UNIVERSITY of York

Discussion Papers in Economics

No. 22/01

Beyond reasonable doubt: the impact of politically independent jurors on jury trials in the US

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Beyond reasonable doubt: the impact of politically independent jurors on jury trials in the US

PRELIMINARY TITLE, DO NOT CIRCULATE

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December 27, 2021

Abstract

This article evaluates the impact of politically independent jurors on trial verdicts in the US state of North Carolina. To identify the effect of jurors' political affiliations, I rely on the day-to-day random variation in the composition of jury pools. The results suggest that the presence of independent jurors decreases the percentage of guilty verdicts. I implement a set of robustness checks, dividing the proportion of independent jurors by gender and by ethnic group. The findings suggest that the effect is mainly driven by independent men, and remain negative and significant across different ethnicities. Moreover, I interact the proportion of independent jurors with the ethnicity of defendants, and I remove counties with a high/low number of trials. The results suggest that the effect is stronger for black defendants and that my findings are not driven by outlier counties. Finally, I evaluate the presence of possible political discrimination in the striking patterns. I find that there are no clear strike patterns for independent jurors, although some statistically significant strategic striking is present for Republicans and Democrats alike.

PRELIMINARY DRAFT, PLEASE DO NOT CIRCULATE

JEL Codes: K14, K40, D72
Keywords: Jury, Peremptory challenges, Political Affiliation, Independent

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†Thanks go to the North Carolina Sunshine Project, Ron Wright, Francis Flanagan for their help with the dataset and Andrew Pickering, the participants in the XIII RIDGE FORUM, participants of SIEP2021, participants of SIE2021 and the participants of the Political Economy Cluster seminars at the University of York for the many useful suggestions.

1 Introduction

According to the US Department of Justice, the US has the second highest incarceration rate in the world with 698 per 100,000 of the population, and an overall incarceration rate of 0.6%.[1] Moreover, incarceration rates vary across different states and across different ethnic groups, as shown in Figure 1.

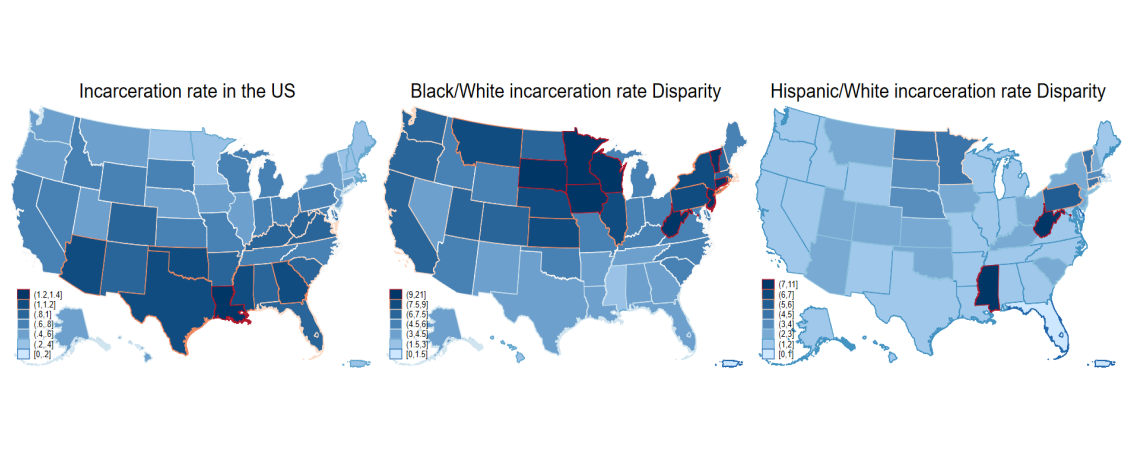

Figure 1: Incarceration rates in the US (Census 2010)

According to Figure 1, states in the US have deep differences in incarceration rates, with the highest values in Louisiana and the lowest in Vermont. Additionally, there are disparities across different ethnic groups.[2] A general trend across states is that white defendants are less likely to be incarcerated than black and hispanic defendants. The previous literature suggests that there are different causes for these disparities, such as different levels of education (e.g. Lochner and Moretti (2004)) or income (e.g. Fleisher (1966)). Recent academic literature has found that the judiciary system also plays a role. For example, some authors suggest that characteristics of the jury pool and of seated juries influence the outcomes of trials, regardless of the evidence presented in the case, and this can create disparities in the prison population (e.g. Anwar et al. (2012), Anwar et al. (2019) and Flanagan (2018)).

In this article, I examine the effects of jurors' political affiliations on trials verdicts. I specifically focus on the role of independent jurors for three main reasons. First, the majority of the previous literature analyses the behaviours of Republicans and Democrats. Second, in recent decades the US - and North Carolina in particular - has experienced an important shift from Republican and Democrat to independent (more details in Section 2). Third, independents have less confidence in courts and institutions with respect to "classic" political affiliations (more details in Section 2.1).

My empirical analysis uses data of felony trials in North Carolina between 2010 and 2012. To ensure the causality of my results, I exploit random day-to-day variation in the jury pool, as proposed by Anwar et al. (2012). My research question is composed of two parts. First, I examine the role of political affiliation in the jury selection process, with a specific focus upon independent jurors. My findings suggest that some discrimination based on political affiliation is present, but this does not involve independent jurors. Second, I study the impact of independent jurors, both in the jury pool and seated juries on trials outcomes. The findings suggest that the percentage of independent jurors in the jury pool has a negative and statistically significant effect on the

[1] The highest is Seychelles with 799 per 100,000 of the population. Source: https://nicic.gov/world-prison-population-listeleventh-edition

[2] Incarceration rate disparity is the ratio between the incarceration rates of black/hispanic and white defendants.

percentage of guilty verdicts. Additionally, I implement a set of heterogeneity checks (dividing by gender groups and ethnic groups) and robustness checks (interacting political affiliation with defendant race and removing outlier counties). The results are consistent with the main findings. Finally, to investigate the effect of seated juries on trials outcomes, I use the the proportion of independent jurors in the jury pool as an instrument for the proportion of seated independent juror. The findings are similar to those in the main analysis.

This work relies on the previous literature in many ways. First, it is connected to research on the impact (and biases) of jury pools on trial outcomes. For example, Anwar et al. (2012) evaluate the effect of the presence of at least one black man in the jury pool on trial outcomes in Florida. According to the authors, all-white jury pools are significantly more likely to convict black defendants. However, the conviction gap between black and white defendants is entirely eliminated by the presence of just one black person in the jury pool. Another relevant work is Flanagan (2018), which investigates the differing impact of the presence of black and white men on jury verdicts in North Carolina. Flanagan's findings suggest that jury pools with higher proportions of white men are more likely to convict black male defendants, while jury pools with a higher proportion of black men are more likely to acquit all defendants. Moreover, the behaviours of prosecutors and defence attorneys in the jury selection process suggest that they adjust peremptory-challenge strategies to maximize the probability of convictions/acquittals. This strand of the literature also includes Anwar et al. (2014), which explores the impact of age on trial outcomes in Florida. The authors find that older jurors are significantly more likely to convict, and prosecutors are more likely to exclude younger jurors, while defence attorneys are more likely to exclude older jurors.

