# Are Some Teachers Just "Meaner" than Others?

using data analysis to conquer our inherent bias

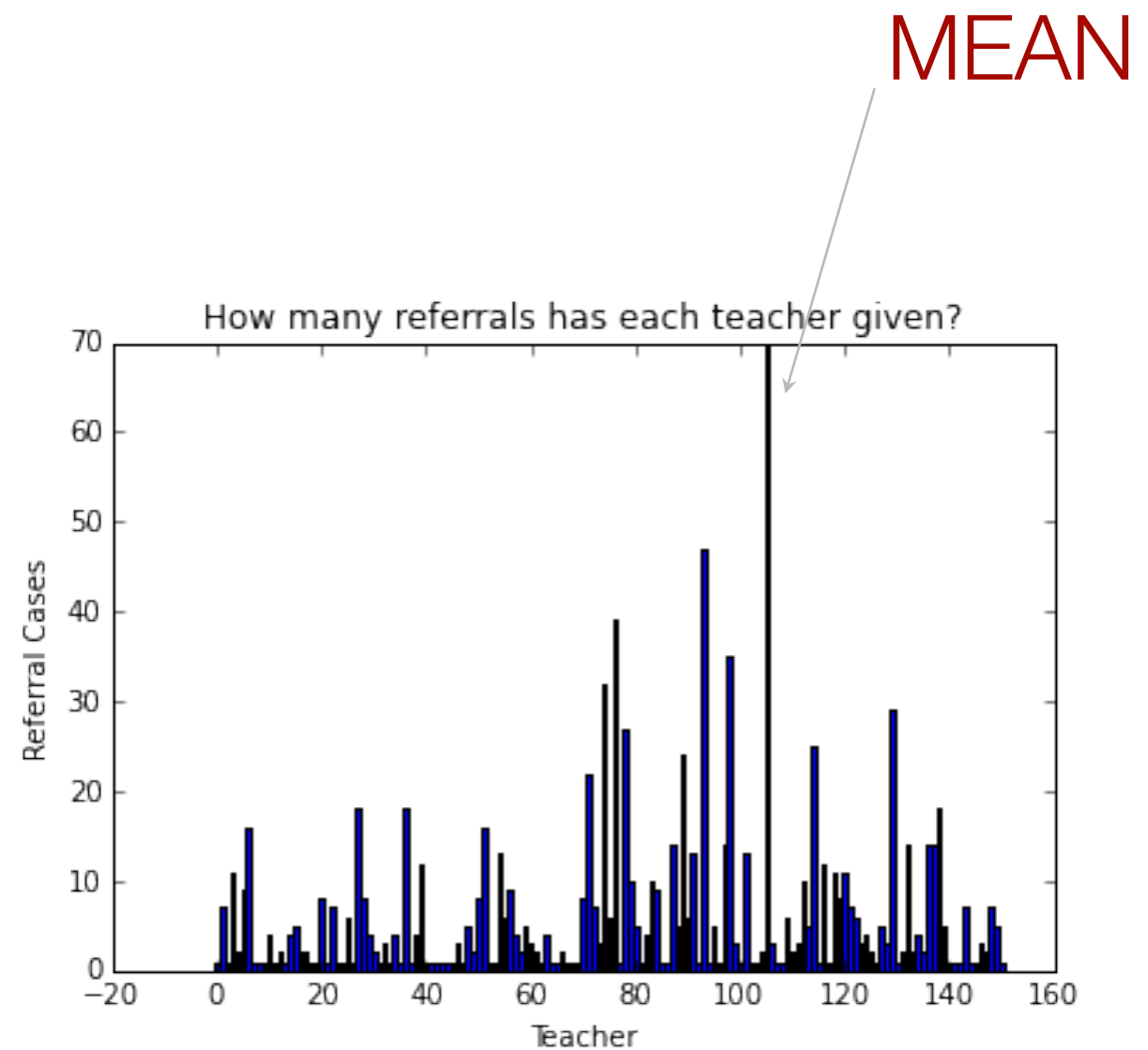By
Liz Izhikevich, Joanne Yeh, Siyang Wang

