

# Racial Equity in Private: CATI versus Online Mode Effects on Attitudes Towards Police Reform

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## Question

Do we find mode effects in white Americans' views of police or police reform that could indicate social desirability bias?



# Social Desirability Bias

- Sensitive Questions and Response Editing
  - Explaining question sensitivity (Tourangeau and Yan 2007):
    - Intrusive
    - Threat of disclosure
    - **Socially undesirable**
      - Ex: Drug use, sexual behavior, voting history, **race**, etc.
  - Survey mode and sensitivity: CATI > Online (Kreuter and Tourangeau 2008; Groves et al. 2009)
- Race, Public Policy, and Social Desirability Bias
  - Race of interviewer effects (Hatchett and Schuman 1975)
  - Mode effects with race-related public policy questions (Krysan 1998; Krysan and Couper 2003)
  - New questions about race for a new context (Moberg et al. 2019)



# Hypothesis

- (NULL)  $H_0$ : No mode effects.
- (SOCIAL DESIRABILITY)  $H_1$ : White online participants will be less likely to exhibit favorable views of the police *and* support pro-law enforcement positions on police reform.



# Survey Design

- Probability-based sample of 335 registered voters in Taylor, Michigan
- Mixed mode: Text to web, then CATI if no response
  - CATI: n=225
  - Online: n=110
- Non-experimental design: Respondents self-selected survey mode
- Fielded September 13-19, 2021
- Survey sponsor: ACLU of Michigan



## Survey Context

- Taylor, MI: A Detroit suburb of ~60,000 people
- Approximately 67% white, 20% Black
- Moderate household income and lower educational attainment
- 2020 vote: Biden 52%, Trump 46%
- General election for Mayor (non-partisan office) in November 2021



## Police Misconduct in Taylor

- Incidents of police violence against unarmed Black men in 2016 and 2020
- Officers were not disciplined in either case
- Increased calls for reform
- Majority of voters in our survey identify racial justice (63%) as a top/high priority, with a smaller number prioritizing police reform (50%)



# Candidates on Police and Police Reform

- Michigan State Rep. Alex Garza — endorsed by the Police Officers Association of Michigan
- City Councilman Tim Woolley — emphasized military background and support for law enforcement
- **Key point:** Both mayoral candidates hold generally positive attitudes about the Taylor Police Department, though Garza supported reforms Woolley did not.

“I want people to feel safe here. We have a great police department, but there are instances where I have been displeased.”  
–Alex Garza

“Chief Blair does a good job. We’ve had many conversations and I know he wouldn’t put up with [excessive police violence].” –Tim Woolley





# Dependent Variables

- **(POLICE FAVORABILITY):** Now please tell me whether your opinion of each of the following individuals or groups is favorable or unfavorable. Here is the first one. Is your opinion of *Taylor Police Department* very favorable, somewhat favorable, somewhat unfavorable, very unfavorable, or don't you know enough to say?
- **(POLICE REFORM):** Alex Garza has pledged transparency and accountability by making police officers' disciplinary records publicly available when they are considered for new jobs or promotions within the department, and when the officer leaves the city's police force.

Tim Woolley says he will not make disciplinary records public because he says releasing police officers' discipline records could lead to poor job performance and/or increased liability to the City.

Which candidate do you agree with more?

Definitely Alex Garza  
Probably Alex Garza  
Probably Tim Woolley  
Definitely Tim Woolley  
(DON'T READ) Don't know  
(DON'T READ) REFUSE



# Summary Statistics by Survey Mode: Dependent Variables

Survey Mode	Mean		Standard Deviation	
	CATI	Online	CATI	Online
Police Favorability (binary)	0.76	0.76	0.43	0.43
Police Favorability	3.7	3.8	1.4	1.3
Police Reform (binary)	0.62	0.70	0.49	0.46
Police Reform	2.8	3.1	1.3	1.1



# Methodology

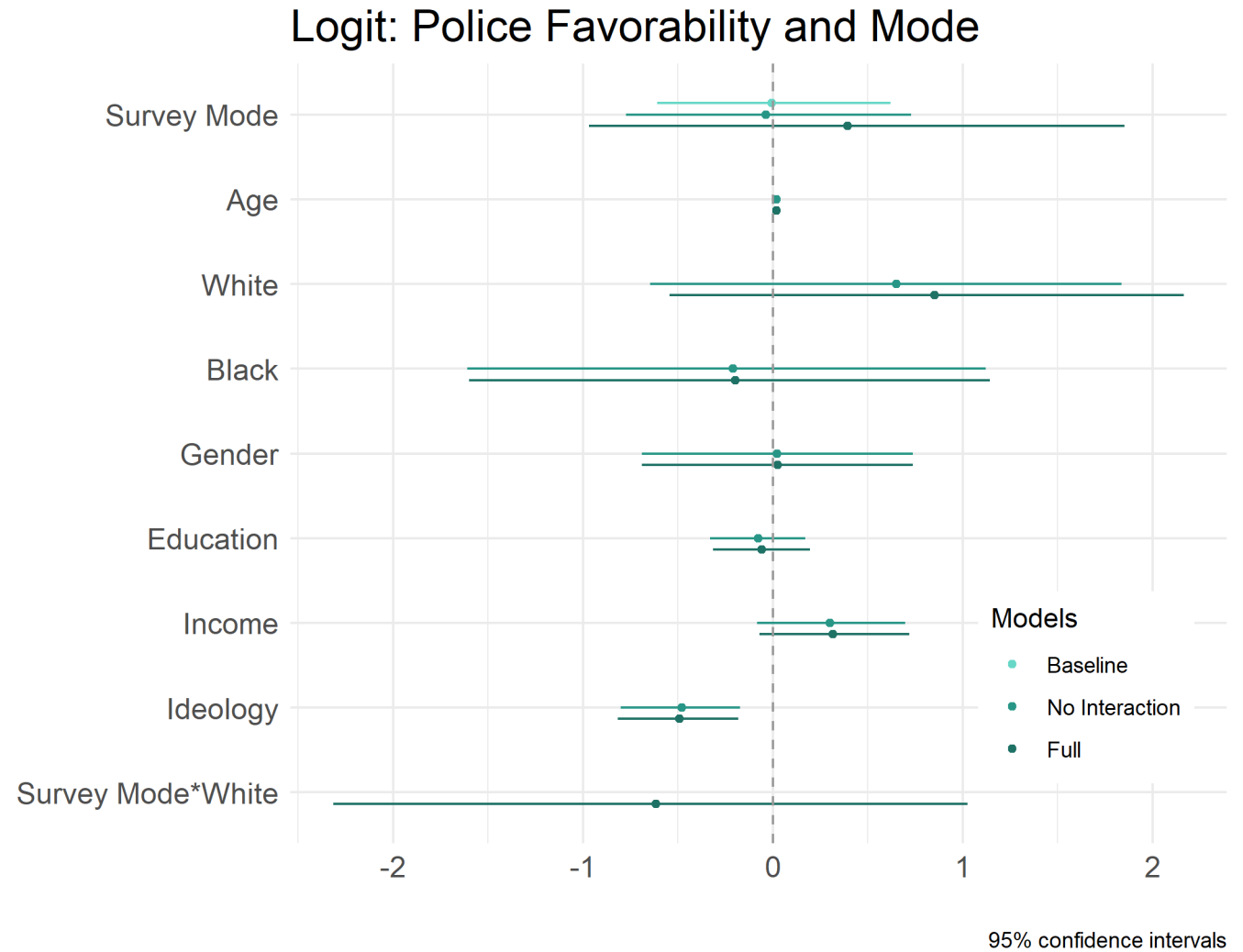
- Pre-Processing
  - Imbalance and overlap issues detected
  - Matching Method: Mahalanobis Distance Matching
    - Preferred over propensity-score matching (King and Nielsen 2019)
- Modeling Approach
  - Logit:
    - Police favorability: Favorable vs. unfavorable
    - Police reform: Definitely/probably Alex Garza (REFORM) vs. definitely/probably Tim Woolley (PRO-POLICE)
  - Ordered logit:
    - Police favorability: 5-point scale (very favorable, somewhat favorable, neutral, somewhat unfavorable, very unfavorable)
    - Police reform: 4-point scale (definitely Alex Garza, probably Alex Garza, probably Time Woolley, definitely Tim Woolley)
- Unmatched and matched datasets modeled