Second, this article is linked to the growing literature on unaffiliated/independent voters. While the majority of previous works focus on Republicans and Democrats (e.g. Keen and Jacobs (2009), Spitzer and Talley (2013), Schanzenbach and Tiller (2008) and Fischman and Schanzenbach (2011)), independent voters in the US have risen from 31% in 1988 to 44% in 2021.[3] In this framework some early studies are present, such as Peterson and Wrighton (1998), who suggest that a lower level of trust in the government is a good predictor of voting for third party candidates. Another interesting work is Buckman et al. (2020), which investigates the effect of the increasing number of unaffiliated voters in North Carolina on child vaccination rates. According to the authors, the increase in the share of unaffiliated voters increases the child vaccine exemption rates. Both articles underline the connection between unaffiliated/independent voters and lower levels of trust in government, parties, and institutions.

Third, this article is connected to the literature on the effect of political ideology on trial verdicts. Previous articles have mainly focused on the impact of the judge's political ideology on trial outcomes in the US, suggesting that judges' political and party affiliations matter. Generally, Democratic judges are more favourable in liberal cases, such as abortion and women rights, while Republicans are more lenient in conservatives cases, such as gun controls (Spitzer and Talley, 2013). Overall, the literature suggests that Republican judges deliver harsher sentences (Schanzenbach and Tiller, 2008; Fischman and Schanzenbach, 2011). The effects of jurors' political ideologies have received less attention. Anwar et al. (2019) evaluate the impact of the political affiliation of *nämndemän* in Sweden, which have some elements in common with US jurors.[4] *Nämndemän* belonging to far-right parties are more likely to convict young defendants as well as defendants with distinctly Arabic names. Conversely there is an increase in conviction with female victims when there are *nämndemän* from the far-left party. In the US, Hermann (1970) suggests that, while Republicans and Democrats behave differently, the main difference is between them and unaffiliated voters. Hastie et al. (1999) suggest that the effect of conservatives is present but not

[3] Source: https://news.gallup.com/poll/343976/quarterly-gap-party-affiliation-largest-2012.aspx

[4] *Nämndemän* are appointed officials that serve for 4-year terms. In serious criminal cases, 3 *nämndemän* and a professional judge decide the verdict.

significant and Wentland (2012) suggests a negative effect for Democrats. Overall, the evidence is not clear and these articles are not principally concerned with unaffiliated/independent jurors.

The present work adds to the scarce literature on the behaviours and influence of unaffiliated/independent voters, while contributing to the growing literature on jurors and the effects of their characteristics on trial verdicts.

The remainder of the paper is organised as follows: in Section 2, I describe the political framework in the US and in North Carolina. In Section 3, I focus on the legal system, and in Section 4 I present my dataset and the empirical strategy. In Section 5 I present the main results and in Section 6 the possible mechanisms behind them. In Section 7 I list my conclusions.

2 Political framework in North Carolina: Independent voters

Generally speaking, American voters can be divided into four major categories: Republicans, Democrats, independents, and third party voters. Historically, Republicans and Democrats represent the largest political groups in the country, but in recent years this has been changing rapidly, as shown in Figure 2.

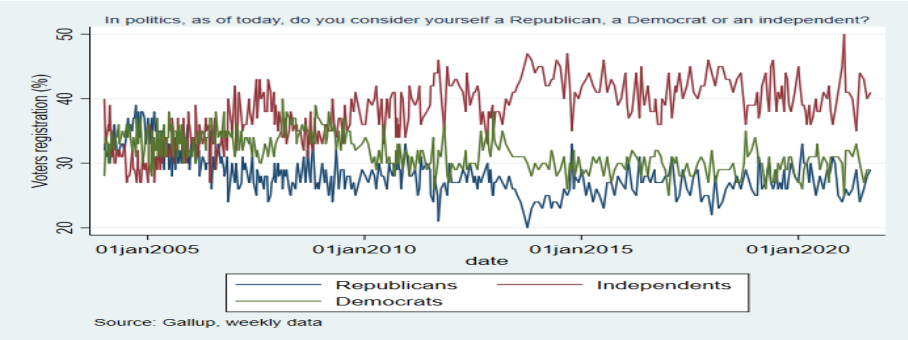

Figure 2: Political Affiliation Trend of Voters

Figure 2 shows the answers to the question "In politics, as of today, do you consider yourself a Republican, a Democrat or an independent?" from the GALLUP party affiliation survey from 2004 to 2020.[5] The trends indicate a clear decrease in affiliation to traditional parties, and a strong increase in independents. Another way to evaluate party affiliation is to look at the results for those states whose voters register by party affiliation. Overall, the voter registration for states follows a similar pattern, as shown in Figure 3.[6]

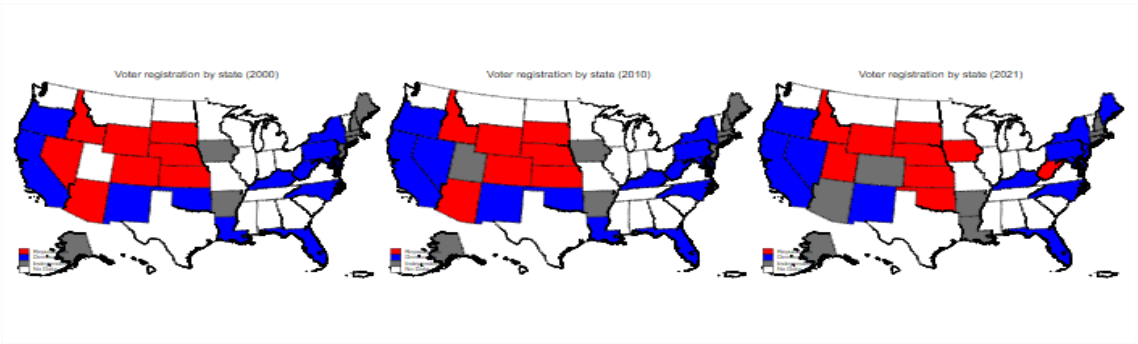

Figure 3: Voter registration by Political Affiliation in 2000, 2010, 2021

[5] https://news.gallup.com/poll/15370/party-affiliation.aspx
[6] https://ballotpedia.org/Partisan_affiliations_of_registered_voters

Figure 3 shows which party/political affiliation the majority of voters register.[7] While the majority of states remain under the control of Democrats or Republicans, there is an increase in the number of states where independence is the majority position, from 8 states (25% of states with voter registration) in 2000 to 9 states in 2021 (26.47% of states with voter registration).