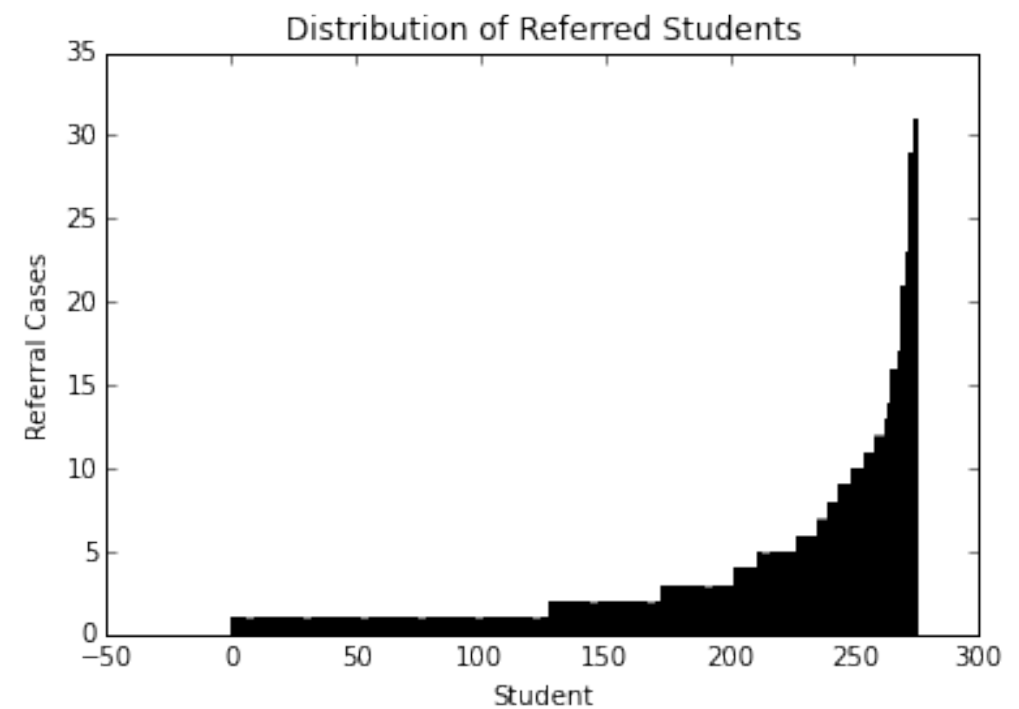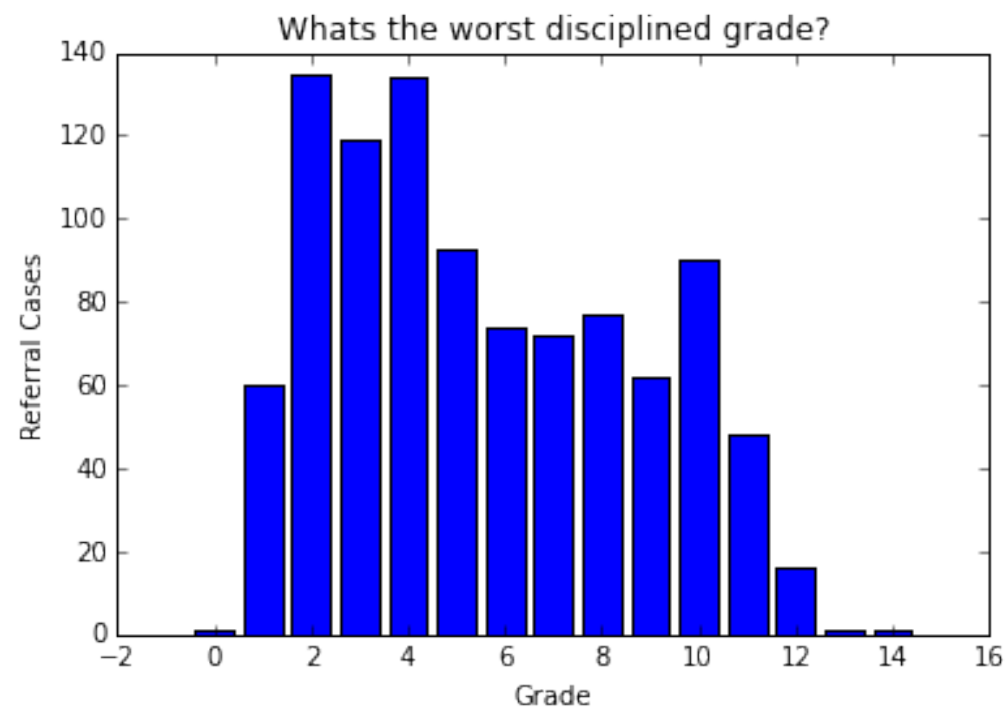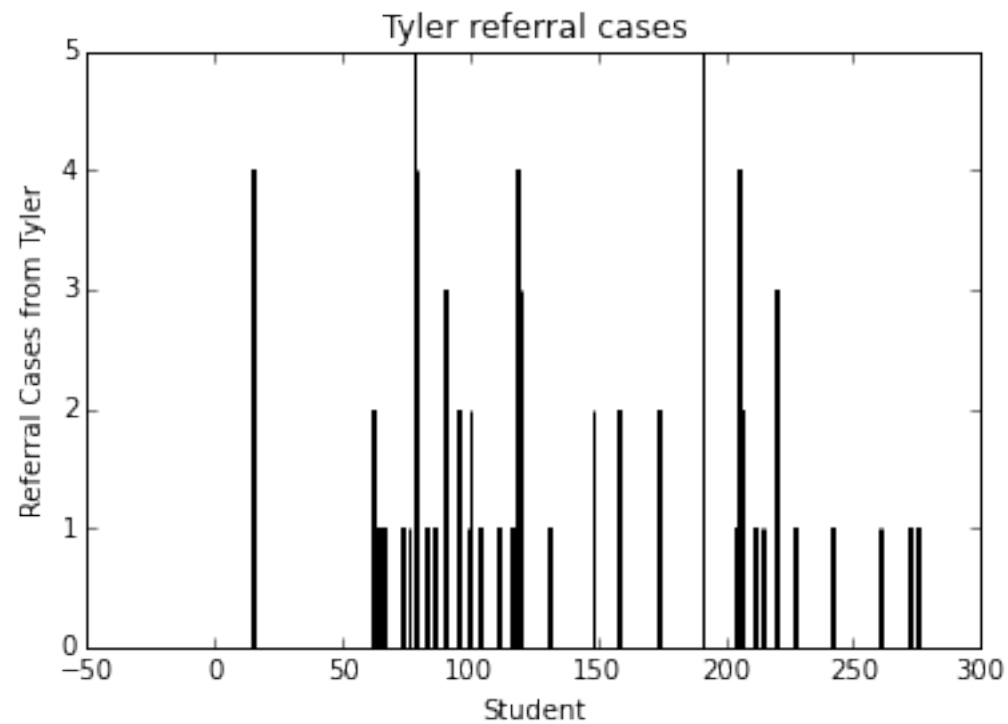# what makes us think teachers are mean?

