# My Paper on NLSY97 Data

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## 1 The First Section

This is where I talk about basic LaTeX. Using the `parskip` package, I can create a new paragraph by using line breaks, which I will do now.

I can also make cool equations inline by using parentheses—like this: $x + 2$—or by using single dollar signs—like this: $x + 2$. Parentheses are preferred because the left and right delimiter are distinct.

I can make cool equations in a block style by using the `equation` environment like so:

$$y = x\beta + \varepsilon$$

or by using double dollar signs:

$$y = x\beta + \varepsilon$$

Again, the `equation` environment is preferred because the begin and end delimiters are different.

I can also add a bibliography, but this is beyond the scope of our discussion right now. Overleaf has plenty of resources for this on their website. Another good place to look for LaTeX help is the WikiBook on it.

## 2 The Second Section

Wherein we do tables and graphs. To include the graph we made in ggplot, we create the `figure` environment. The 'H' option tells LaTeX to 'hold' the position of the figure instead of positioning it somewhere else. I use the `caption` command to add a caption—although I also put a title on the plot in ggplot so you would typically choose one or the other. I use the `label` command after the caption to add a label. Then in my paper I can use the `ref` command and LaTeX knows I am referring to Figure 1.

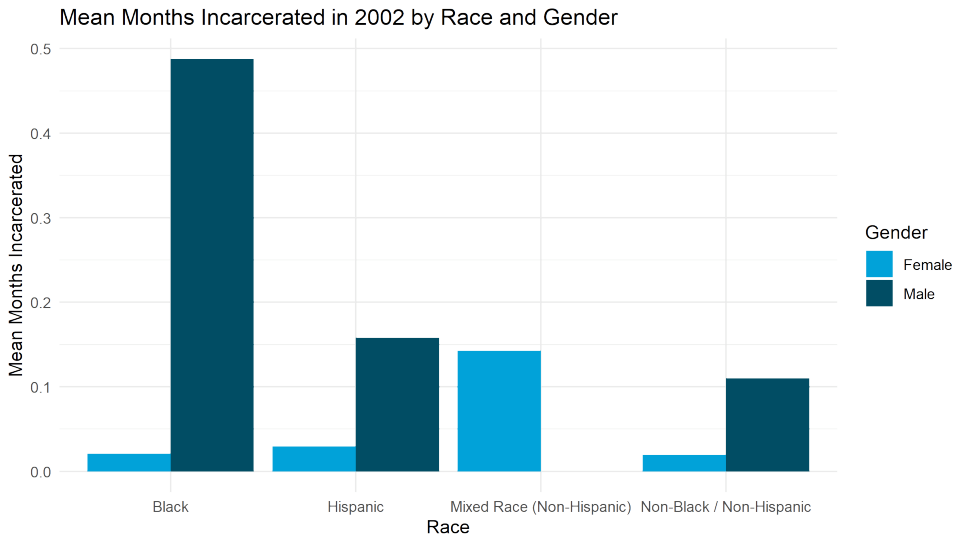


Figure 1: Mean Number of Months Incarcerated in 2002 by Race and Gender (this is the LaTeX caption, not the ggplot title)

Tables are somewhat easier, since `kableExtra` and `stargazer` generate LaTeX code that is ready to just "copy-paste" into our document. The `label` argument in the R code is the label that the table will have in the tex output, if you want to `ref` it.

Table 1: Mean Months Incarcerated in 2002 by Race and Gender

| Gender | Black | Hispanic | Mixed Race Non Hispanic | Non Black Non Hispanic |
|---|---|---|---|---|
| Female | 0.0211268 | 0.0298013 | 0.1428571 | 0.0193192 |
| Male | 0.4876712 | 0.1579509 | 0.0000000 | 0.1099476 |

Table 2: Regression Output. Omitted category is Black Females.

| | *Dependent variable:* |
|---|---|
| | Months Incarcerated in 2002 |
| Hispanic | $-0.159^{***}$ |
| | (0.038) |
| Mixed Race (Non-Hispanic) | $-0.174^{**}$ |
| | (0.083) |
| Non-Black / Non-Hispanic | $-0.189^{***}$ |
| | (0.035) |
| Male | $0.194^{***}$ |
| | (0.022) |
| Constant | $0.155^{***}$ |
| | (0.026) |
| Observations | 8,621 |
| $R^2$ | 0.015 |
| Adjusted $R^2$ | 0.014 |
| Residual Std. Error | 1.019 (df = 8616) |
| F Statistic | $32.033^{***}$ (df = 4; 8616) |
| *Note:* | $^{*}$p<0.1; $^{**}$p<0.05; $^{***}$p<0.01 |