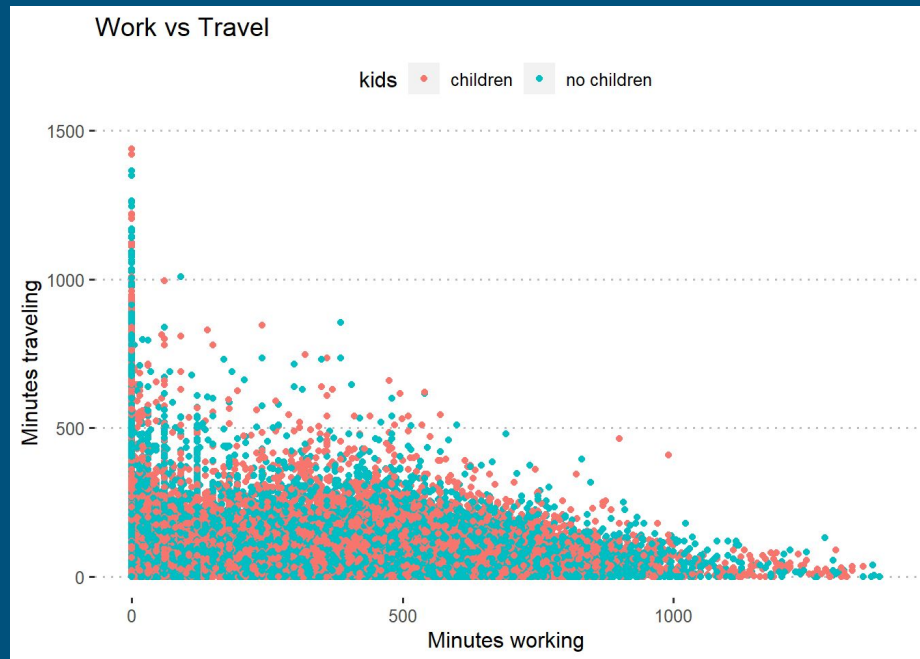


Work-Life Balance

Jay Maxwell

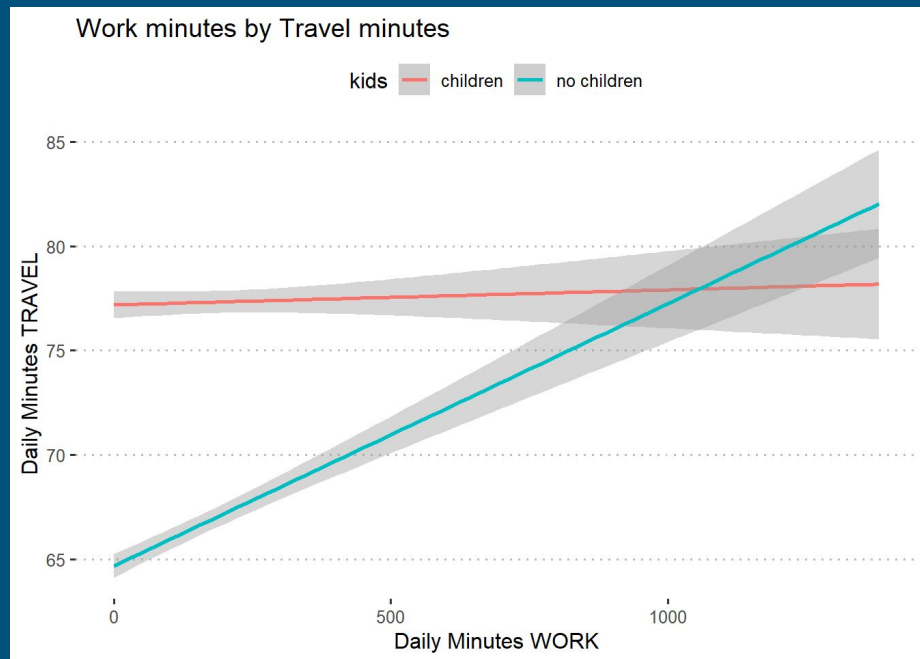
Work-Life Balance

- Minutes reported working vs minutes reported in other activities
- Household with no reported children compared to household with children