# how can we use data science to prove?
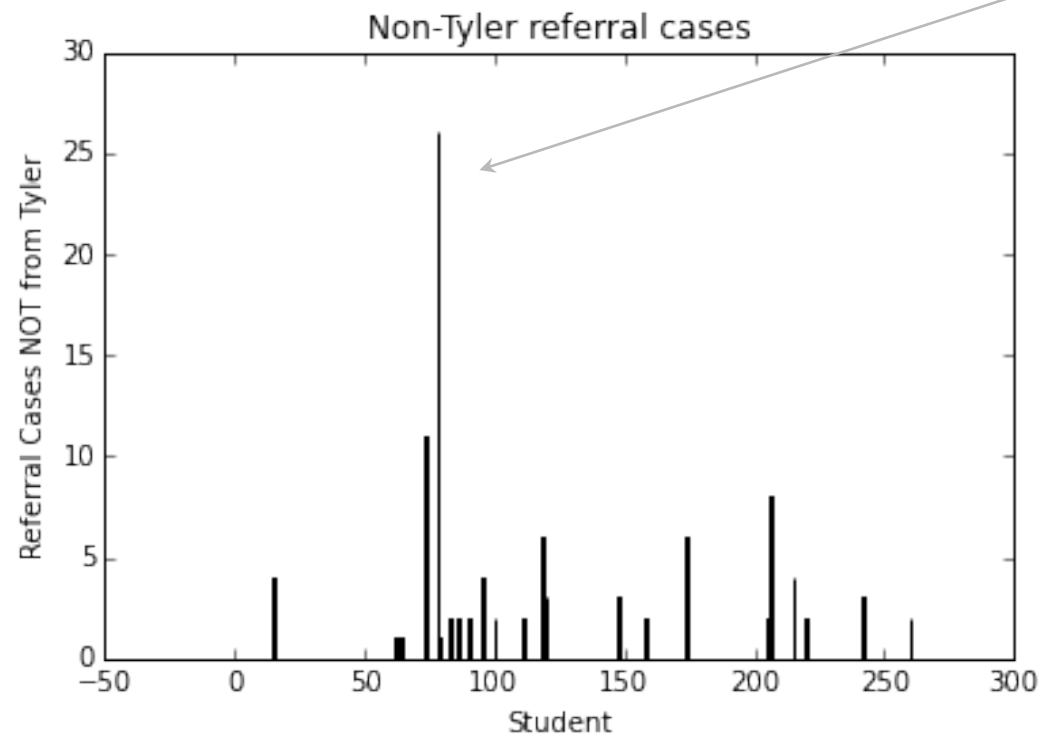
look at relative external data

# look at relative **internal** data
