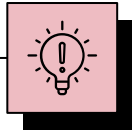
The background features a white grid pattern. In the top left, there is a solid pink square with a small white circle and a black dot. To its right are several horizontal black lines. In the top right, there is a large pink circle with diagonal lines. Below it is a solid teal square with a black dot. In the bottom right, there is a small pink circle with a black dot. A black wavy line is on the left side.

# Machine Learning & Abolitionism

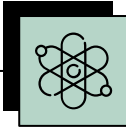
By Elliot Richardson

# Today's presentation:

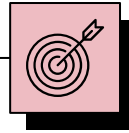
**What & why?**



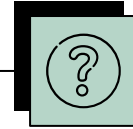
**How?**



**Results**



**Q&A**





# Targeting 101: Partisan scores

## Partisan score

Noun ▪ [ pah-r-tuh-zuhn, -suhn ] [ skawr, skohr ]

A prediction of someone's support for a particular political party in the form of a score between 1-100 that is generated by applying machine learning to both voter file and consumer data.



# Targeting 101: Partisan scores



## Your base

High scores (~70+)

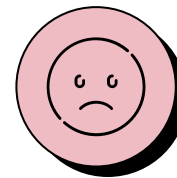
Reliable supporters,  
potential volunteers



## Toss-up

Medium scores (40-70)

Potentially persuadable,  
**majority of outreach**



## Opponents

Low scores (< 40)

Opposed to mission,  
keep it low-key

# What am I doing?

- Utilizing information a campaign might realistically have
  - Age, gender, race, location, voter registration, etc
- Predicting support for defunding police as proxy for abolitionism
  - i.e. Generating an “abolition score”

# Why am I doing it?

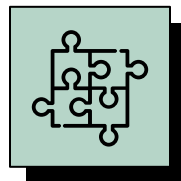
- Abolition doesn't line up perfectly with partisan ideology
  - i.e. GOP-leaning libertarians might be more supportive than moderate Democrats with relatives on the force

