

# Milestone 4

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This is my pdf document for milestone 4 of Gov 1006 Final Project. Please refer to the Github repository for my entire project.<sup>1</sup> I am replicating Out of gas: quantifying fatigue in MLB relievers<sup>2</sup> by Kyle Burris and Jacob Coleman. They seek to answer the question of quantifying velocity loss on MLB relief pitchers based on their usage in the preceding days (Burris and Coleman 2018).

I also make use of Xie (2020), Wickham (2019), and Xie (2015) for this milestone.

## 1 GT Table

a	b	c
67	86	68
51	86	29
41	36	59
67	95	17
34	62	43

## 2 Regression Table

	<i>Dependent variable:</i>	
	a	
	(1)	(2)
b	−0.469 (0.500)	
c		0.245 (0.312)
Constant	67.872** (21.832)	36.334 (19.575)
Observations	10	10
R <sup>2</sup>	0.099	0.072
Adjusted R <sup>2</sup>	−0.014	−0.044
Residual Std. Error (df = 8)	31.009	31.470
F Statistic (df = 1; 8)	0.878	0.619
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

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<sup>1</sup>Github repository

<sup>2</sup>Replication Paper

## References

- Burris, Kyle, and Jacob Coleman. 2018. “Out of Gas: Quantifying Fatigue in Mlb Relievers.” *Journal of Quantitative Analysis in Sports* 14 (2): 57–64. doi:10.1515/jqas-2018-0007.
- Wickham, Hadley. 2019. *Stringr: Simple, Consistent Wrappers for Common String Operations*. <https://CRAN.R-project.org/package=stringr>.
- Xie, Yihui. 2015. *Dynamic Documents with R and Knitr*. 2nd ed. Boca Raton, Florida: Chapman; Hall/CRC. <https://yihui.org/knitr/>.
- . 2020. *Knitr: A General-Purpose Package for Dynamic Report Generation in R*. <https://CRAN.R-project.org/package=knitr>.