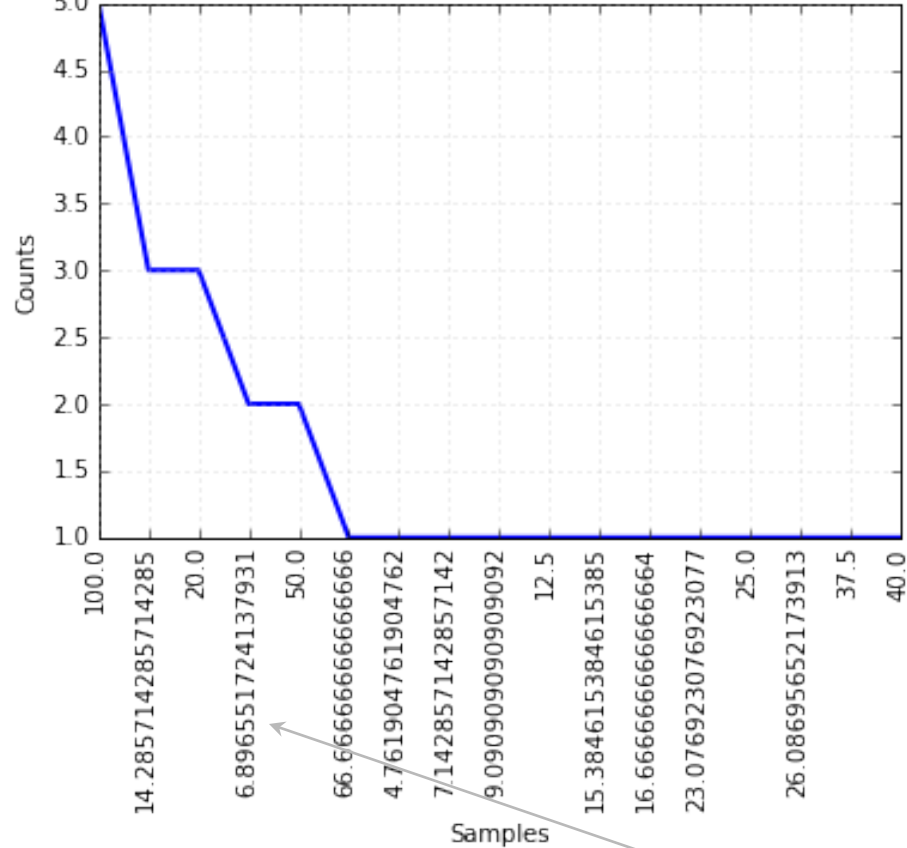


Tyler: top referral giver
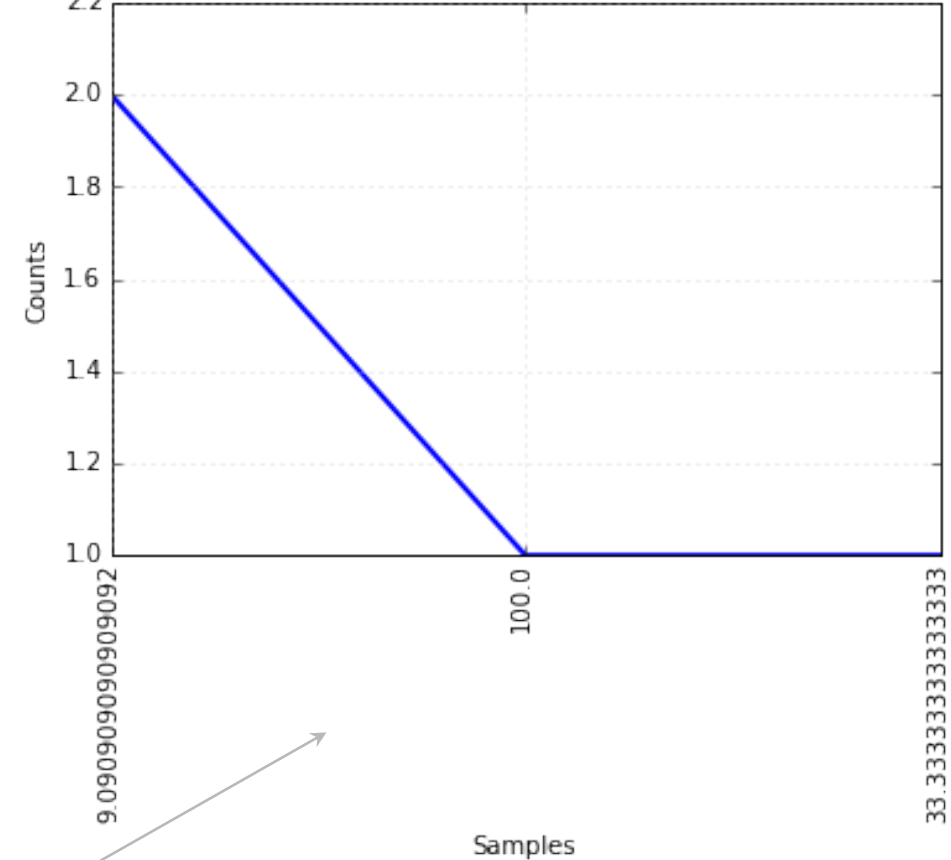
26 referrals NOT from her!