# **My approach:** Throw stuff at the wall



## **See what sticks**

Tried 10+ different types of models, evaluated, and then tuned the top four



## **Combine stickiness**

Ensembled the best tuned models to utilize their collective wisdom

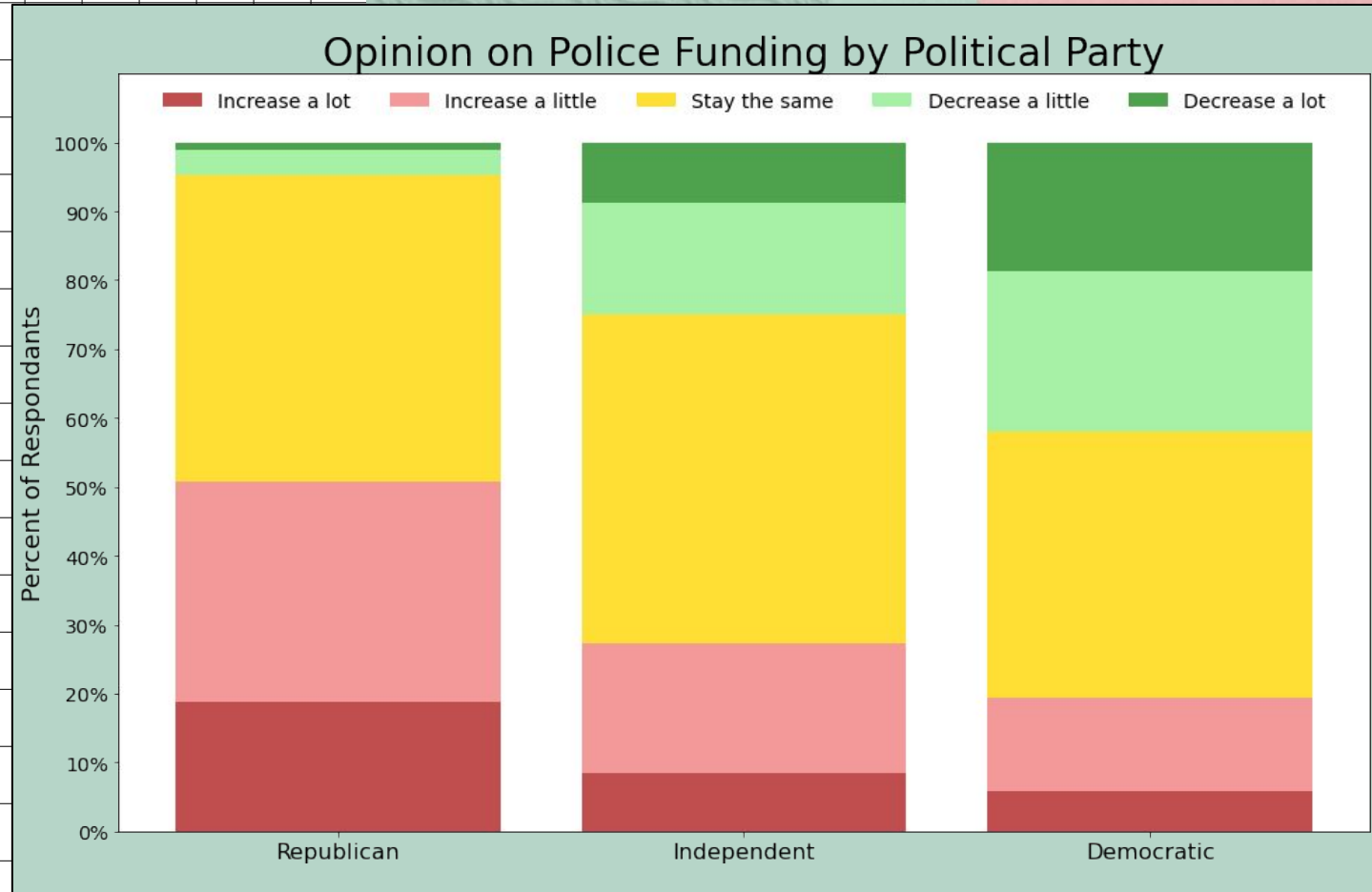
# Model performance



- Not great on either dataset
  - Favorability: Average error of  $\pm 30$  ( $R^2 = .2672$ )