In this article, I look more specifically at the political trend in North Carolina (more details about why I choose North Carolina in Section 4.1). In Figure 4 I show the voter registration trends in North Carolina according to the North Carolina State Board of Elections.[8][9]

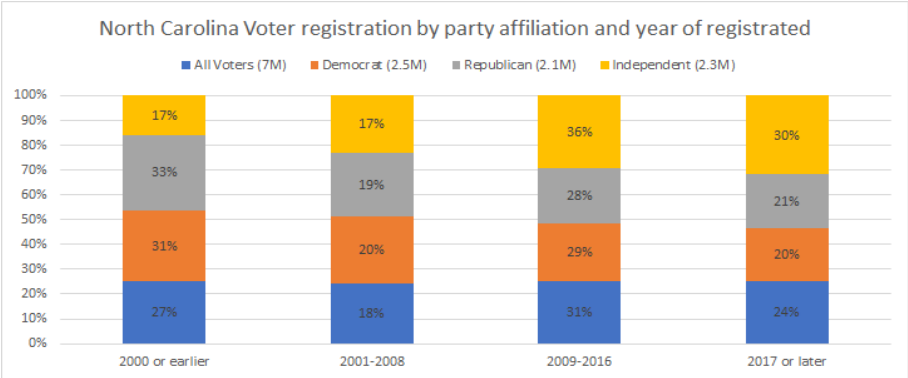

Figure 4: Voter registration by Political Affiliation Trend in North Carolina

Figure 4 indicates that the majority of North Carolina's independent voters first registered in 2009 or later. Overall, Figure 4 shows a scenario similar to that presented at national level. Additionally, although not present in the graph, in North Carolina there is a small percentage of third party voters. According to the North Carolina State Board of Elections, in 2020 this grouping represented 0.7% of voters, with the vast majority belonging to the Libertarian Party (0.6%).[10] This is a small party that can be consider right-wing in terms of economics and left-wing in terms of civil liberties. Overall, constituents of this grouping tend to be Non Hispanic/White, young, and male.[11]

2.1 How will these jurors vote?

Independent voters are the main focus of this article. Overall, they do not fully identify with the major parties but they are not apolitical (Twenge et al., 2016). The majority of independent voters lean consistently towards a specific party, although independent voters that lean towards a party are less likely than partisan voters to perceive that party favourably.[12] Additionally, far more independents than partisans have an unfavourable opinion of both parties.[13] Looking at recent surveys, overall independents who lean towards a party are less likely than party members to say that jury duty is important.[14] According to the Meredith poll, North Carolina independents hold

[7] It is important to notice that not all states have voter registration by party.
[8] Source: https://www.ncsbe.gov/
[9] Note: analysis is restricted to voters with active, inactive and temporary registrations. Voters with registration dated prior to 1930 were excluded from the analysis.
[10] The other parties are the Constitution Party (0.5%) and the Green Party (0.04%).
[11] https://www.prri.org/research/2013-american-values-survey/
[12] https://www.pewresearch.org/politics/2019/03/14/political-independents-who-they-are-what-they-think/
[13] https://www.pewresearch.org/politics/2019/03/14/political-independents-who-they-are-what-they-think/
[14] https://www.pewresearch.org/politics/2018/04/26/9-the-responsibilities-of-citizenship/

less trust in the voting system.[15] Finally, Buckman et al. (2020) specifically focus on the unaffiliated in North Carolina. They investigate vaccination rates and find a strong relation between a decrease in child vaccination rates and an increase in unaffiliated voters. The authors explain this trend as resulting from the lower level of trust of unaffiliated voters in the system.

To investigate the attitudes of independents towards the legal system and the political system, I use some questions extracted from the *General Social Survey* (GSS).[16] From this dataset, I select the following questions:[17]

- No confidence in the court system, extrapolated as "very little confidence" and "no confidence" as answers to the question "How much confidence you have in courts and the legal system?" (Table 1).
- You cannot trust the US supreme court, extrapolated as "hardly any" to the question "As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them? Item: US Supreme court" (Table 1).
- Less police spending, extrapolated from a question about the increase in police spending, corresponding to a preference for "less spending" and "much less spending" (Table 2).
- We cannot trust people in govt, the variable is extracted from the respondents who "disagree" or "strongly disagree" with the following sentence: "Most of the time we can trust people in government to do what is right" (Table 2).
- Most politicians are only out for what they can get out of politics, the variable is extracted from the respondents who "agree" or "strongly agree" with the following sentence: "Most politicians are in politics only for what they can get out of it personally" (Table 3).
- Political parties don't give real policy choices, the variable is extracted from the respondents who "agree" or "strongly agree" with the following sentence: "Political parties do not give voters real policy choices" (Table 3).

To investigate the relationships between these variables and independent voters, I use a linear regression model. The results are presented in Table 1, Table 2, and Table 3.

[15] A survey organized by the Meredith College that investigates specifically the pattern and behaviours of people living in North Carolina.(https://www.meredith.edu/meredith-poll/)

[16] https://gss.norc.org/

[17] Descriptive statistics available upon request.

Table 1: GSS regressions results: “No confidence in courts ” and “You cannot trust the Supreme Court”

dep. var.:	No confidence in courts								You cannot trust the Supreme Court							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
independent	0.0497***	0.0320**	0.0304**	0.0304**	0.0357**	0.0317**	0.0315**	0.0322**	0.0264***	0.0207***	0.0180***	0.0169***	0.0196***	0.0210***	0.0214***	0.0214***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
	[3.71]	[2.10]	[2.00]	[1.99]	[2.33]	[2.07]	[2.05]	[2.09]	[7.07]	[4.96]	[4.32]	[4.05]	[4.64]	[5.00]	[5.07]	[5.08]
otherparty	0.172***	0.155***	0.147***	0.147***	0.155***	0.165***	0.164***	0.165***	0.0901***	0.0844***	0.0787***	0.0763***	0.0800***	0.0871***	0.0886***	0.0887***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
	[3.47]	[3.08]	[2.89]	[2.88]	[3.03]	[3.21]	[3.18]	[3.20]	[5.45]	[5.07]	[4.74]	[4.59]	[4.80]	[5.23]	[5.31]	[5.31]
rep		-0.0414***	-0.0428***	-0.0429***	-0.0326**	-0.0298*	-0.0296*	-0.0286*		-0.0143***	-0.0143***	-0.0151***	-0.0103**	-0.00515	-0.00532	-0.00516
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
		[-2.60]	[-2.70]	[-2.70]	[-1.99]	[-1.83]	[-1.82]	[-1.75]		[-3.26]	[-3.26]	[-3.43]	[-2.28]	[-1.14]	[-1.18]	[-1.14]
female				-0.000905	-0.000898	-0.00234	-0.00125	-0.00154				-0.0140***	-0.0143***	-0.0158***	-0.0166***	-0.0167***
				(0.01)	(0.01)	(0.01)	(0.01)	(0.01)				(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
				[-0.07]	[-0.07]	[-0.18]	[-0.10]	[-0.12]				[-3.92]	[-4.01]	[-4.47]	[-4.67]	[-4.69]
white					-0.0375**	-0.0279*	-0.0289*	-0.0278*					-0.0201***	-0.0101**	-0.00978**	-0.00952*
					(0.02)	(0.02)	(0.02)	(0.02)					(0.00)	(0.00)	(0.00)	(0.00)
					[-2.27]	[-1.67]	[-1.73]	[-1.66]					[-4.16]	[-2.08]	[-2.00]	[-1.95]
Highest year of school completed						-0.0109***	-0.0113***	-0.0112***						-0.0119***	-0.0115***	-0.0114***
						(0.00)	(0.00)	(0.00)						(0.00)	(0.00)	(0.00)
						[-5.16]	[-5.20]	[-5.14]						[-20.31]	[-18.98]	[-18.91]
Number of children							-0.00417	-0.00376							0.00341***	0.00349***
							(0.00)	(0.00)							(0.00)	(0.00)
							[-1.10]	[-0.98]							[3.27]	[3.34]
married								-0.0387								-0.0105
								(0.03)								(0.01)
								[-1.44]								[-1.08]
Constant	0.259***	0.277***	0.284***	0.285***	0.307***	0.451***	0.503***	0.499***	0.143***	0.149***	0.131***	0.140***	0.154***	0.299***	0.287***	0.286***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
	[32.64]	[25.83]	[17.53]	[15.53]	[14.42]	[12.61]	[13.48]	[13.36]	[65.98]	[52.23]	[11.08]	[11.57]	[12.26]	[20.52]	[19.06]	[18.99]
Observations	4984	4984	4984	4984	4984	4977	4968	4968	41942	41942	41942	41942	41942	41860	41772	41772
Year FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Notes: robust standard errors in parenthesis and t-statistics in brackets. * p < 0.1, ** p < 0.05, *** p < 0.01. No confidence in courts , You cannot trust the Supreme Courtand the main independent variables are dummies. *Excluded category*: Democrats.

