Your Actual Proposal Title

Your Actual Name

2024-09-30
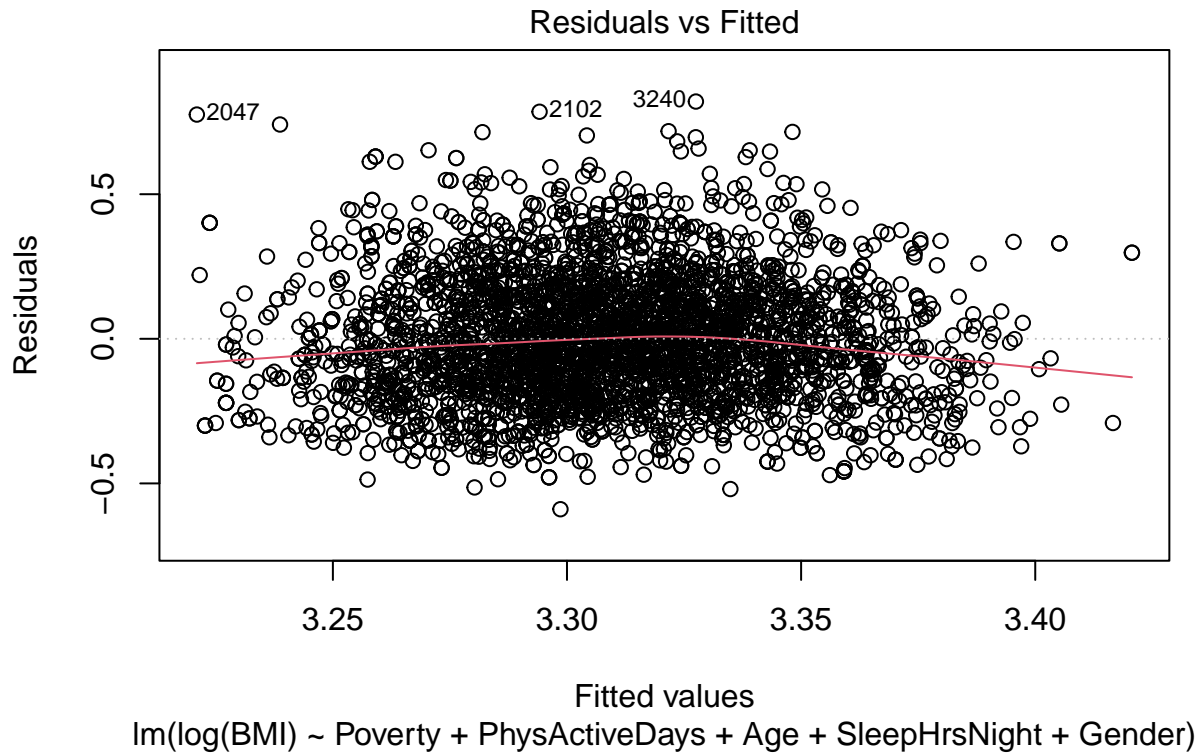