  - Defund support: Average error of  $\pm 24$  ( $R^2 = .2325$ )
- Things to note:
  - Targeting firms have consumer data
  - Continuous / discrete & ordinal
  - Very low  $R^2$  scores are normal in social sciences

# Findings:

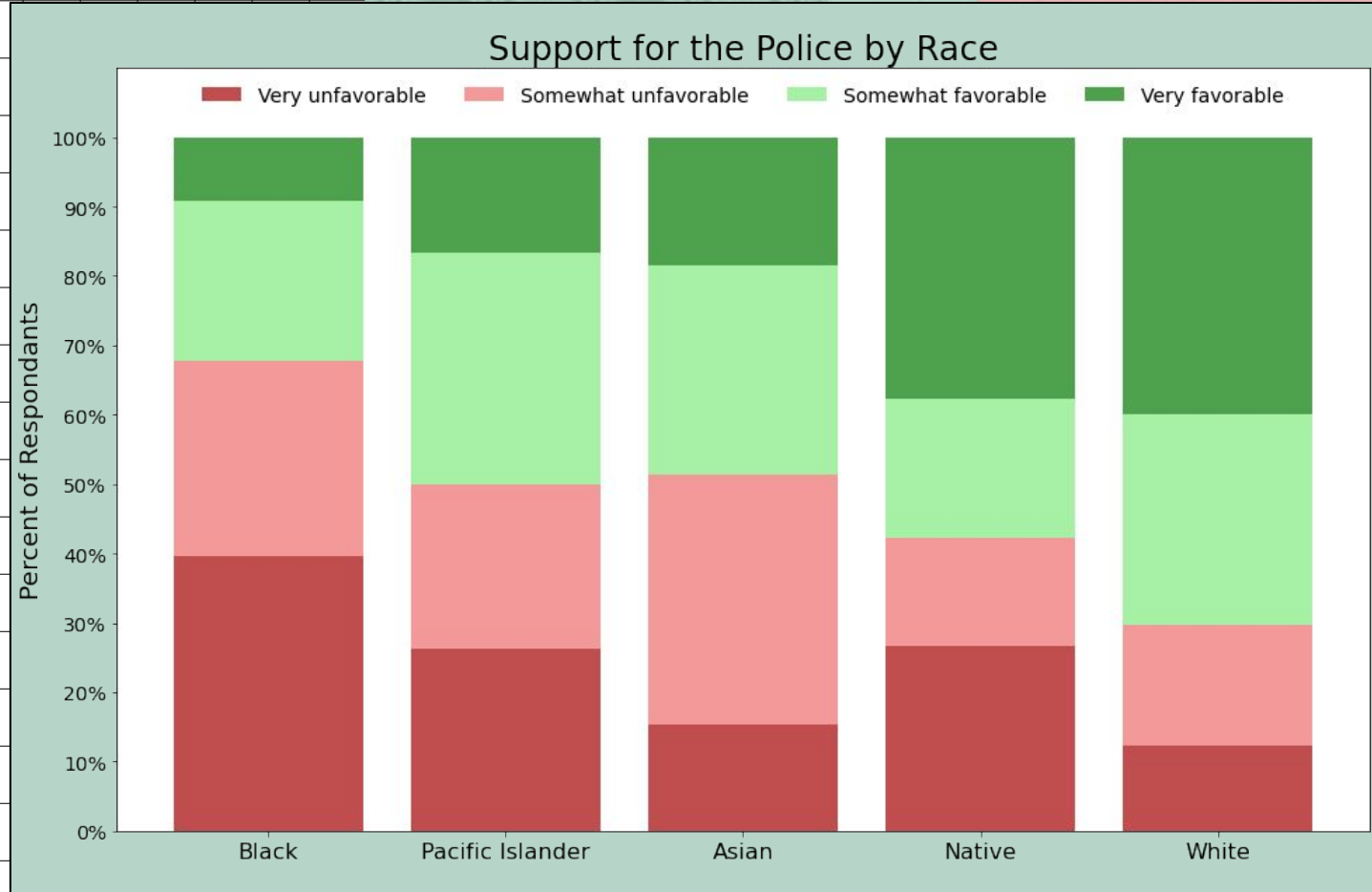
As expected, Dems support at highest rate, but still a minority





