

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

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

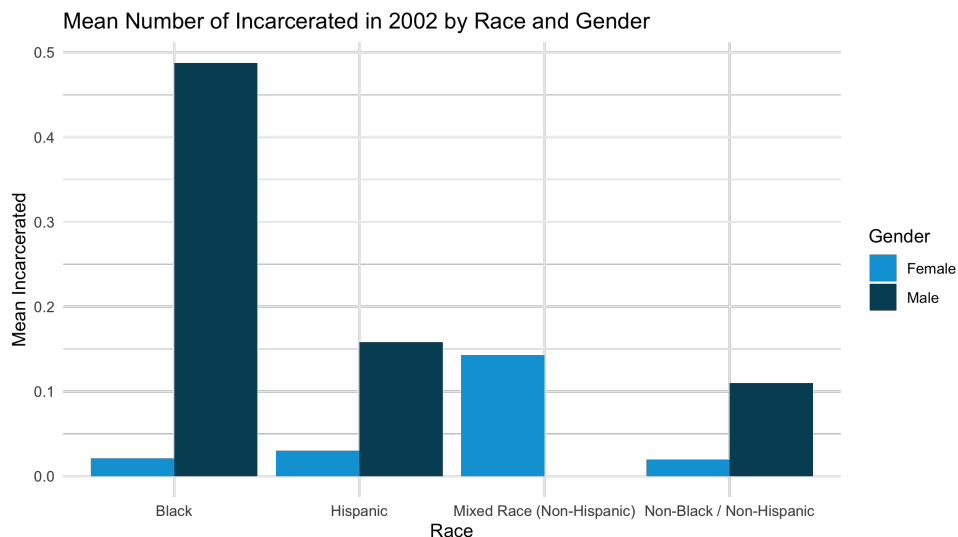


Figure 1: Mean Number of Incarcerated in 2002 by Race and Gender (this is the LaTeX caption, not the ggplot title)

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 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.

	<i>Dependent variable:</i>
	Incarceration 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)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

3 Analysis of the Results

As can clearly be seen from Figure 1, there is a much higher degree of incarceration among males than females with the possible exception of Mixed Race (Non-Hispanic); though the complete lack of any males in that category suggests to me that there may be some issue in the data collection or perhaps simply an anomaly resulting in the discrepancy. We can also see that incarceration is far higher for black males than all others.

This is further backed up by Table 1, providing more directly comparable numbers on each of the groups. Table 2 solidifies this by showing that these differences are all statistically significant at the 5% level.

Overall the most noteworthy aspects of this appear to be the extremely high level of incarceration of black males, the generally higher incarceration among males, and the bizarrely high incarceration rate of Mixed Race (Non-Hispanic) females with the complete absence of incarceration among the males of that group.

This was done on Overleaf as I kept running into issues when compiling on R.