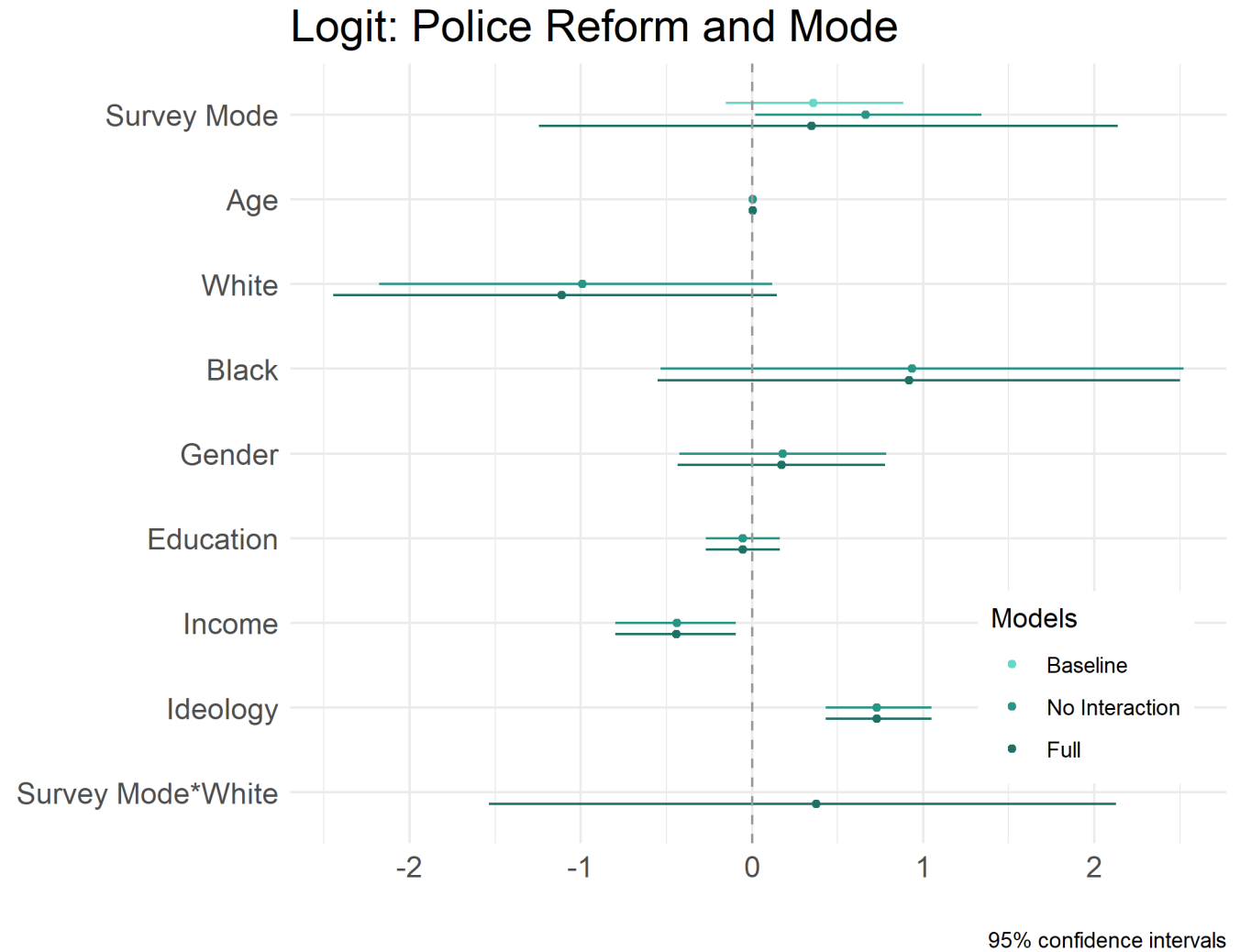
# Results



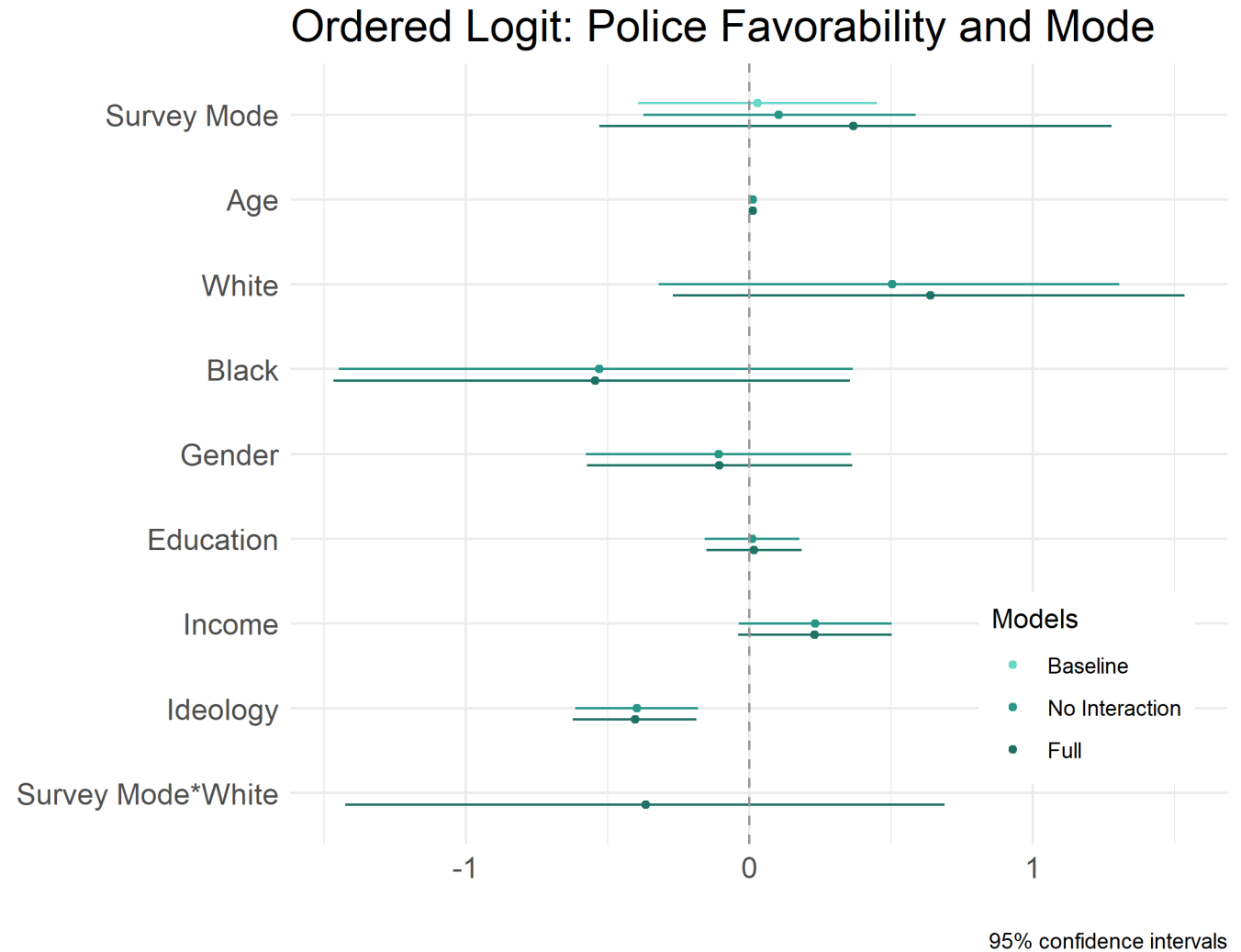
- Survey mode is not a significant predictor of police favorability