Teacher1: second top referral giver

Teacher2: median referral giver (6)

Which proportion of referrals recieved by a student were given by Ms.Naechia?

Which proportion of referrals recieved by a student were given by Ms.Crystal?

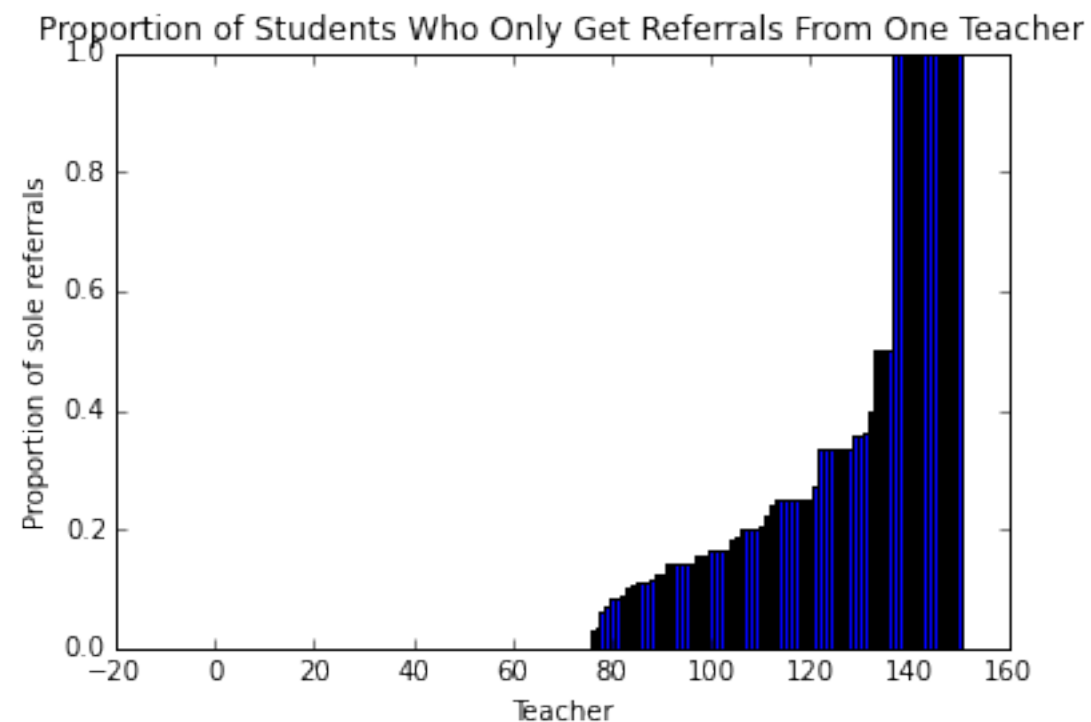difference?

# Lets look at the math:



Sole referral giving to student:
Ms.Crystal: 16.66%
Ms.Naechia: 10.6%
Ms.Tyler: 18.57%



Proportion of Students Who Only Get Referrals From One Teacher

The variance for the proportions is: 0.0852883388144697

# what does this all mean?

mean teachers only seem mean?

Teacher bias seems to be very minimal

Referral giving related to:

a) "Population Density" of Grade?
b) emotionally unstable students?

student solution?

referral type actions ⟶ petty



Introduce a fun "behavior" class for controlling emotions?

## conclusion: things to consider...

only analyzing Monarch
    -could be exceptional teachers

tested only one teacher vs all others

we hope we've changed your outlook
on that one teacher
you've been thinking about