Irania Matos Econometric- HW 1 9/4/2025

## *Group Members:*

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## Dice Experiment Results

I compared two dice: a control die (unmodified) and a modified die (heated and lightly filed). Each roll was recorded as. For each roll, record the outcome as either:

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1 (if it's a 6)
0 (if it's not a 6)
```

Control:

Modified:

## Household Pulse Data

This is the relationship between the K4SUM and the private and public health insurance I have gathered. The level of K4SUM based on the data we collected and summarized is interesting because it shows that there is not a significant difference between people that have public or private insurance.

The "experiment" shows the following data:

People that answered "Yes, I do have public insurance" and "No, I don't have public insurance" have a mean of 6.72 and 7.05, with a median of 6 and 5.

People that have answered "Yes, I do have private insurance" and "No, I do not have private insurance" have a mean of 6.71 and 7.66, with a median of 6 and 7.As you can notice, the numbers are not very far away from each other. We have carefully re-read the data and found out what could have been the gap, or gaps.

#### Interesting Factor/Surprises

- I was expecting larger households to earn more, but based on the data, income per person drops as household size grows. Household size between 3-5 had the largest income. While household size 9-10 had one of the lowest incomes.
- I was expecting females to have equal or better coverage, but here they're slightly less likely than males. (75% vs 71.7%).

# Questions

- 1. Which states have the lowest and highest insurance coverage?
- 2. Do some households have both public and private insurance?
- 3. People that do not have private insurance are counted again in the public insurance question?
- 4. Are there racial differences in insurance type (public vs private)?
- 5. How does education level relate to the likelihood of having private health insurance?