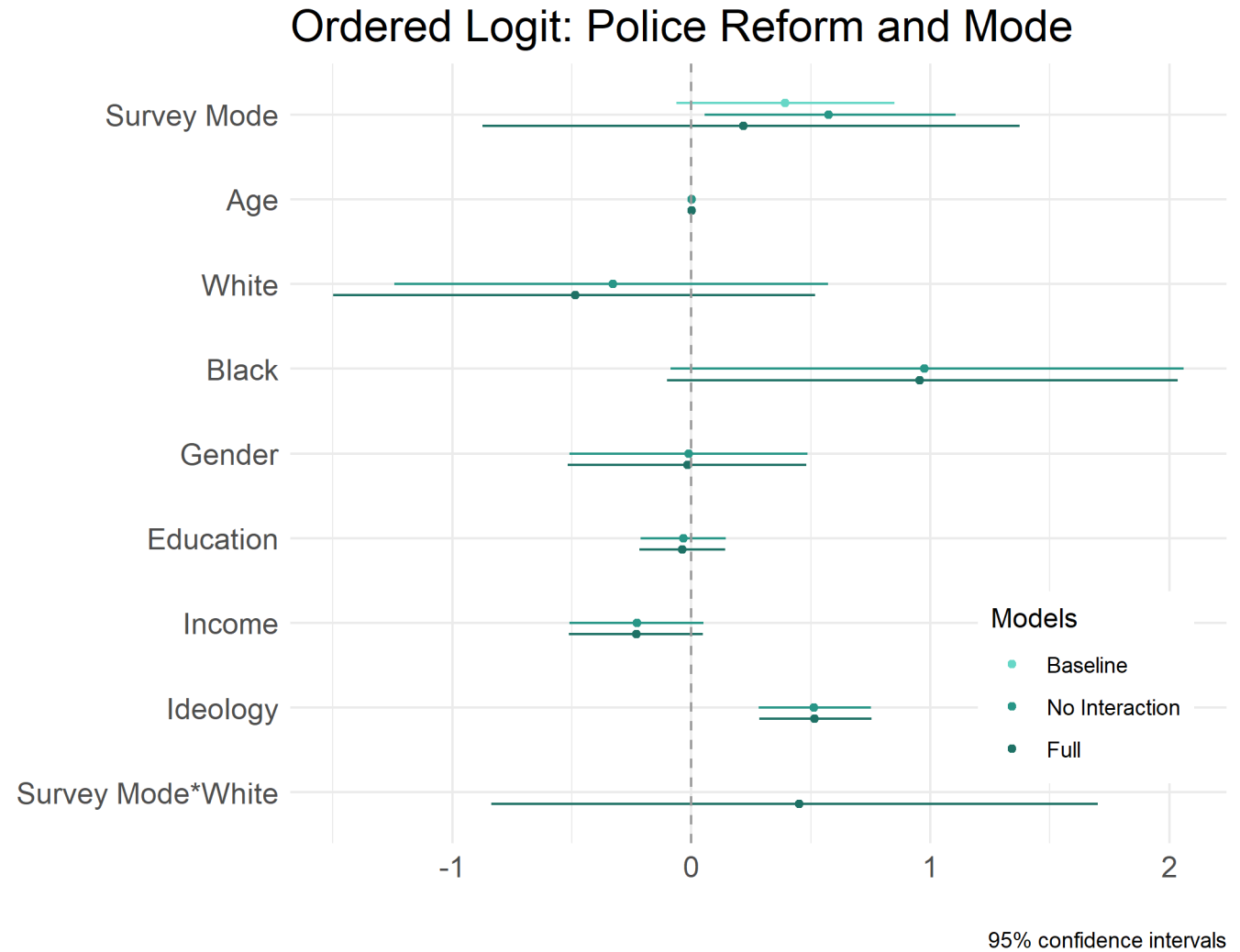
- Survey mode fails to consistently achieve statistical significance



- Similar to the binary models of police favorability, survey mode is not a significant predictor of police favorability



- Survey mode fails to consistently achieve statistical significance, echoing the binary models of police reform





## Summary

- Survey mode is not a significant predictor of attitudes towards police and police reform
- Ideology consistently predicts expressed attitudes



# Future Research

- Missing data
  - “No single approach to measuring or adjusting for mode differences” (Olson et al. 2021)
    - Coverage
    - **Nonresponse**
    - Measurement
- Experimental design
- More questions on police reform and contemporary race-related policies
- New context: How might local attitudes and candidates shape our findings?



# Thank you

- Ethan Santangelo: [ethan@ewhiteresearch.com](mailto:ethan@ewhiteresearch.com)
- Chris Campbell: [chris@ewhiteresearch.com](mailto:chris@ewhiteresearch.com)
- Emma White: [emma@ewhiteresearch.com](mailto:emma@ewhiteresearch.com)



# Appendix



# Independent Variables

- **Survey Mode (0, 1):** CATI, online
- **White (0, 1):** Non-white, white
- **Black (0, 1):** Non-Black, Black
- **Age (interval):** Years of age
- **Education (ordinal, 1-6):** Grade 1-11; high school graduate/GED; some college; technical/vocational/assoc./2-year degree; college graduate/bachelors/4-year degree; post graduate/Masters/PhD/JD/MD
- **Ideology (ordinal, 1-5):** Very conservative, somewhat conservative; middle of the road; somewhat liberal; very liberal
- **Gender (0, 1):** Male, female
- **Income\* (ordinal, 1-5):** <20,000; 20,000-30,000; 30,000-50,000; 50,000-75,000; 75,000-100,000
- **Vote Choice Index (VCI), 3-category\* (ordinal, 1-3):** Likely Republican, independent, likely Democrat
  - Ideology employed in primary models, with VCI used in robustness checks

\*Modeled variable provided by Catalist



# Summary Statistics: Dependent Variables

Sample	Mean		Standard Deviation	
	Unmatched	Matched	Unmatched	Matched
Police Favorability (binary)	0.76	0.82	0.43	0.39
Police Favorability	3.7	3.8	1.4	1.2
Police Reform (binary)	0.64	0.68	0.48	0.47
Police Reform	2.9	3.0	1.2	1.2



# Summary Statistics: Independent Variables

Sample	Mean		Standard Deviation	
	Unmatched	Matched	Unmatched	Matched
Survey Mode	0.33	0.5	0.47	.50
Age	51	52	16	15
Education	3.7	3.7	1.4	1.3
Ideology	3.9	3.7	1.1	1.1
Gender	0.56	0.62	0.50	0.49
Income	3.1	3.3	0.89	0.82
VCI	2.3	2.4	0.74	0.74



# Summary Statistics by Survey Mode: Independent Variables, Unmatched

Survey Mode	Mean		Standard Deviation	
	CATI	Online	CATI	Online
Age	52	50	16	15
Education	3.7	3.6	1.4	1.4
Ideology	2.9	2.9	1.1	1.1
Gender	0.53	0.61	0.53	0.49
Income	3.0	3.2	0.89	0.88
VCI	2.3	2.3	0.75	0.70