Contributions

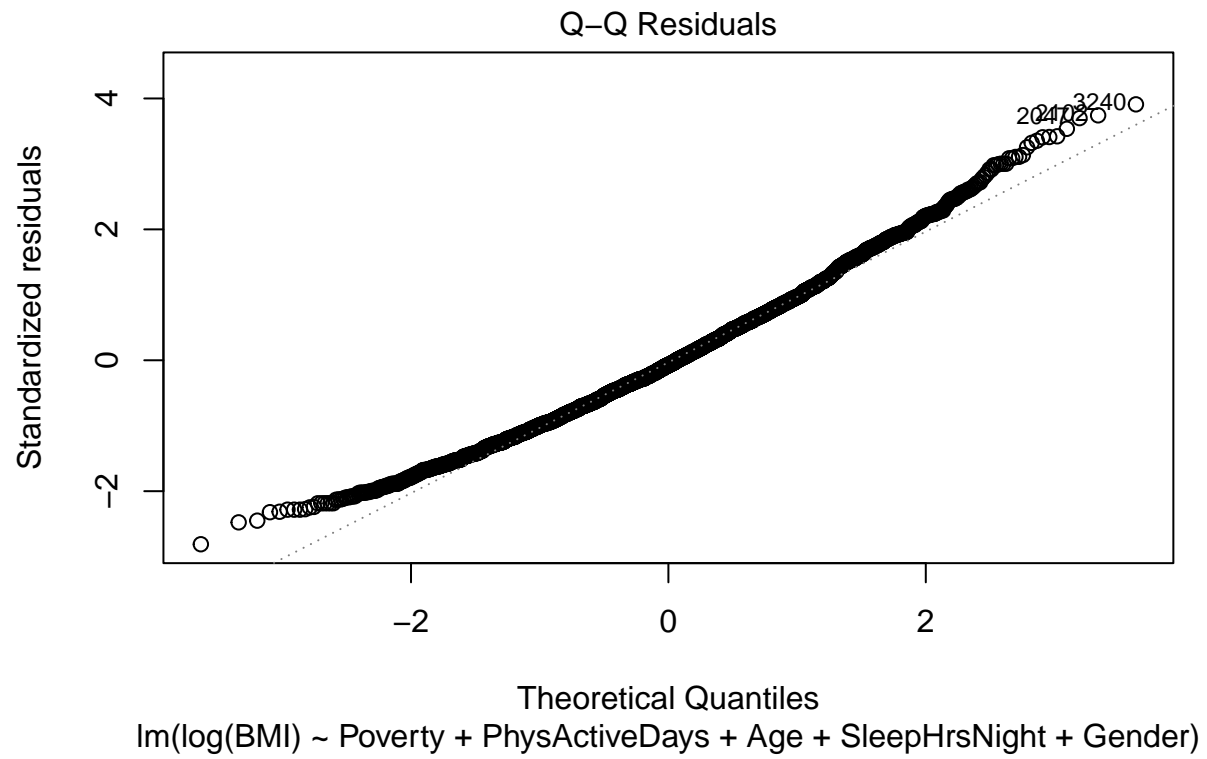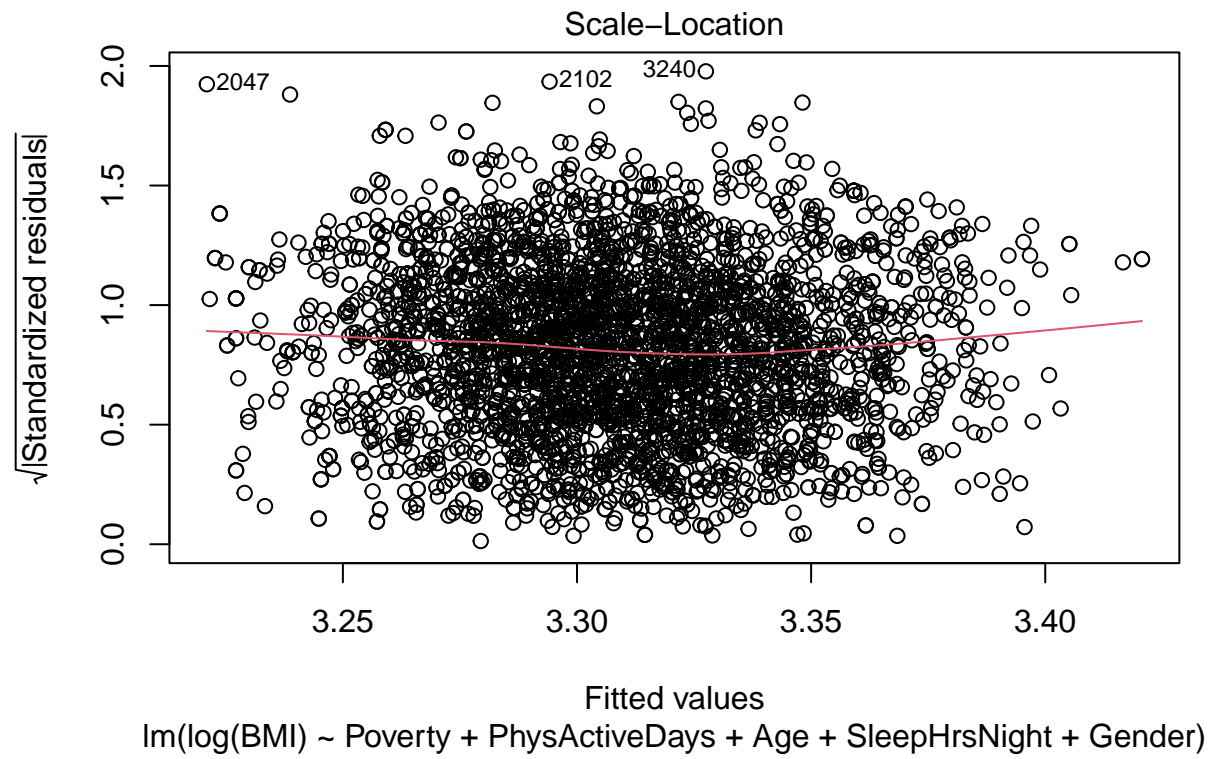## Introduction