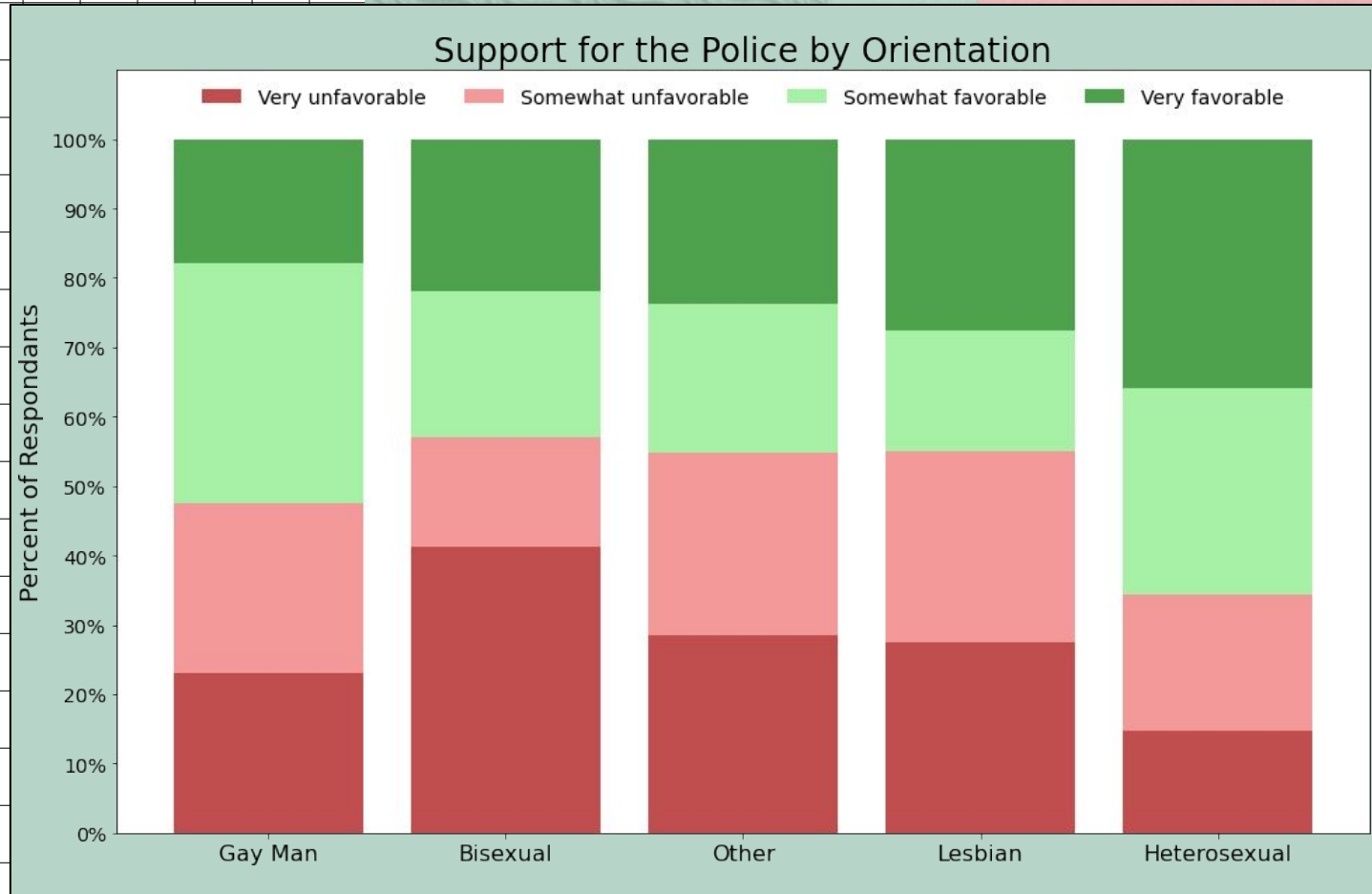
# Findings:

Marginalized folks have less favorable opinions of the police



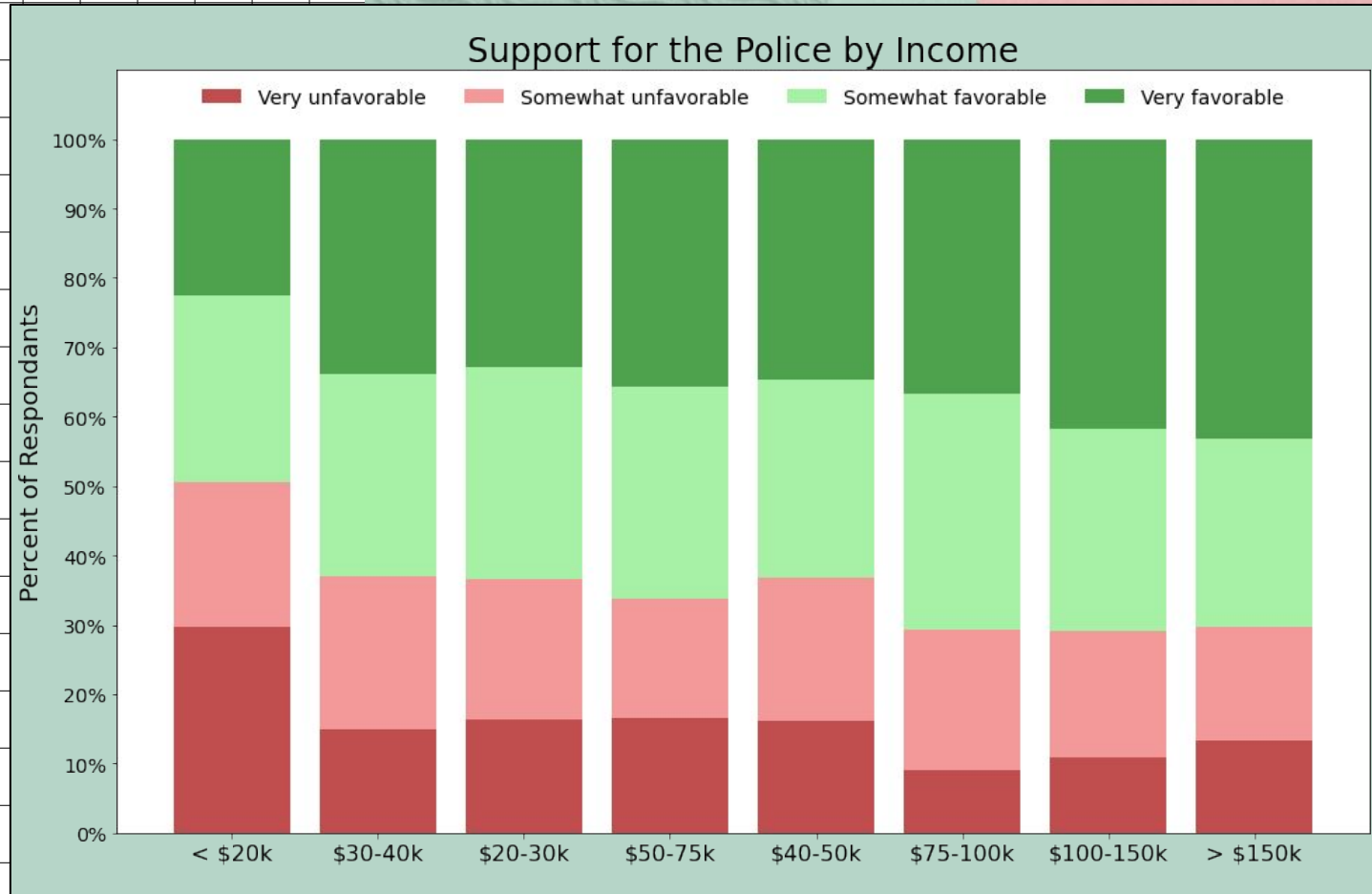
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