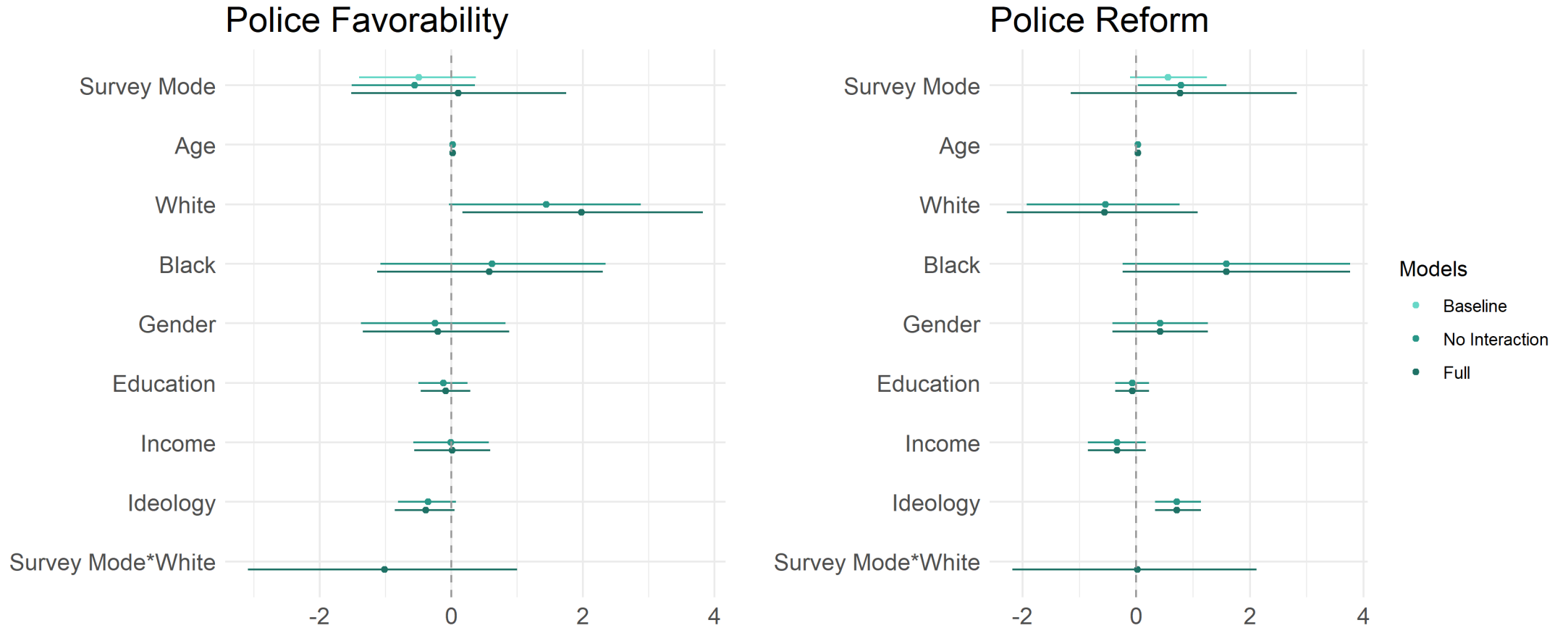


# Summary Statistics by Survey Mode: Independent Variables, Matched

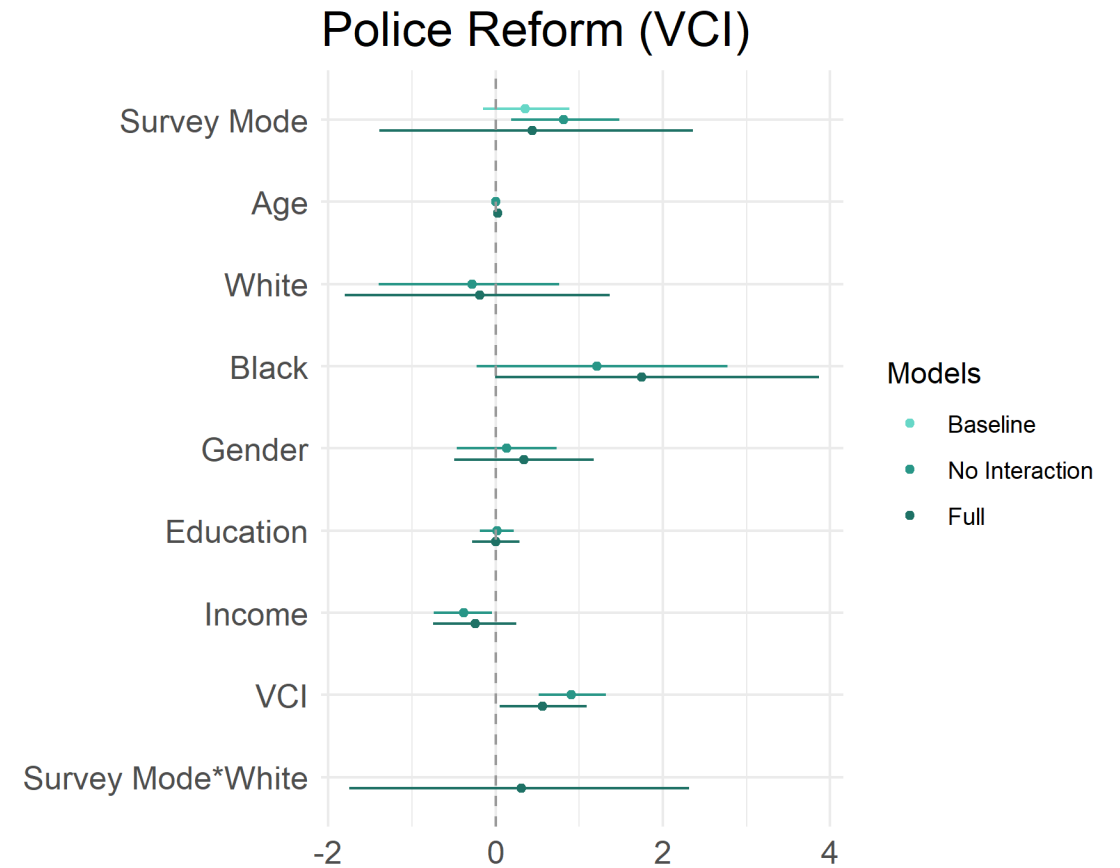
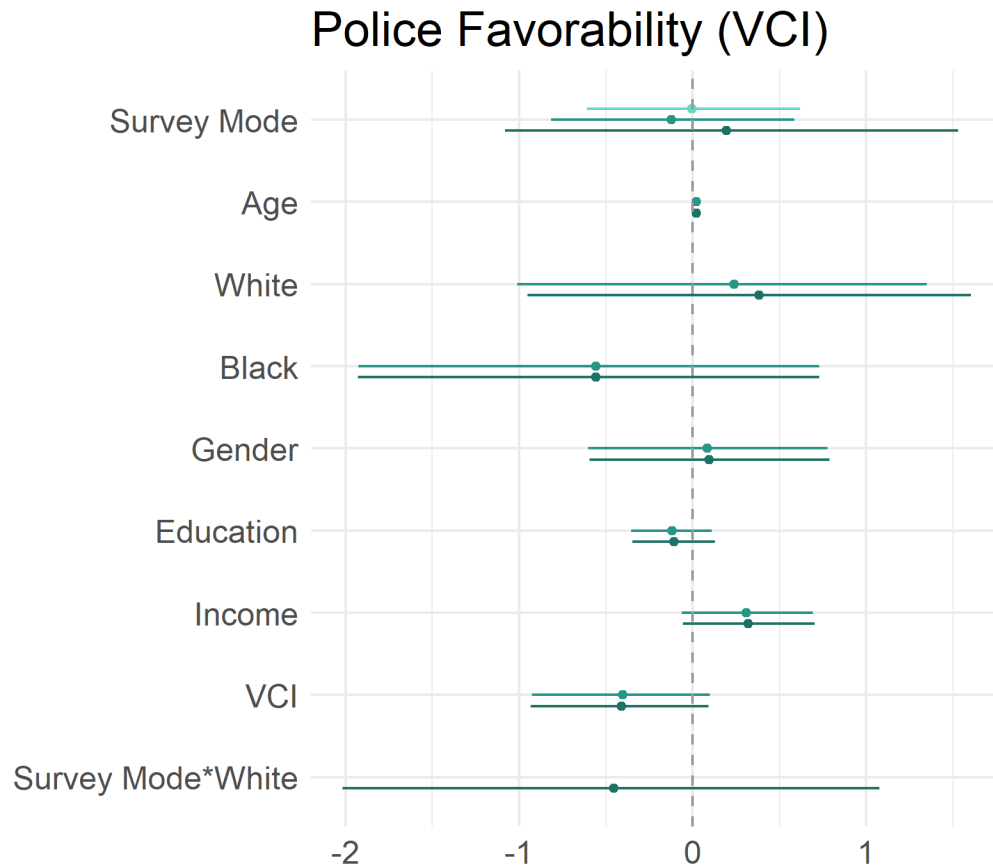
Survey Mode	Mean		Standard Deviation	
	CATI	Online	CATI	Online
Age	51	51	14	15
Education	3.7	3.7	1.3	1.4
Ideology	3	3	1.1	1.1
Gender	0.62	0.61	0.49	0.49
Income	3.3	3.3	0.78	0.86
VCI	2.4	2.3	0.76	0.72