Table 2: GSS regressions results: “Less police funding ” and “No trust in people in Gov”

dep. var.:	Less police funding								No trust in people in Gov							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
independent	0.0282***	0.0237***	0.0218***	0.0196**	0.0250***	0.0243***	0.0226***	0.0224***	0.0530***	0.0599***	0.0546***	0.0535***	0.0424**	0.0409**	0.0408**	0.0407**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
	[3.84]	[2.85]	[2.63]	[2.36]	[2.96]	[2.86]	[2.67]	[2.65]	[3.28]	[3.26]	[2.97]	[2.90]	[2.27]	[2.19]	[2.18]	[2.17]
otherparty	0.0215	0.0170	0.0113	0.00632	0.0131	0.0134	0.0118	0.00631	0.208***	0.215***	0.192***	0.189***	0.175***	0.179***	0.179***	0.179***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.06)	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
	[0.64]	[0.50]	[0.34]	[0.19]	[0.38]	[0.39]	[0.35]	[0.18]	[3.76]	[3.83]	[3.50]	[3.45]	[3.19]	[3.25]	[3.27]	[3.26]
rep		-0.0101	-0.00888	-0.0109	0.000352	0.000735	0.000301	0.000570		0.0162	0.0226	0.0207	-0.00157	-0.000898	-0.00188	-0.00217
		(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
		[-1.24]	[-1.08]	[-1.34]	[0.04]	[0.08]	[0.03]	[0.07]		[0.79]	[1.11]	[1.01]	[-0.07]	[-0.04]	[-0.09]	[-0.10]
female				-0.0230***	-0.0234***	-0.0232***	-0.0218***	-0.0224***				-0.0159	-0.0155	-0.0162	-0.0172	-0.0168
				(0.01)	(0.01)	(0.01)	(0.01)	(0.01)				(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
				[-3.28]	[-3.35]	[-3.32]	[-3.12]	[-3.21]				[-1.01]	[-0.99]	[-1.03]	[-1.10]	[-1.07]
white					-0.0453***	-0.0434***	-0.0445***	-0.0418***					0.0735***	0.0768***	0.0774***	0.0766***
					(0.01)	(0.01)	(0.01)	(0.01)					(0.02)	(0.02)	(0.02)	(0.02)
					[-4.45]	[-4.24]	[-4.35]	[-4.09]					[3.84]	[3.98]	[4.00]	[3.95]
Highest year of school completed						-0.00185	-0.00270**	-0.00244**						-0.00364	-0.00296	-0.00306
						(0.00)	(0.00)	(0.00)						(0.00)	(0.00)	(0.00)
						[-1.55]	[-2.21]	[-2.02]						[-1.38]	[-1.10]	[-1.13]
Number of children							-0.00671***	-0.00615***							0.00494	0.00467
							(0.00)	(0.00)							(0.00)	(0.00)
							[-3.36]	[-3.09]							[1.01]	[0.96]
married								-0.0586***								0.0173
								(0.02)								(0.03)
								[-3.64]								[0.60]
Constant	0.0642***	0.0687***	0.0528***	0.0636***	0.0991***	0.123***	0.147***	0.141***	0.459***	0.452***	0.497***	0.506***	0.462***	0.510***	0.493***	0.495***
	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)
	[15.67]	[12.12]	[5.08]	[5.72]	[7.29]	[6.26]	[7.05]	[6.78]	[45.02]	[33.69]	[27.24]	[24.52]	[19.48]	[12.05]	[11.09]	[11.10]
Observations	5914	5914	5914	5914	5914	5902	5894	5894	4058	4058	4058	4058	4058	4053	4051	4051
Year FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Notes: robust standard errors in parenthesis and t-statistics in brackets. * p < 0.1, ** p < 0.05, *** p < 0.01. Less police funding , No trust in people in Govand the main independent variables are dummies. *Excluded category*: Democrats.

Table 3: GSS regressions results: "Politicians are in it for the money " and "Political parties don't give real policy choices"