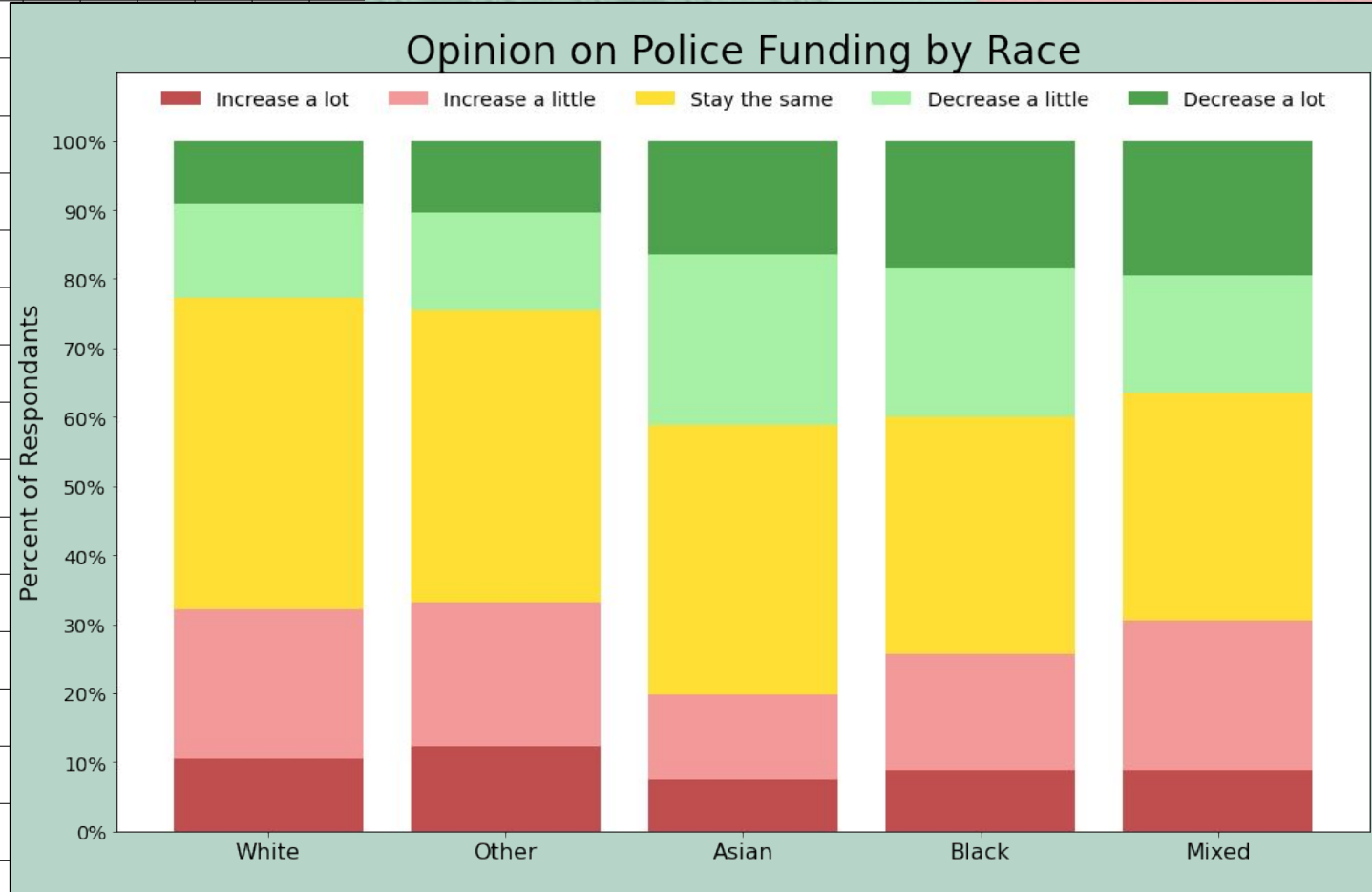
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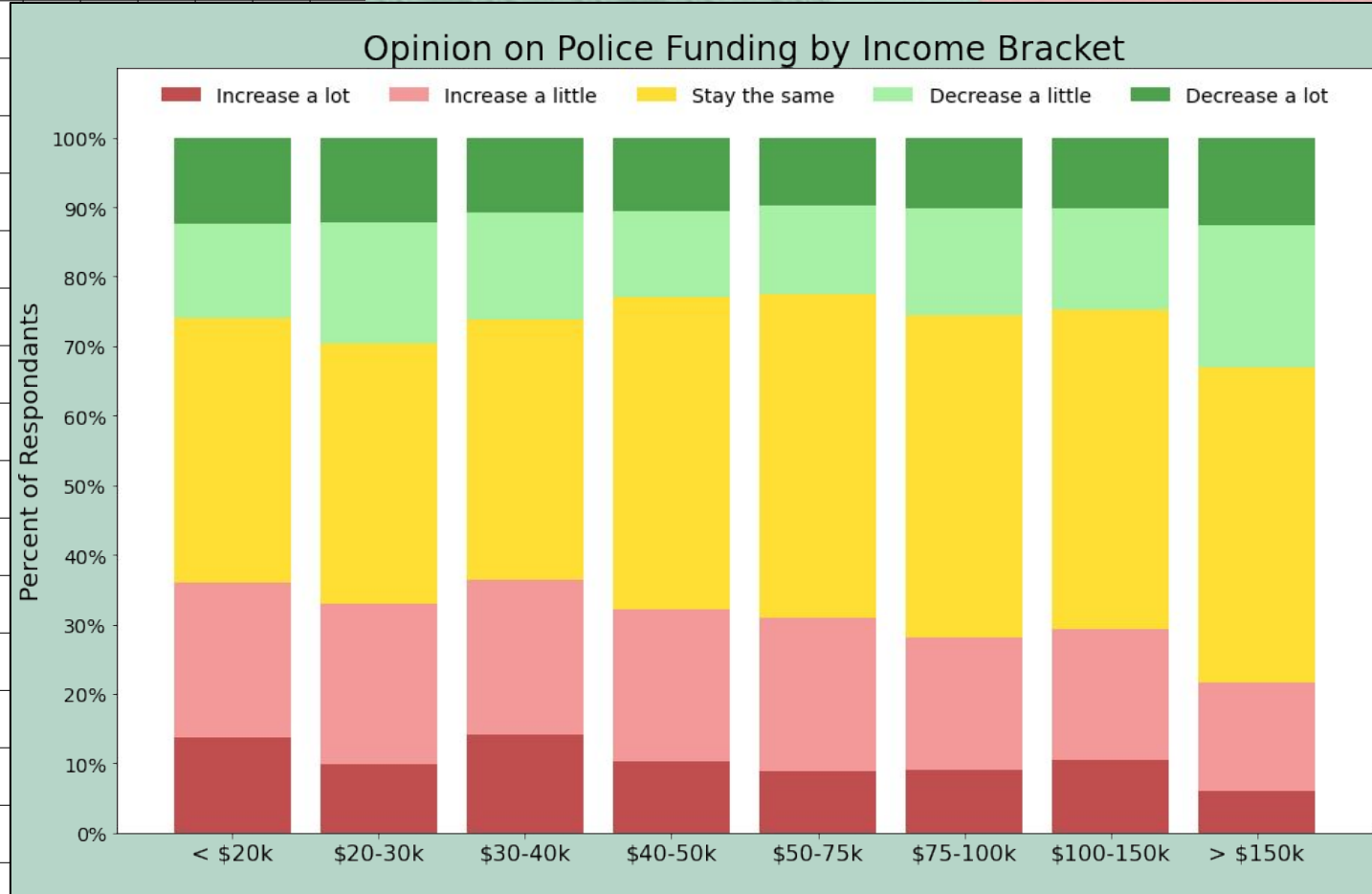
# Findings:

However,  
unfavorable  
opinion  $\neq$   
support for  
defunding



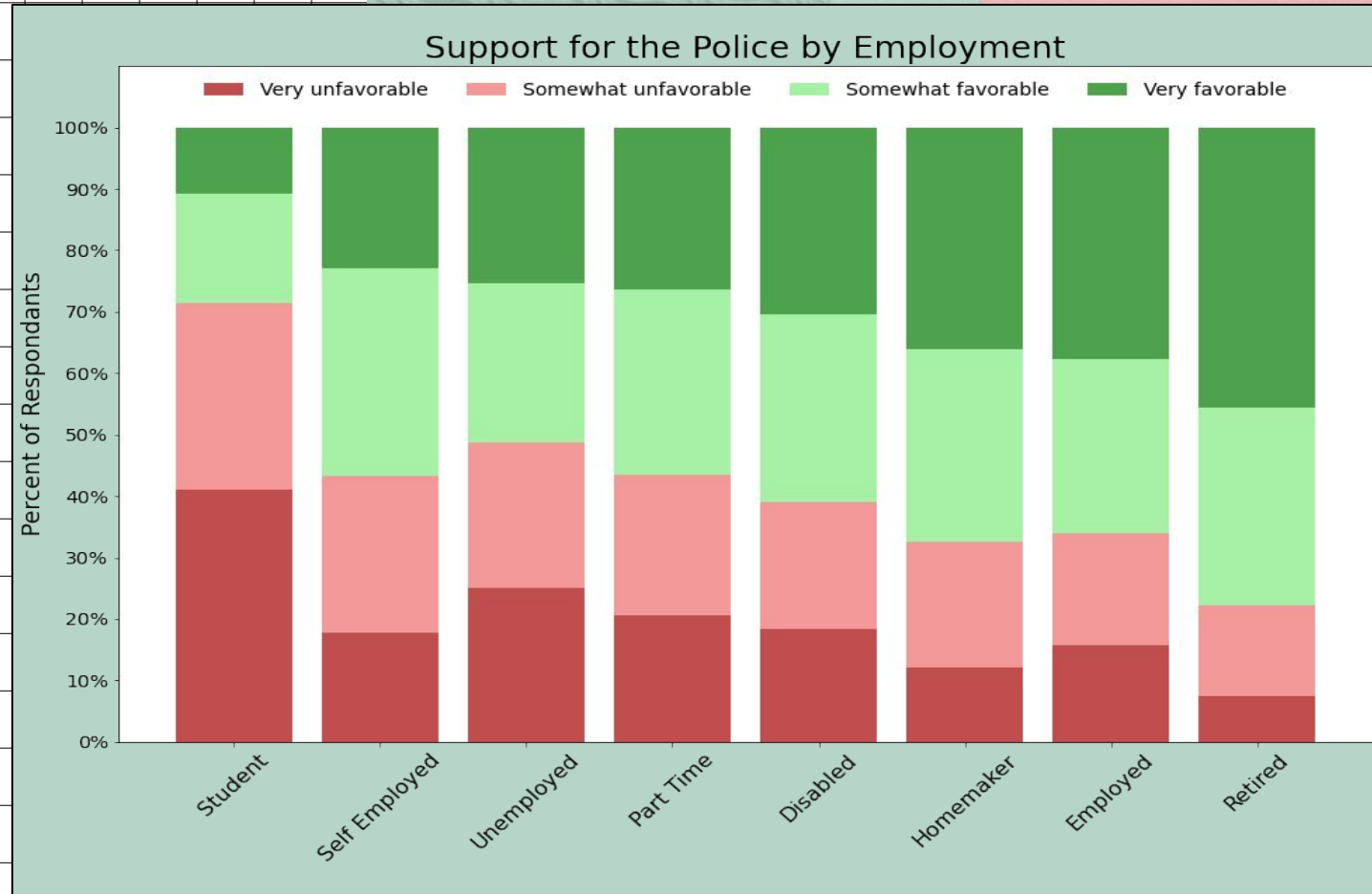
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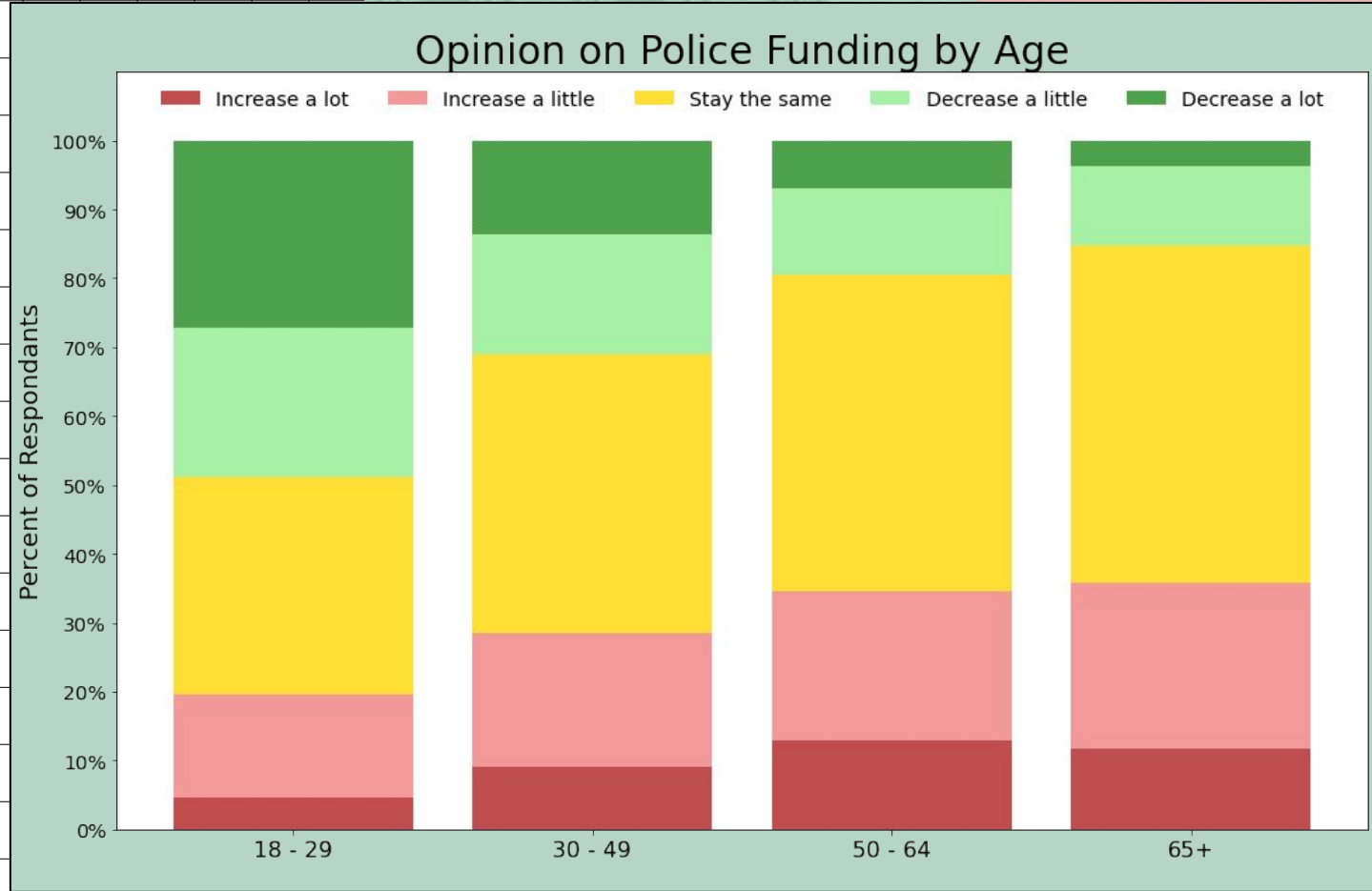
# Findings:

Youth and students will be the driving force of this movement



# Findings:

Youth and students will be the driving force of this movement



# Thank you!

Any questions?