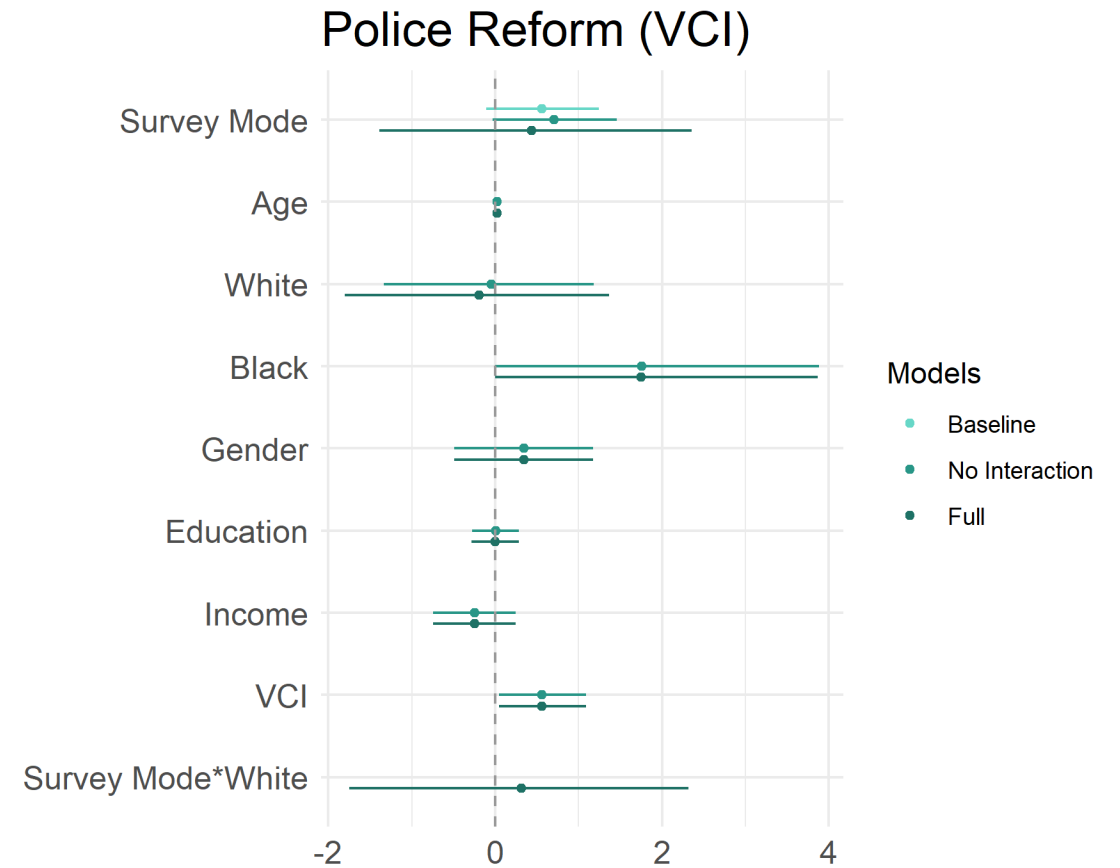
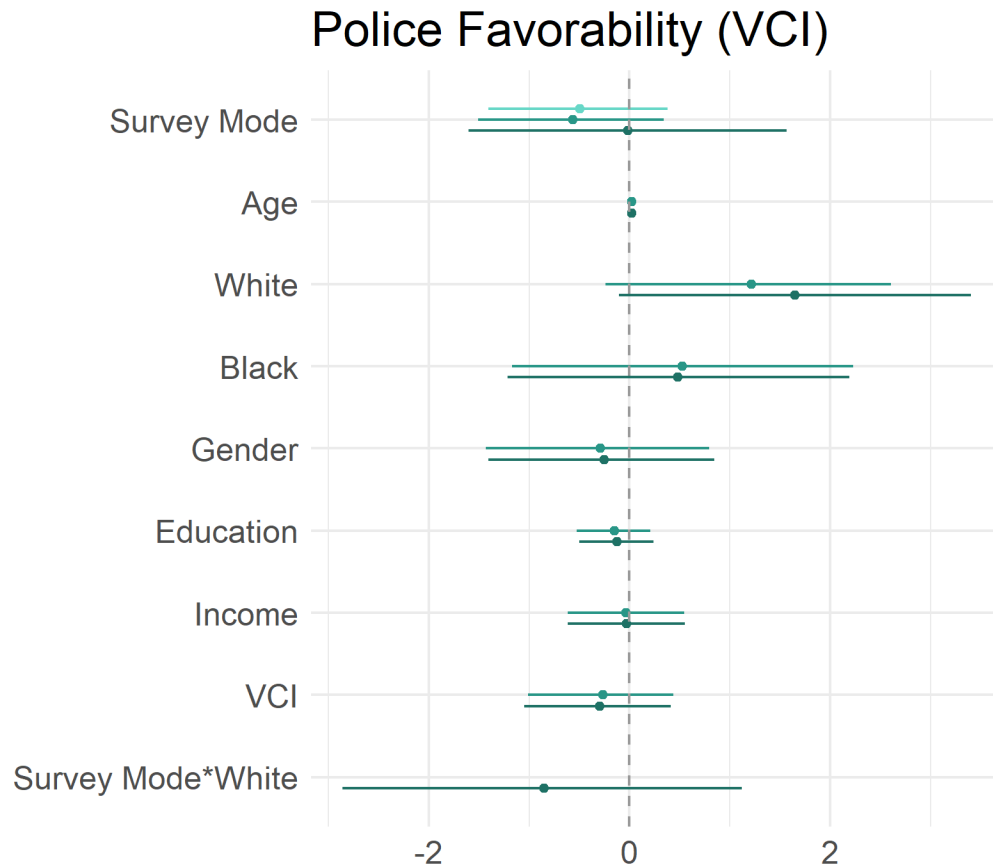
# Matched Logit



# Unmatched Logit: VCI



# Matched Logit: VCI

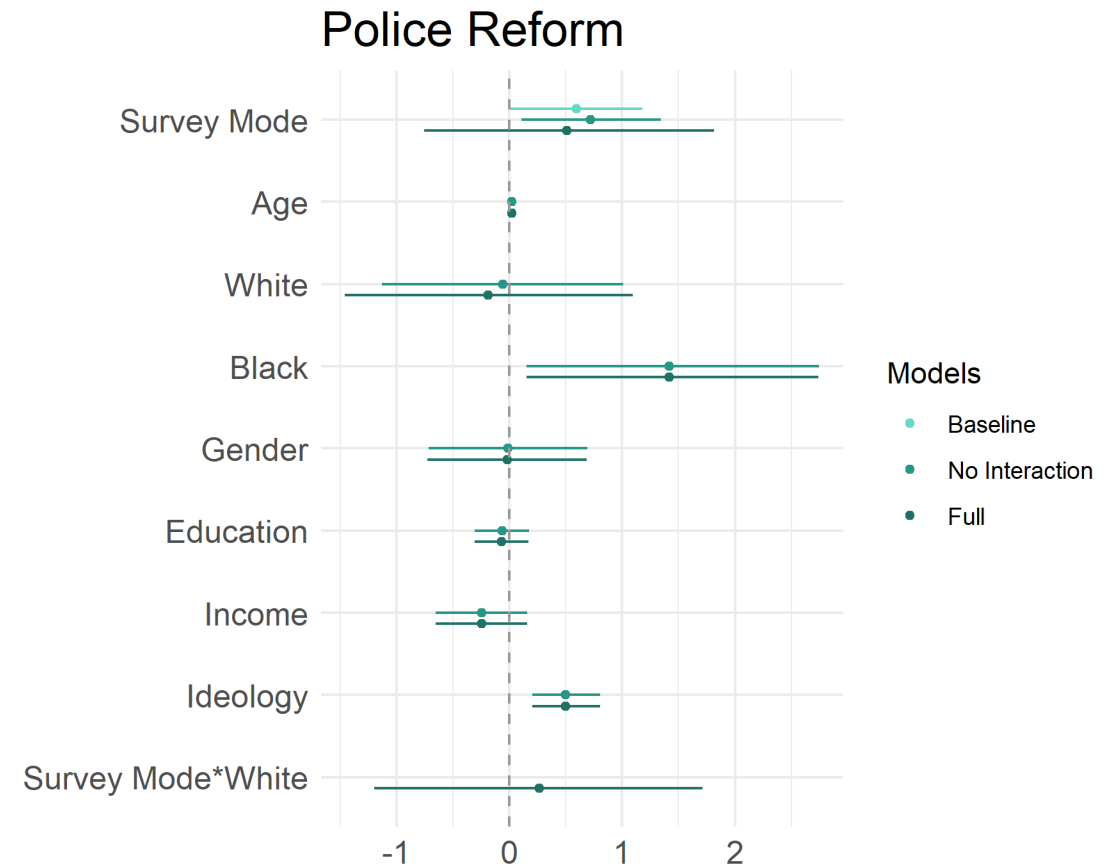
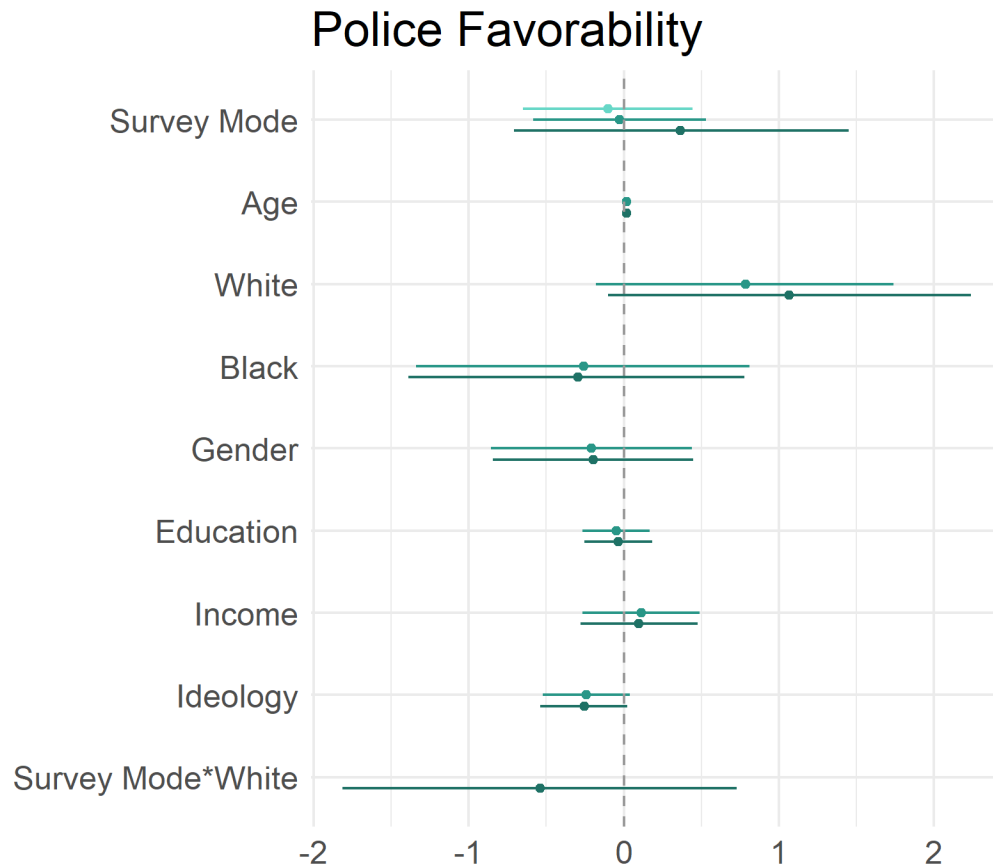


