

# Energy Consumption and Prosocial Behavior

Chia-Wen Chen      Josie Chen

## 1. What is the question?

They want to examine about the prosocially behavior and what is the reason that can motivate people to do something good voluntarily without the individual benefit. Because from the related review show that there exist some puzzle between monetary incentive and prosocially behavior.

## 2. Why should we care about it?

In the real world, there are many tariff, fee, payment that were designed to people like they were assume that just have monetary incentive for all of their behavior. But one thing that we need to care about is the prosocially behavior by volunteer. And the prosocially behavior is also one of the important factor before they were designed to response what their really have to.

## 3. What is the authors answer?

The result show there exist voluntary to do something good for social without the individual benefit in the case of the reduced using of electricity in the crisis when all of them aware it by newspaper ,but no one force them to do it. There are the prosocially behavior. And the money or benefit is not always main reason of every behavior

## 4. How did the authors get there?

They focus on how student use the electricity in the crisis, do or not reduce using it voluntarily. Samples are three dorms in campus that do not price electricity with dynamic pricing, one is female dorm only, and two are male dorm. They focus in the usage of electricity in the crisis and they compare the changing in hour of week of the on-crisis in case one and compare the changing of using it between on-crisis and off-crisis to get the result that they want. They also set the weather as control variable in this study.

**Model and explanation**

$$y_{it} = \alpha_i + \beta_1 1(\text{Critical})_t + \beta_2 1(\text{Critical peak})_t + X_t + \varepsilon_{it};$$

Variable	Definition
$y_{it}$	a usage variable of interest for an individual room in an hour of week i during the sample
$\alpha_i$	usage variation across individual room and hour of week and focus on within room and hour of week variation
$1(\text{Critical})_t$	indicator variables for off-peak and peak hours during the 2 day critical usage window
$1(\text{Critical peak})_t$	indicator variables for peak hours during the 2 day critical usage window
$X_t$	include weather controls at the hourly level and a week of year variable,
$\varepsilon_{it}$	the error term