dep. var.:	Politicians are in it for the money								Political parties don't give real policy choices							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
independent	0.0609***	0.0703***	0.0654***	0.0588***	0.0654***	0.0540***	0.0537***	0.0535***	0.0692***	0.0620***	0.0592**	0.0569**	0.0436*	0.0463**	0.0455*	0.0452*
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
	[3.77]	[3.83]	[3.56]	[3.20]	[3.52]	[2.93]	[2.92]	[2.91]	[3.41]	[2.68]	[2.55]	[2.45]	[1.86]	[1.98]	[1.94]	[1.93]
otherparty	0.0852	0.0946	0.0812	0.0639	0.0720	0.0997*	0.101*	0.100*	0.222***	0.215***	0.205***	0.196***	0.182**	0.179**	0.179**	0.178**
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
	[1.47]	[1.62]	[1.39]	[1.11]	[1.24]	[1.68]	[1.70]	[1.69]	[3.01]	[2.88]	[2.75]	[2.62]	[2.46]	[2.41]	[2.42]	[2.41]
rep		0.0224	0.0256	0.0153	0.0281	0.0302	0.0278	0.0272		-0.0162	-0.0146	-0.0203	-0.0479*	-0.0486*	-0.0499*	-0.0509*
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
		[1.08]	[1.24]	[0.74]	[1.31]	[1.43]	[1.32]	[1.29]		[-0.64]	[-0.57]	[-0.80]	[-1.80]	[-1.83]	[-1.88]	[-1.91]
female				-0.0874***	-0.0877***	-0.0870***	-0.0896***	-0.0889***				-0.0538***	-0.0534***	-0.0529***	-0.0550***	-0.0536***
				(0.02)	(0.02)	(0.02)	(0.02)	(0.02)				(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
				[-5.55]	[-5.56]	[-5.59]	[-5.74]	[-5.69]				[-2.73]	[-2.71]	[-2.69]	[-2.78]	[-2.71]
white					-0.0420**	-0.0218	-0.0203	-0.0214					0.0902***	0.0860***	0.0869***	0.0844***
					(0.02)	(0.02)	(0.02)	(0.02)					(0.02)	(0.02)	(0.02)	(0.02)
					[-2.17]	[-1.13]	[-1.05]	[-1.11]					[3.71]	[3.52]	[3.56]	[3.45]
Highest year of school completed						-0.0263***	-0.0249***	-0.0250***						0.00642*	0.00751**	0.00721**
						(0.00)	(0.00)	(0.00)						(0.00)	(0.00)	(0.00)
						[-10.11]	[-9.35]	[-9.39]						[1.90]	[2.18]	[2.09]
Number of children							0.0115**	0.0111**							0.0105*	0.00965
							(0.00)	(0.00)							(0.01)	(0.01)
							[2.39]	[2.30]							[1.67]	[1.53]
married								0.0248								0.0342
								(0.03)								(0.03)
								[0.87]								[1.14]
Constant	0.501***	0.492***	0.551***	0.605***	0.631***	0.912***	0.873***	0.876***	0.444***	0.452***	0.475***	0.507***	0.452***	0.365***	0.332***	0.319***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)	(0.01)	(0.02)	(0.02)	(0.02)	(0.03)	(0.05)	(0.06)	(0.06)
	[49.00]	[36.60]	[30.41]	[29.63]	[26.73]	[22.16]	[19.74]	[19.76]	[35.14]	[26.68]	[23.27]	[21.55]	[16.20]	[6.86]	[5.84]	[5.53]
Observations	4036	4036	4036	4036	4036	4030	4028	4028	2585	2585	2585	2585	2585	2584	2582	2582
Year FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Notes: robust standard errors in parenthesis and t-statistics in brackets. * p < 0.1, ** p < 0.05, *** p < 0.01. Politicians are in it for the money , Political parties don't give real policy choicesand the main independent variables are dummies. *Excluded category*: Democrats.

Tables 1, 2, and 3 suggest that independent voters have a lower level of confidence in legal and political institutions. In Table 1, independent voters are negative and significantly correlated with lower levels of confidence in the courts, and positive and significantly correlated with no trust in the Supreme Court. In Table 2, independent voters are correlated, positive and significantly, with the idea of "less police funding" and "no trust in people in government". Finally, in Table 3, the findings indicate that they agree with these sentences: "politicians are in it for the money" and "political parties do not give real policy choices". In general, these results indicate that independent voters have a lower level of trust in the legal system, the institutions, and the political system. Trust in politicians and the political system is interconnected because district attorneys and judges are elected in partisan elections (for more details, see Section 3). The presence of politically affiliated judges and prosecutors can influence the way in which evidence is perceived by jurors.

3 Trials and Jury selection process in North Carolina

Trials in the US follow the tradition of Anglo-American legal systems and involve different "actors": the defendant, the defence attorney, the prosecutor, a seated jury, and a judge. The defendant is the person on trial while the defence attorney is the lawyer whose job is to represent the defendant. Generally speaking, the defence attorney can be chosen by the defendant or can be provided by the state or federal governments.[18] Prosecutors present the case against the defendant. They also have significant power in deciding if and when the trials will take place, as suggested by Bandyopadhyay and McCannon (2014). Generally speaking, prosecutors in the US are called *Assistant District Attorneys* while the chief of the prosecution office is called the District Attorney, and he/she is elected in a partisan election every 4 years.[19]

The "referee" of the trial is the judge, whose job is to guarantee that everything happening in the courtroom follows the law. In this case, the judges in my sample are called Superior Court

[18] In this case, defence attorneys are called public defenders. He/she is usually appointed by the courts and advises those who cannot afford to hire a private attorney. Public defenders are full-time attorneys employed by the state or the federal government.

[19] The title is not the same for all US states, but this is the one used in North Carolina.

Judges and they are elected in partisan elections every 8 years.[20] They must be attorneys, although they cannot practice law privately, and must be under 72 years old. In North Carolina, Superior Court Judges preside over one of the 50 districts into which the 100 counties of North Carolina are divided. Districts are aggregated in 8 divisions and Superior Court Judges rotate districts in their division every 6 months (N.C. Gen. Stat., sec. 7).

Finally, the jury's role is to reach a verdict.[21] The jury selection process is fairly similar across states. The first step is to extract a *jury pool*, i.e., a group of potential jurors. Each jurisdiction has a master jury list from which individuals are randomly selected.[22] Once the potential jurors are called, the second step of the selection process is to exclude biased members from the jury pool in a procedure called *voir dire*. Potential jurors can be removed either for cause or due to a peremptory challenge. A removal for cause involves the judge deciding to strike off a juror for apparent bias or hardship, i.e., lack of financial resources or medical problems. There is no limit to the number of jurors who may be removed, but such decisions are left to the judges' discretion. Meanwhile, prosecutors and defence attorneys can exclude jurors through "peremptory challenges". These removals do not require any explanation, but are limited in number and cannot be based on race or gender (*Batson v. Kentucky*, 476 U.S. 79 [1986]; *J.E.B. v. Alabama*, 511 U.S. 127 [1994]).[23] Striking off jurors on the grounds of political ideology is allowed.

According to North Carolina's laws, felony cases in which the defendant does not plead guilty require a 12-member jury and a unanimous verdict for conviction.[24] As noted above, North Carolina is divided into 100 counties and each county has a Superior Court in the county seat.[25] The jury commission in each county renovates the master jury list every two years by randomly drawing names from lists of registered voters and driver licences (N.C. Gen. Stat., sec. 9-2). Jury panels are generated by extracting a group of names randomly from the master list. Once the potential jurors are extracted, the jury selection process, as described above, takes place to fill the 12-seat jury box, plus any alternates (N.C. Gen. Stat., sec. 15A-1214, 1217).[26] In non-capital trials, prosecutors and defence attorneys have six peremptory challenges and one each for every alternative juror. If a juror is removed, they are immediately replaced by a new juror randomly selected from within the juror panels. The seated jury is generated when both parties are satisfied with the outcome or when they have exhausted all challenges.

4 Data

4.1 North Carolina in the US context

To ensure that North Carolina has similar political affiliation patterns and similar criminal trends to the rest of the US and is not an outlier, I rely on the strategy proposed by Norris et al. (2021)

[20] There are some judges appointed by the Governor. They serve 5-year terms and are assigned to a particular district by the Chief Justice of the North Carolina Supreme Court. Their number is limited: in 2014 there were 15.

[21] The sentence is decided by the judge after the jury reaches a verdict.