Models

- Baseline
- No Interaction
- Full



# Matched Ordered Logit

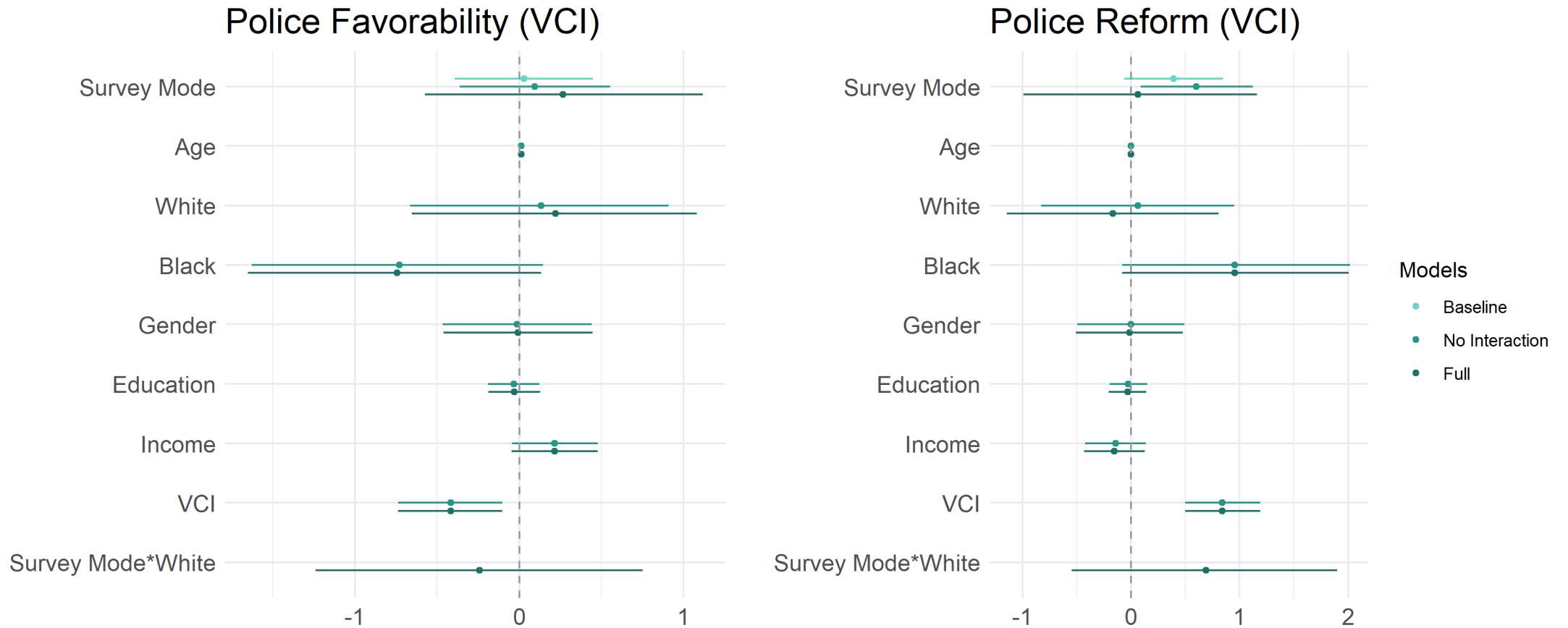


Models

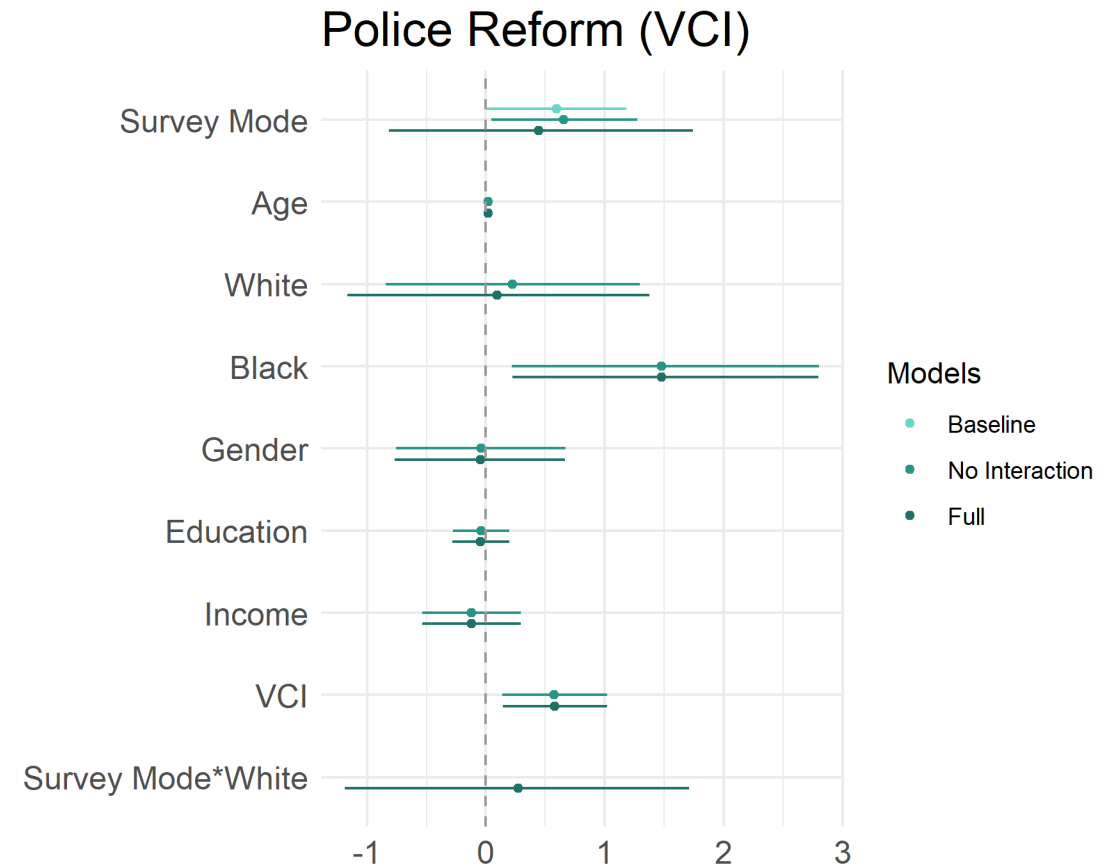
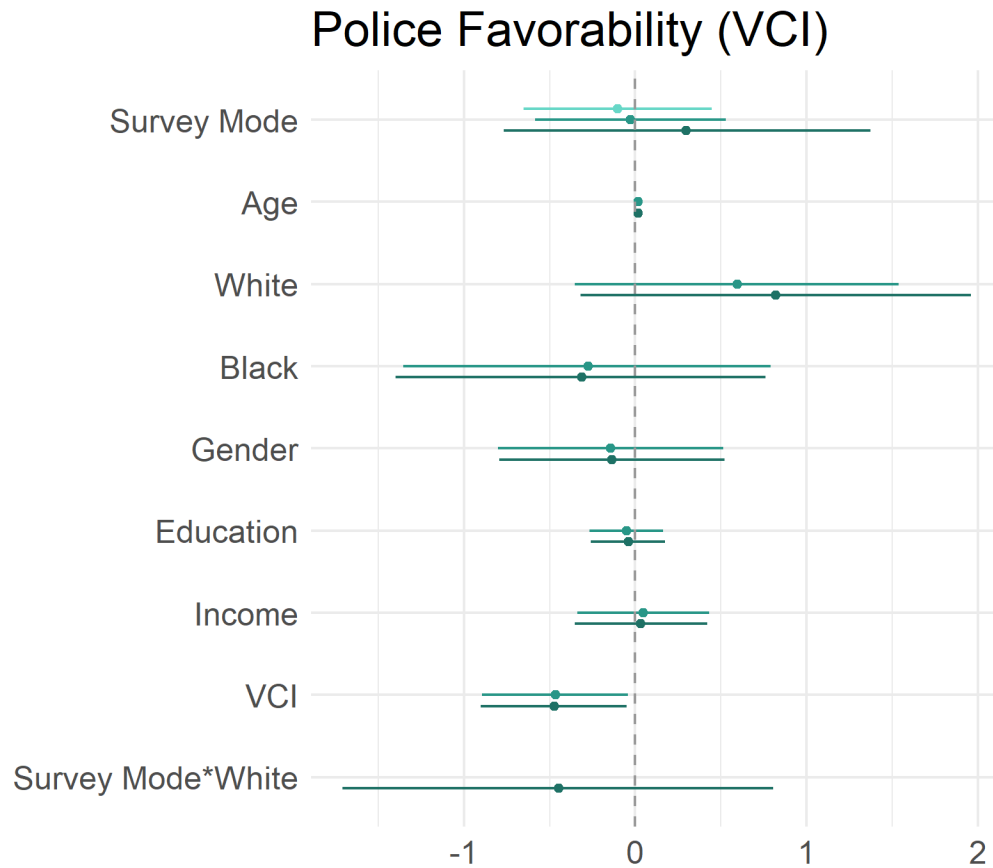
- Baseline
- No Interaction
- Full



# Unmatched Ordered Logit: VCI



# Matched Ordered Logit: VCI



Models

- Baseline
- No Interaction
- Full



# Logit AIC and BIC: Police Favorability

Model	Baseline	No Interaction	Interaction	No Interaction & VIC	Interaction & VIC
<b>AIC</b>					
Unmatched	289	229	231	251	253
Matched	133	137	138	139	140
<b>BIC</b>					
Unmatched	296	260	265	282	287
Matched	139	163	167	165	169





# Logit AIC and BIC: Police Reform

Model	Baseline	No Interaction	Interaction	No Interaction & VIC	Interaction & VIC
<b>AIC</b>					
Unmatched	382	281	282	294	295
Matched	202	178	180	187	189