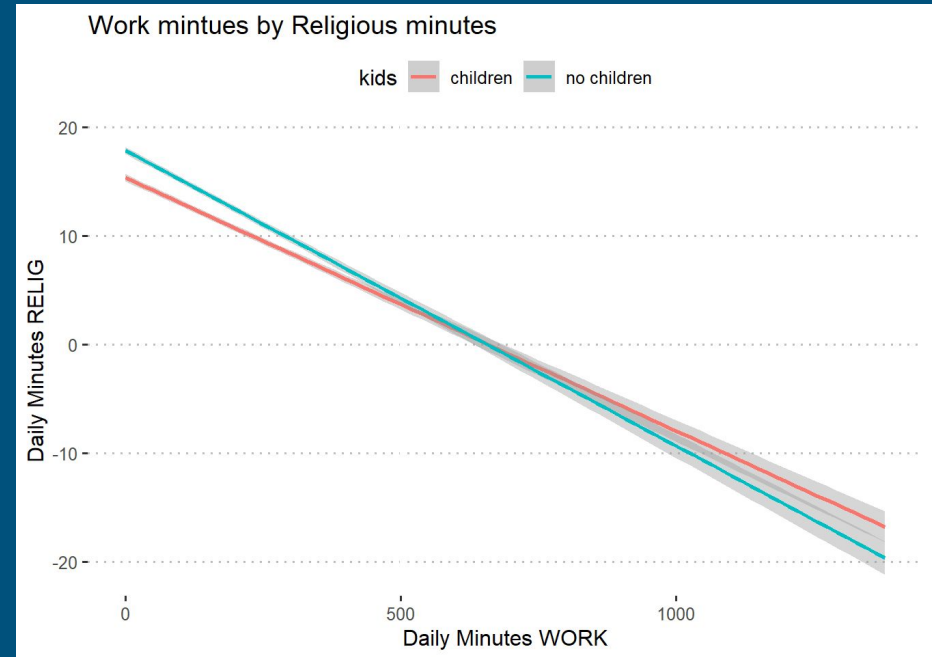
Work vs Travel

- Children appear to have an impact on the reported minutes spent working vs minutes travelling
- Little variation among those with children
- Substantial variation among those without children



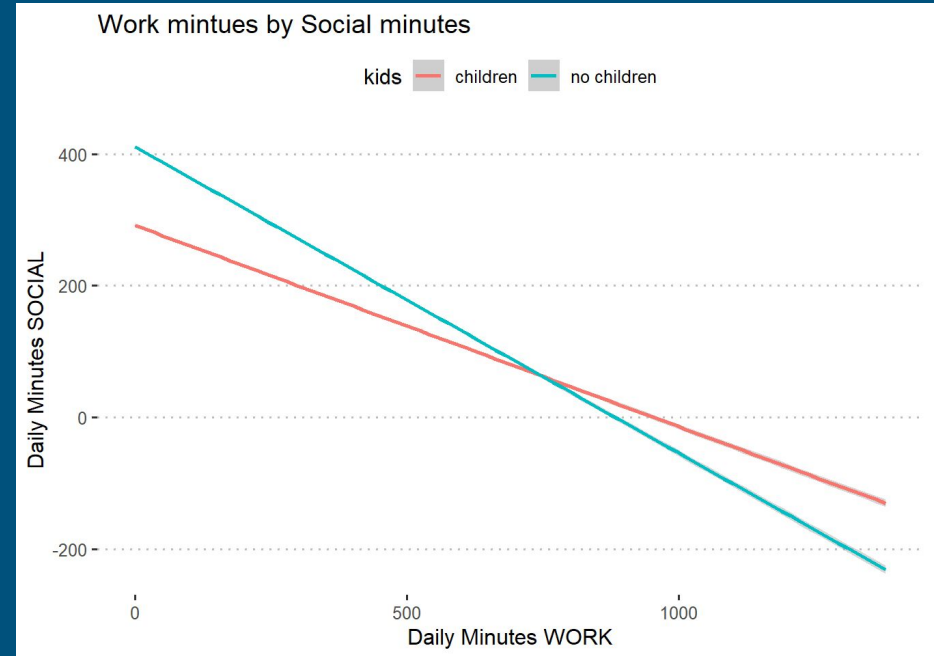
Work vs Religious Time

- Children appear to have an impact on the reported minutes spent working vs minutes travelling
- Little variation among those with children
- Substantial variation among those without children



