

IDS 702: MODULE 6.8

THE MINIMUM WAGE ANALYSIS

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THE MINIMUM WAGE ANALYSIS

- Let's see how causal inference with propensity scores works using the minimum wage data.
- The data is in the file `MinimumWageData.csv` on Sakai.

Variables	Description
NJ.PA	indicator for which state the restaurant is in (1 if NJ, 0 if PA)
EmploymentPre	measures employment for each restaurant before the minimum wage raise in NJ
EmploymentPost	measures employment for each restaurant after the minimum wage raise in NJ
WagePre	measures the hourly wage for each restaurant before the minimum wage raise
BurgerKing	indicator for Burger King
KFC	indicator for KFC
Roys	indicator for Roys
Wendys	indicator for Wendys

THE MINIMUM WAGE ANALYSIS

```
MinWage <- read.csv("data/MinimumWageData.csv",header=T,  
                   colClasses=c("factor","numeric","numeric","numeric",  
                                "factor","factor","factor","factor"))  
str(MinWage)
```

```
## 'data.frame':   372 obs. of  8 variables:  
## $ NJ.PA       : Factor w/ 2 levels "0","1": 1 1 1 1 1 1 1 1 1 1 ...  
## $ EmploymentPost: num  18 29.5 24 30.5 9 6.5 13.5 25 26.5 23 ...  
## $ EmploymentPre : num  30 19 67.5 18.5 6 7 12.5 55 21.5 25.5 ...  
## $ WagePre      : num  5 5.5 5 5 5.25 5 5 5 5 5.5 ...  
## $ BurgerKing  : Factor w/ 2 levels "0","1": 1 1 2 2 1 1 1 2 2 2 ...  
## $ KFC         : Factor w/ 2 levels "0","1": 1 1 1 1 2 2 1 1 1 1 ...  
## $ Roys       : Factor w/ 2 levels "0","1": 1 1 1 1 1 1 2 1 1 1 ...  
## $ Wendys     : Factor w/ 2 levels "0","1": 2 2 1 1 1 1 1 1 1 1 ...
```

```
head(MinWage)
```

```
##   NJ.PA EmploymentPost EmploymentPre WagePre BurgerKing KFC Roys Wendys  
## 1     0           18.0           30.0     5.00         0  0  0     1  
## 2     0           29.5           19.0     5.50         0  0  0     1  
## 3     0           24.0           67.5     5.00         1  0  0     0  
## 4     0           30.5           18.5     5.00         1  0  0     0  
## 5     0            9.0            6.0     5.25         0  1  0     0  
## 6     0            6.5            7.0     5.00         0  1  0     0
```

IN-CLASS ANALYSIS: MOVE TO THE R SCRIPT HERE

WHAT'S NEXT?

MOVE ON TO THE READINGS FOR THE NEXT MODULE!