<b>BIC</b>					
Unmatched	390	312	318	326	331
Matched	208	205	211	215	220



# Ordered Logit AIC and BIC: Police Favorability

Model	Baseline	No Interaction	Interaction	No Interaction & VCI	Interaction & VCI
<b>AIC</b>					
Unmatched	940	769	771	827	829
Matched	497	492	493	490	492
<b>BIC</b>					
Unmatched	959	812	818	871	876
Matched	513	530	534	528	533



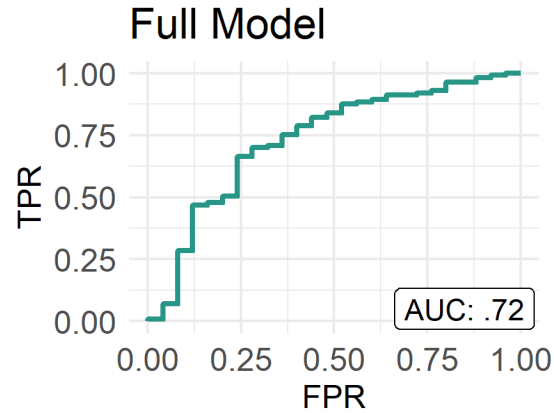
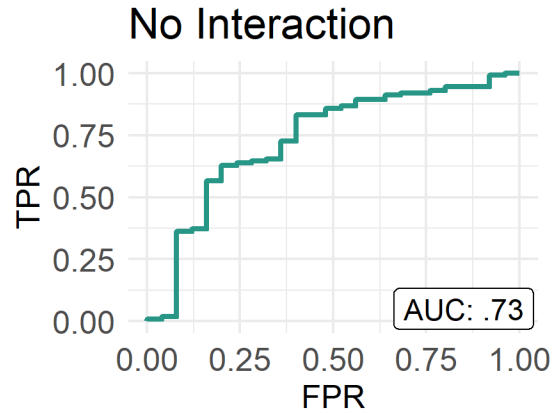
# Ordered Logit AIC and BIC: Police Reform

Model	Baseline	No Interaction	Interaction	No Interaction & VCI	Interaction & VCI
<b>AIC</b>					
Unmatched	729	591	592	613	613
Matched	401	383	385	388	390
<b>BIC</b>					
Unmatched	743	629	634	652	656
Matched	413	417	422	422	427

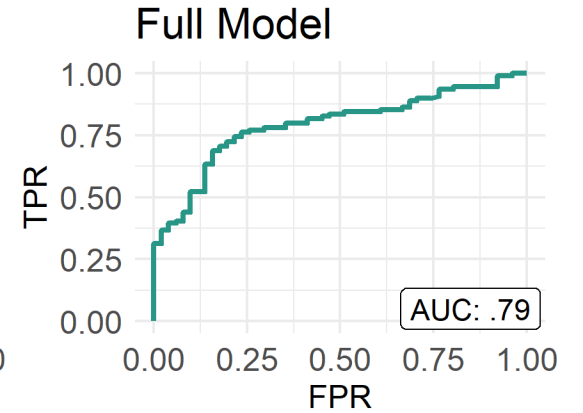
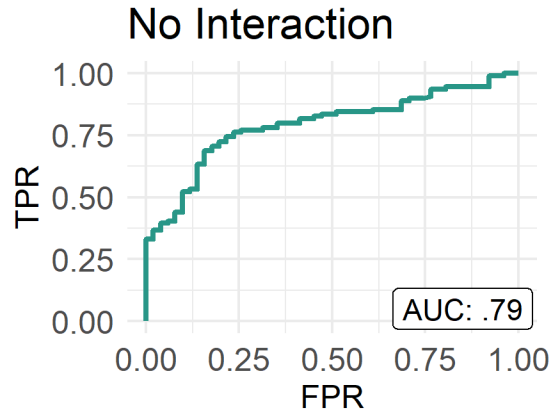