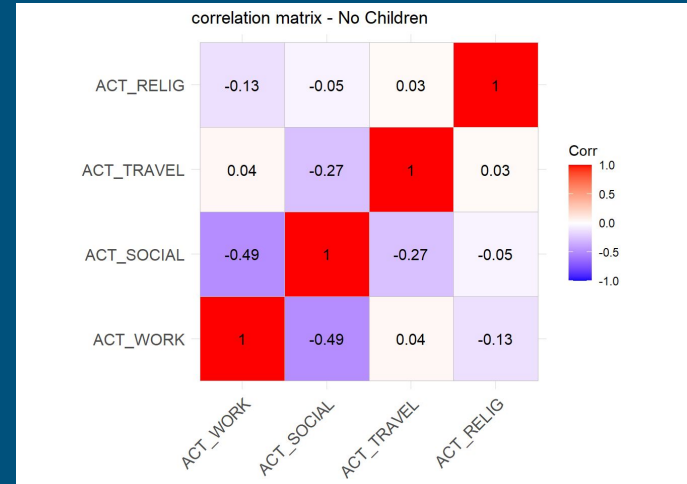
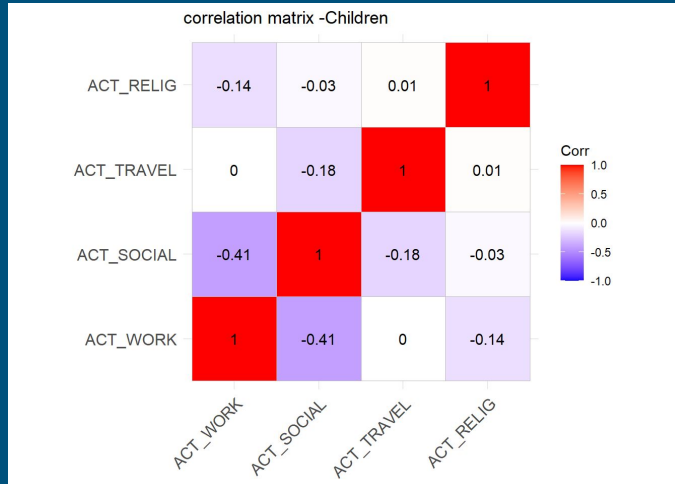
Work vs Social Time

- As work time increases, social time decreases
- Holds for for households with children and households without children



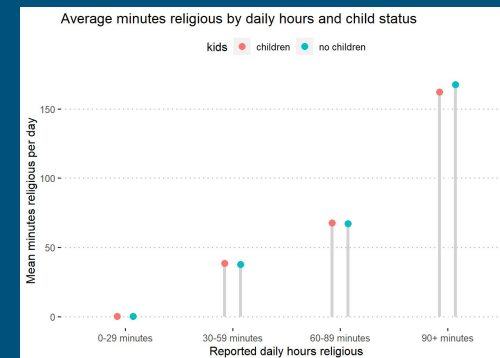
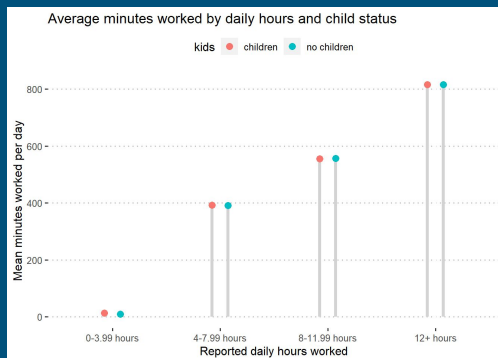
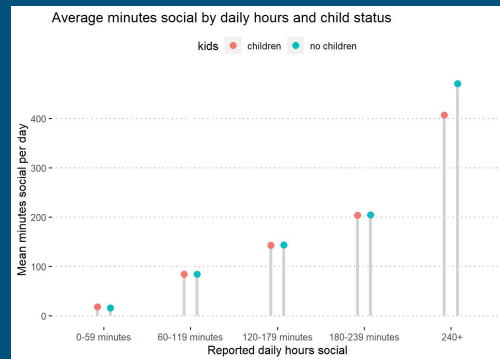
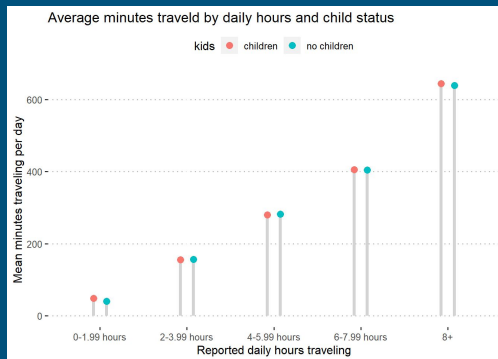
Correlation

- Moderate negative correlation between Work and Social time.
- No correlation between Work and Travel time.
- Weak correlation between Work and Religious time.
- Holds true for Children / No Children households



Children and Time Use

- Broke up time use minutes into discrete bins
- Found the mean minutes spent per bin, for each Time Use categories
- Children / No children appears to play little role in the mean minutes engaged per activity



Conclusion

Conclusion

- **Time Usage Over Time**

- Time spent doing religious activities has decreased and time spent working has also decreased an equal amount across all regions in the US

- **Life Satisfaction & Time Usage**

- The more a person can diversify their daily activities the greater their perceived life satisfaction will be

- **Health & Time Usage**

- increased physical activity does not necessarily correlate to healthier BMI - other factors (nutrition, etc) must be involved

- **Work-Life Balance**

- Household with and without children, on the average, spend the same amount of time on the activities we examined.
- Work and social time have a negative correlation, work and the other activities have little correlation.