Data Description
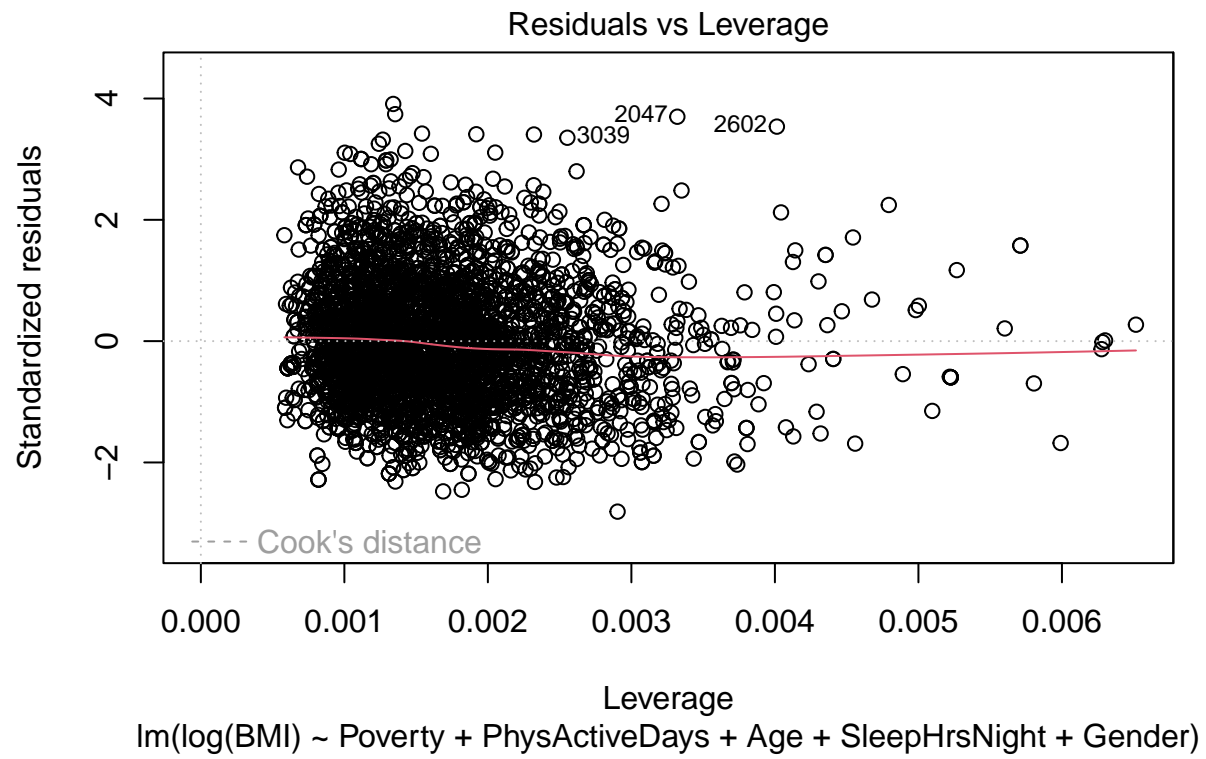
Preliminary Results

Bibliography

```
## 
## The downloaded binary packages are in
##   /var/folders/km/sjr_hj0n7lj6hf7j8l7nrfpm0000gn/T//Rtmph6Rf1C/downloaded_packages
```

```
## # A tibble: 6 x 6
##     BMI Poverty PhysActiveDays   Age SleepHrsNight Gender
##   <dbl>   <dbl>          <int> <int>         <int> <fct>
## 1  27.2     5               5    45             8 female
## 2  27.2     5               5    45             8 female
## 3  27.2     5               5    45             8 female
## 4  23.7     2.2             7    66             7 male
## 5  23.7     5               5    58             5 male
## 6  26.0     2.2             1    54             4 male
```

```
## 
## Call:
## lm(formula = log(BMI) ~ Poverty + PhysActiveDays + Age + SleepHrsNight +
##     Gender, data = nhanes_data)
## 
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.58922 -0.14816 -0.01533  0.13461  0.82036