# Matched ROC

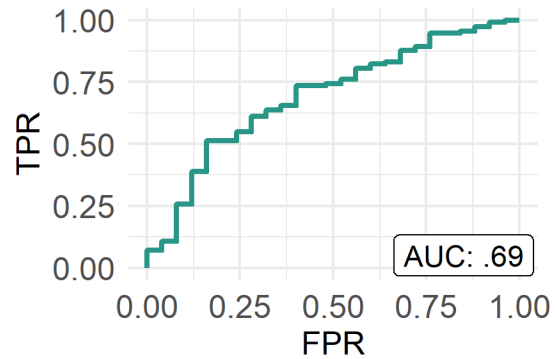
## Police Favorability



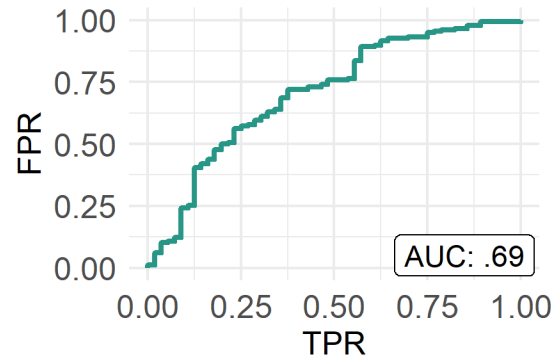
## Police Reform



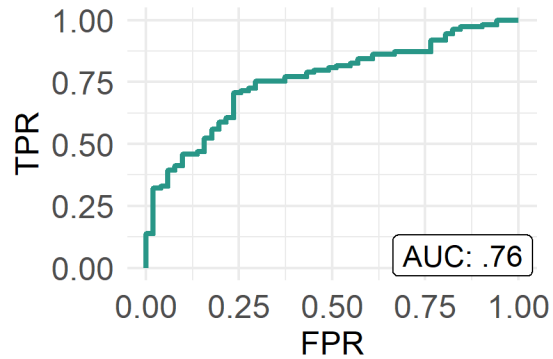
## No Interaction (VCI)



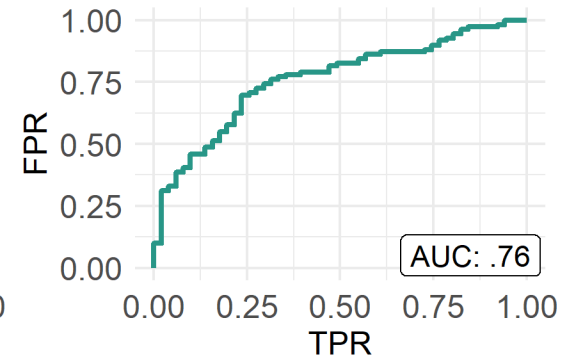
## Full Model (VCI)



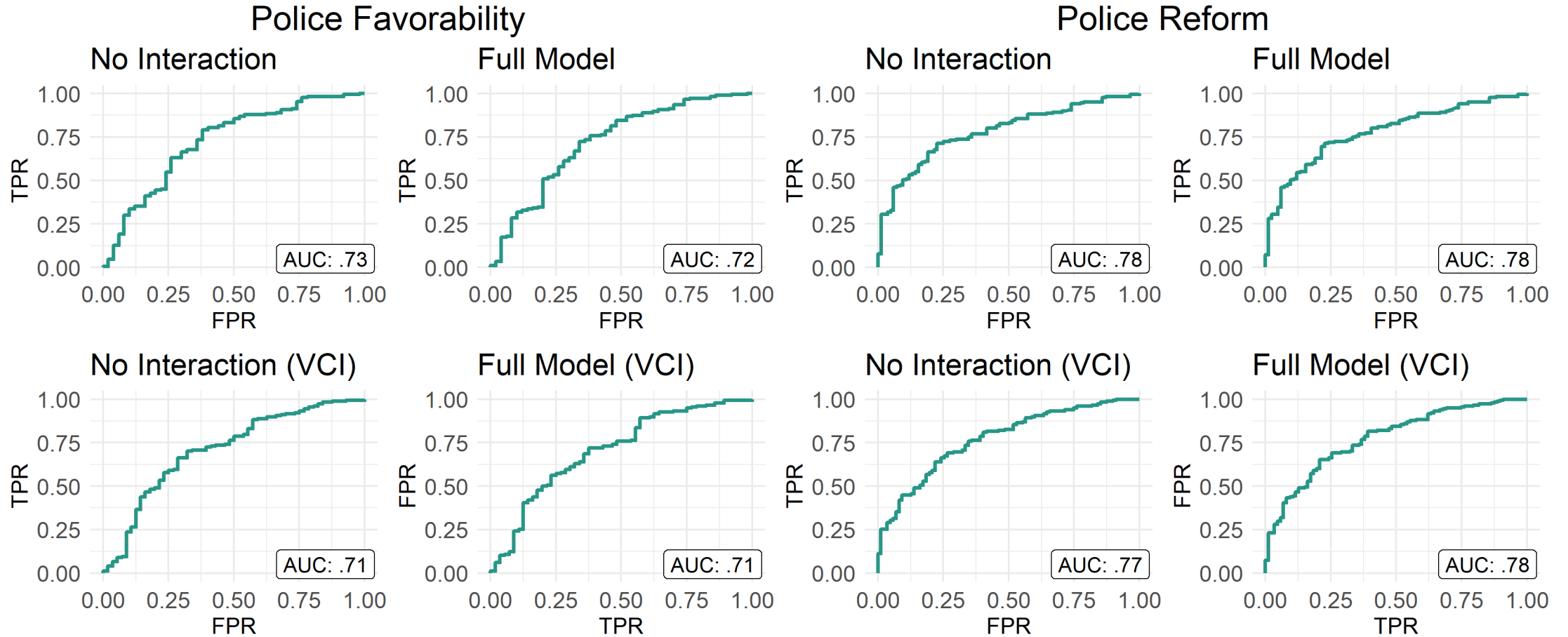
## No Interaction (VCI)



## Full Model (VCI)



# Unmatched ROC



# Survey Disclosure

- Sponsor: American Civil Liberties Union of Michigan
- Population: Registered voters in Taylor, MI
- Sample Frame:
  - Method/Sample Type: Probability-based sample
  - List Provider: Catalist
  - Sample Criteria:
    - Registered voters in Taylor, MI
    - Voted in at least one election in 2014, 2016, 2018 or 2020 or registered to vote since 2020
- Survey Method: Text to web, with CATI for individuals who did not respond to the initial survey invitation
  - Interviews conducted by KSG Research
- Quota/Sample Target: At least one-third online survey respondents
- Language: English
- Dates of Data Collection: September 13-19, 2021
- Sample Size:
  - Total: 335
  - Online: 110
  - CATI : 225



# Survey Disclosure (Continued)

- Weighting: Survey weights were not used in this analysis
- Survey Processing:
  - Recoding: Open-ended, human coding
    - Race “not listed” option recoded based off respondent descriptions
      - Coding scheme followed race and ethnicity categories as defined by the United States Census Bureau
  - Matching Procedure: Mahalanobis Distance Matching
- Research Design and Data Limitations: The data collected and analyzed in this survey contains an undetermined amount of error (sampling and from other sources), which may ultimately influence the findings discussed in this presentation. Our work should be interpreted alongside the broader literature on American public opinion and survey measurement error.



# Full Question Language

- **Education:** What was the last grade of school you completed? (CATI INSTRUCTIONS: READ ONLY IF NECESSARY)

Grade 1-11  
High school graduate/GED  
Some college  
Technical/vocational/assoc./2-year degree  
College graduate/bachelors/4-year degree  
Post graduate/Masters/PhD/JD/MD  
(CATI: DON'T READ) REFUSE

- **Race:** Would you describe yourself as white or Caucasian, Black or African-American, Asian or Pacific Islander, Hispanic or Latino(a), or Native American? (CATI INSTRUCTIONS: READ "LATINO" TO MEN, "LATINA" TO WOMEN; ALLOW MULTIPLE RESPONSES)

White/Caucasian  
Black/African American  
Asian Pacific Islander  
Hispanic or Latino  
Native American  
(DON'T READ) Not listed  
(SPECIFY \_\_\_\_\_)  
(CATI: DON'T READ) REFUSE





# Full Question Language (Continued)

- **Ideology:** In terms of your political outlook, do you usually consider yourself: (CATI INSTRUCTIONS: READ CATEGORIES; REVERSE ORDER)?

Very conservative  
Somewhat conservative  
Middle of the road  
Somewhat liberal  
Very liberal  
(CATI: DON'T READ) REFUSE

- **Issue Priority:** Now I'm going to read a list of issues. For each, please tell me if it will be a top priority, high priority, moderate priority, or low priority for you personally when you are deciding who to vote for in the election for mayor:

- a) Jobs and the economy
- b) Crime
- c) (SPLIT A) Government transparency
- d) (SPLIT B) Government accountability
- e) Corruption in government
- f) Police reform
- g) Addressing racial injustice



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