[22] According to North Carolina legislation, a qualified juror must be: U.S. citizen, a resident of the county where the summons was issued, at least 18 years old, able to understand English, and physically/mentally competent. Jurors must not: have served as a juror during the previous two years, have served a full term as a grand juror in the last six years, have been convicted of a felony (unless citizenship rights have been restored). Source: https://www.nccourts.gov/help-topics/jury-service/jury-service.

[23] If one side is suspected of gender/race discrimination, the opposing side may object using the so-called Batson's challenge. In practice, successful Batson challenges are extremely rare.

[24] In 2015, there was an amendment in the North Carolina constitution that allow defendants on non-capital charges to face a bench trial, rather than a jury trial. This study considers trials before the amendment.

[25] In a small number of counties, the Superior Court meets in cities different from the county seats, due to population criteria.

[26] The use of one or more alternates is left to judges' discretion. On average, in the sample, the seated jury is 12.93.

and plot how the different characteristics behave in the different states and on average in the US. First, using data from Pew Center, I examine political affiliation in Figure 5.[27]

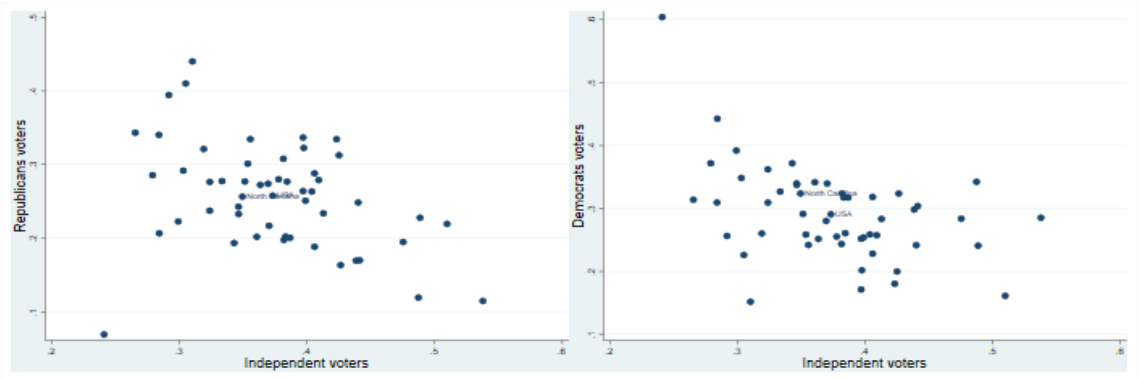

Figure 5: State-Level Comparisons of Political Affiliation

Figure 5 shows two scatter plots of Republican, Democrat, and independent share across all US states. The US average and North Carolina have similar patterns in terms of political affiliation, suggesting that North Carolina is in line with the rest of the country. In Figure 6, I use data from the FBI about violent and property crimes.[28]

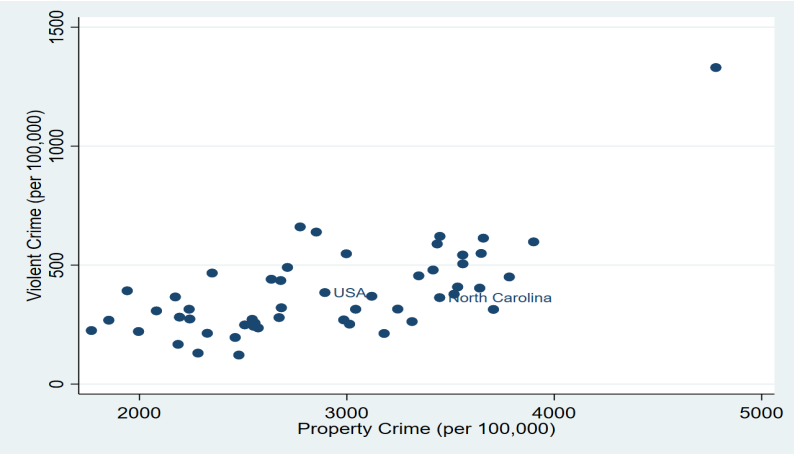

Figure 6: State-Level Comparisons of Crime

Figure 6 shows a scatter plot of violent crimes and property crimes across all US states. Also in this case the US average and North Carolina have similar patterns in terms of crime. Figure 5 and Figure 6 show that the main characteristics of my analysis are similar for North Carolina and the US.

[27] https://www.pewresearch.org/topic/politics-policy/political-parties-polarization/political-parties/

[28] https://ucr.fbi.gov/crime-in-the-u.s/2010/crime-in-the-u.s.-2010

4.2 Sunshine Project

The dataset consists of non-capital felony trials in North Carolina between 2010 and 2012.[29] These data are collected by the research team of the North Carolina Jury Sunshine Project.[30] First, they identify the trials held between 2010 and 2012 and collect all the relevant information directly from the physical case files for each trial. The case files contain the list of the potential jurors, whether or not the jurors were challenged for cause, struck off by the defence or by the state. They also include information about the names of judges, states and defence attorneys, list of charges, verdict, sentence, defendant's name, date of birth, race, and gender. Second, to collect the demographic information, they match the name of prospective jurors with registered voters, using the North Carolina Board of Election database, obtaining the following self-reported variables: name, age, address, political affiliation, gender, and race.[31] The political affiliation includes the following categories: Democrats, Republicans, Libertarian, independent, and unknown. Race categories are white, black, Asian, Native American or indigenous, Hispanic, other, and unknown. Given the limited number of observations in some categories, I re-frame race variables as white, black, unknown, and other, which includes the categories Asian, Native American or indigenous, Hispanic, and other.

The full dataset contains 1090 trials with around 25,000 jurors. However, the sample in this article is limited to non-capital trials, with only one defendant and with a known verdict of guilty/not-guilty.[32] The final sample includes 767 trials and 17163 jurors in 767 counties.

[29] I exclude all murders classified as A1 felonies in North Carolina. Moreover, there are 8 trials in the data that are set in 2009 or 2013 due to delays in the court system and lags between the jury selection and the conclusion of the trial, as in Flanagan (2018).

[30] https://www.illinoislawreview.org/print/vol-2018-no-4/the-jury-sunshine-project/

[31] https://www.ncsbe.gov/

[32] I also remove trials with fewer than 12 jurors in the pool and in the seated jury, and trials with more than 20 seated jurors. Overall this incorporates 33 trials.