## 
## Coefficients:
##                  Estimate Std. Error t value Pr(>|t|)
## (Intercept)     3.3596886  0.0229080 146.660  < 2e-16 ***
## Poverty        -0.0101187  0.0021355  -4.738 2.24e-06 ***
## PhysActiveDays -0.0043391  0.0019351  -2.242 0.025004 *
## Age             0.0012950  0.0002051   6.313 3.07e-10 ***
## SleepHrsNight  -0.0102776  0.0027065  -3.797 0.000149 ***
## Gendermale      0.0212251  0.0070538   3.009 0.002639 **
## ---
```
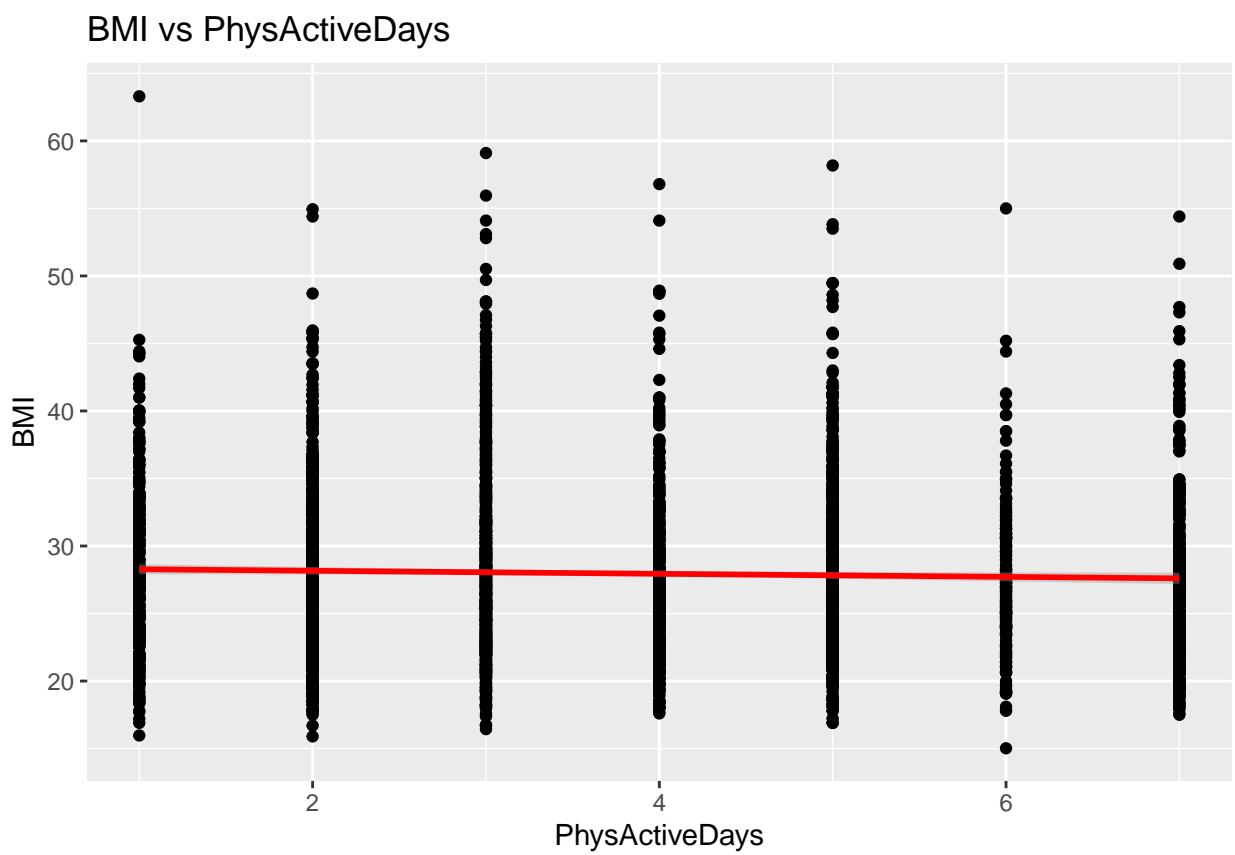
```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.2099 on 3567 degrees of freedom
## Multiple R-squared:  0.02335,   Adjusted R-squared:  0.02198
## F-statistic: 17.06 on 5 and 3567 DF,  p-value: < 2.2e-16
```


Residuals vs Fitted

lm(log(BMI) ~ Poverty + PhysActiveDays + Age + SleepHrsNight + Gender)

Q–Q Residuals

Standardized residuals

Theoretical Quantiles
lm(log(BMI) ~ Poverty + PhysActiveDays + Age + SleepHrsNight + Gender)

Scale−Location

√|Standardized residuals|

Fitted values
lm(log(BMI) ~ Poverty + PhysActiveDays + Age + SleepHrsNight + Gender)

Residuals vs Leverage

lm(log(BMI) ~ Poverty + PhysActiveDays + Age + SleepHrsNight + Gender)

BMI vs PhysActiveDays

BMI vs Poverty

BMI vs Gender