4.3 Summary Statistics

Table 4: Summary Statistics

	count	mean	sd	min	max
Defendant characteristics:					
Def. woman	767	0.1121	0.32	0.00	1.00
Def. white	767	0.3272	0.47	0.00	1.00
Def. black	767	0.6245	0.48	0.00	1.00
Def. over 30	767	0.6193	0.49	0.00	1.00
Trials' characteristics:					
Robbery charge	767	0.0834	0.28	0.00	1.00
Drug charge	767	0.1890	0.39	0.00	1.00
Sex charge	767	0.1082	0.31	0.00	1.00
Property crime charge	767	0.2947	0.46	0.00	1.00
Other crime charge	767	0.0847	0.28	0.00	1.00
Murder charge	767	0.0417	0.20	0.00	1.00
Weapon charge	767	0.0495	0.22	0.00	1.00
Other violent crime charge	767	0.1591	0.37	0.00	1.00
Unknown charge	767	0.0143	0.12	0.00	1.00
Prop. guilty convictions	767	0.7114	0.44	0.00	1.00
All charges	767	1.1199	0.39	1.00	3.00
Jury pool characteristics:					
Total jury pool	767	22.3768	5.05	12.00	52.00
Excluded for cause	767	2.1538	3.06	0.00	30.00
State strikes	767	2.2243	1.87	0.00	9.00
Defense strikes	767	3.1851	2.40	0.00	13.00
Proportion of pool women	767	0.5140	0.11	0.14	0.79
Proportion of pool unknwon gender	767	0.0251	0.03	0.00	0.11
Proportion of pool white	767	0.6134	0.17	0.07	1.00
Proportion of pool black	767	0.1647	0.13	0.00	0.67
Proportion of pool other	767	0.0240	0.04	0.00	0.39
Proportion of pool unknwon race	767	0.1979	0.11	0.00	0.52
Proportion of pool indipendent	767	0.1692	0.10	0.00	0.53
Proportion of pool Libertarians	767	0.0013	0.01	0.00	0.12
Proportion of pool Republicans	767	0.2577	0.12	0.00	0.72
Proportion of pool unknwon political	767	0.2489	0.11	0.03	0.55
Proportion of pool Democrats	767	0.3229	0.14	0.00	0.83
Proportion of pool indipendent White	767	0.1412	0.09	0.00	0.53
Proportion of pool indipendent Black	767	0.0161	0.03	0.00	0.19
Proportion of pool indipendent Other	767	0.0084	0.02	0.00	0.12
Proportion of pool Libertarians White	767	0.0010	0.01	0.00	0.12
Proportion of pool Libertarians Black	767	0.0001	0.00	0.00	0.05
Proportion of pool Democrats White	767	0.1633	0.10	0.00	0.52
Proportion of pool Democrats Black	767	0.1390	0.12	0.00	0.67
Proportion of pool Democrats Other	767	0.0098	0.03	0.00	0.28
Proportion of pool Republicans White	767	0.2483	0.12	0.00	0.72
Proportion of pool Republicans Black	767	0.0041	0.01	0.00	0.10
Proportion of pool Republicans Other	767	0.0035	0.01	0.00	0.10
Seated jury characteristics:					
Total seated jurors	767	12.9270	0.60	12.00	18.00
Excluded for cause	767	2.1538	3.06	0.00	30.00
State strikes	767	2.2243	1.87	0.00	9.00
Defense strikes	767	3.1851	2.40	0.00	13.00
Proportion of seat indipendent	767	0.1722	0.12	0.00	0.67
Proportion of seat Libertarians	767	0.0013	0.01	0.00	0.08
Proportion of seat Republicans	767	0.2632	0.15	0.00	0.77
Proportion of seat Democrats	767	0.3200	0.16	0.00	0.85
Proportion of seat unknwon political	767	0.2433	0.14	0.00	0.67
Proportion of seat women	767	0.5216	0.14	0.00	0.92
Proportion of seat white	767	0.6172	0.19	0.00	1.00
Proportion of seat black	767	0.1680	0.15	0.00	0.83
Proportion of seat race unknown	767	0.1912	0.13	0.00	0.62

Notes: *Def.* indicates defendant. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Proportion of seat* indicates the proportion of jurors with a certain characteristic in the seated jury.

Table 4 presents the summary statistics in the sample for 767 trials. Overall, 11.21% of the defendants are female, 62.45% are black, and 32.72% are white. The majority of defendants, 61.93%, are over 30 years of age.

Following the previous literature, Anwar et al. (2012, 2014) and Flanagan (2018), I generate a set of dummies for the charges according to the following categories: murder (non-capital), robbery, other violent offences, property offences, other offences, drug offences, sex offences, weapon offences, and unknown charges. Overall, 73.92% of the defendants were convicted and on average each defendant had 1.12 charges against them.[33] The main independent variables regard the political affiliation of the jurors in the jury pools. The average percentages of independent, Republican, Democrat, and Libertarian jurors in the jury pool are, respectively, 16.92%, 25%, 32%, and 0.13%.[34] The jury pool shows a higher percentage of people identifying as white (61.34%) and only 16.47% identifying as black, while the proportion of women in the jury pool is 51%.[35][36] Considering the racial composition divided by political affiliation, independent jurors tend to be white (16.92%), in line with the previous survey results.

For political affiliation, the patterns between seated juries and jury pools proposed in Table 4 are similar. To establish whether the peremptory challenges have an impact on seated juries, I analyse and test for difference between variables. The findings are presented in Table 5.

Table 5: Jury pool vs seated jury

	Jury pool Mean	Seated jury Mean	Difference
Independent	0.168***	0.171***	-0.00314
	(0.00339)	(0.00421)	(0.00541)
Democrats	0.323***	0.321***	0.00186
	(0.00506)	(0.00589)	(0.00777)
Republicans	0.257***	0.263***	-0.00558
	(0.00440)	(0.00514)	(0.00677)
Female	0.514***	0.522***	-0.00841
	(0.00374)	(0.00497)	(0.00622)
Male	0.461***	0.456***	0.00503
	(0.00376)	(0.00497)	(0.00623)
White	0.614***	0.618***	-0.00451
	(0.00616)	(0.00693)	(0.00927)
Black	0.164***	0.168***	-0.00392
	(0.00470)	(0.00552)	(0.00725)
Other	0.0233***	0.0229***	0.000382
	(0.00152)	(0.00172)	(0.00230)

Notes: robust standard errors in parenthesis. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

The results in Table 5 suggest that, if differences are present, they are not statistically significant. This indicates that the seated jury, on average, is not statistically different from the jury pool and, on average, there seems to be no pattern for exclusion restrictions/peremptory challenges. However, these results tell us nothing about the strategy of the single actors, a.k.a. judges, assistant district attorneys, and defence attorneys.

[33] Following Flanagan (2018), I remove 14 observations with more than 3 charges.

[34] Given the structure the variable representing the proportion go independent and the dispersion, I remove the upper and lower 1% of the distribution (17 obs).

[35] Given the high number of recordings of unknown gender among jurors, I remove the 2% top of the distribution for unknown gender (43 obs).

[36] Overall, only 22.2% identify as Afro-American in North Carolina (https://www.census.gov/quickfacts/fact/table/NC/PST045219).

4.4 Research Design and Empirical Strategy

To identify the effect of political affiliation on trial outcomes, I follow the methodology first proposed by Anwar et al. (2012, 2014). The authors rely on the day-to-day random variation in jury pool selection to examine the impact of white jurors on verdicts. The Florida dataset used by Anwar et al. (2012, 2014) follows two counties for a series of years. However, the Sunshine project dataset has data spanning over 66 counties for 2 years. In this case, each county has its own jury master list and the number of trials per county is relatively small. To ensure the randomization of the jury selection process, county and year fixed effects are required (Flanagan, 2018). Table 6 examines the variation in the demographic composition of the jury pool across trials and its correlation with the defendants' and the trials' characteristics. Specifically, I regress certain characteristics from the jury pools against observable characteristics of cases and defendants. If jury pools were truly randomly selected, conditioned to year and county fixed effects, the regression coefficients should be close to zero and statistically insignificant. Table 6 essentially shows this, with only 6 significant coefficients over 105 variables and very low F-statistics for the joint tests.[37] Although the results of Table 6 cannot rule out the possibility that the composition of the jury is related to characteristics of the case of defendants that I cannot observe, they suggest that this should not be a major concern.

Finally, as suggested in Section 3, the main analysis should also consider the structure of the Superior Court System, where judges are rotated within the districts and may hear trials from different counties. To account for this, the regressions presented in this article also include judge fixed effects.

As mentioned in Section 1, the main research question of this article is divided into two parts. I first examine the difference in striking patterns between prosecution and defence (see Section 5.1). Second, I evaluate the effects of demographics on trial outcomes, following the two-fold strategy proposed by Anwar et al. (2014). In Section 5.2, I use a reduced-form approach and examine how trial outcomes are influenced by the presence of independent jurors in the jury pool and, overall, by political affiliation. This variation, as suggested by Table 6, can be considered as random. In Section 5.3, I directly examine the causal relationship between the proportion of independent jurors in the seated jury and trial outcomes. However, the seated jury, due to the jury selection process, cannot be considered as good as random. I overcome this problem by implementing an instrument variable strategy. I use the proportion of independent jurors present in the jury pool as an instrument of the proportion of seated independent jurors.

[37] In the table, I also show the results for adjusted within-r2 as proposed by Correia (2016), to overcome interpretation driven by fixed effects.

Table 6: Relationship between Jury pool demographics and Trial Characteristics

dep. var.:	Prop. Pool Ind	Prop. Pool Lib	Prop. Pool Rep	Prop. Pool Dem	Prop. Pool Female	Prop. Pool White	Prop. Pool Black
All charges	0.00302	-0.000261	0.0149	-0.0120	-0.0127	0.0136	-0.00798
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
	[0.28]	[-0.50]	[1.31]	[-1.21]	[-1.22]	[1.37]	[-1.04]
Robbery charge	-0.00745	0.00197	0.0405	-0.0507*	-0.00695	0.0214	-0.0364*
	(0.03)	(0.00)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
	[-0.30]	[0.69]	[1.55]	[-1.78]	[-0.26]	[0.74]	[-1.76]
Drug charge	0.00510	0.00269	0.00956	-0.0285	-0.0277	0.0225	-0.0199
	(0.02)	(0.00)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
	[0.21]	[0.95]	[0.37]	[-1.03]	[-1.12]	[0.83]	[-0.99]
Sex charge	0.0165	0.00397	-0.00262	-0.0520*	-0.0126	-0.0165	-0.0152
	(0.03)	(0.00)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
	[0.65]	[1.19]	[-0.10]	[-1.88]	[-0.48]	[-0.61]	[-0.77]
Property crime charge	-0.00445	0.00226	0.0215	-0.0288	-0.0122	0.0117	-0.0109
	(0.02)	(0.00)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)
	[-0.18]	[0.79]	[0.86]	[-1.10]	[-0.52]	[0.45]	[-0.59]
Other crime charge	-0.0112	0.00361	0.0155	-0.0192	-0.0115	0.0104	-0.0177
	(0.02)	(0.00)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)
	[-0.46]	[1.14]	[0.65]	[-0.75]	[-0.48]	[0.40]	[-0.99]
Murder charge	-0.00291	0.00388	0.0298	-0.0305	-0.0131	0.0321	-0.0289
	(0.03)	(0.00)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)
	[-0.11]	[1.20]	[1.12]	[-1.17]	[-0.56]	[1.16]	[-1.55]
Weapon charge	-0.0123	0.00168	0.0105	-0.0267	0.00139	-0.0311	-0.00550
	(0.03)	(0.00)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
	[-0.47]	[0.62]	[0.36]	[-0.87]	[0.05]	[-1.04]	[-0.25]
Other violent crime charge	-0.00502	0.00344	0.0298	-0.0470*	-0.0145	0.00472	-0.0143
	(0.02)	(0.00)	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)
	[-0.22]	[1.20]	[1.25]	[-1.86]	[-0.68]	[0.20]	[-0.87]
Unknown charge	0.00580	0.00569	0.0178	-0.00842	-0.0484	0.0279	0.00346
	(0.03)	(0.01)	(0.04)	(0.04)	(0.04)	(0.05)	(0.03)
	[0.20]	[0.91]	[0.44]	[-0.19]	[-1.12]	[0.58]	[0.12]
Def. woman	-0.0248**	0.0000891	0.00911	0.00635	-0.00340	-0.0241*	0.00729
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
	[-2.33]	[0.12]	[0.62]	[0.48]	[-0.27]	[-1.74]	[0.64]
Def. white	0.00730	-0.00100	0.00531	-0.00131	0.0130	-0.00278	0.00670
	(0.02)	(0.00)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
	[0.41]	[-0.73]	[0.30]	[-0.06]	[0.75]	[-0.12]	[0.53]
Def. black	0.000680	0.000756	0.0257	-0.000583	0.00992	-0.0141	0.0204
	(0.02)	(0.00)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)
	[0.04]	[0.53]	[1.53]	[-0.03]	[0.59]	[-0.63]	[1.64]
Def. over 30	-0.00776	0.000219	0.000581	0.00659	0.00276	-0.000980	0.00275
	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
	[-1.15]	[0.29]	[0.08]	[0.80]	[0.34]	[-0.11]	[0.42]
Constant	0.172***	-0.00168	0.202***	0.368***	0.532***	0.602***	0.173***
	(0.03)	(0.00)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)
	[6.83]	[-0.51]	[7.72]	[12.11]	[20.38]	[19.80]	[8.94]
Observations	767	767	767	767	767	767	767
F-stat	0.971	1.173	1.744	1.120	0.582	1.246	1.255
Adjusted within-R2	0.000118	0.000816	0.0145	0.00000794	-0.00929	0.00653	-0.000917
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: Each column reports parameter estimates and heteroskedasticity-robust standard error (in parenthesis) and t-statistics (in brackets) from OLS regressions using the variable in the column heading as the dependent variable. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. *Prop.* stands for proportion in the jury pools and *Def.* stays for defendant. *Excluded crime dummy*: Other violent crimes.

5 Results

5.1 Challenge patterns

In this Section I examine the mechanisms of peremptory challenges, specifically the potential for assistant district attorneys/defence attorneys to strategically strike off prospective jurors based on their ideological positions. As proposed by Flanagan (2018), I regress the variables representing the possible reasons for a juror to be struck off (for cause, by state, by defence) on the different political affiliations in the US. Due to the high correlation between political affiliation and other demographic characteristics (Revesz, 2015) and trial-related characteristics, I also insert different sets of controls over juror characteristics and trial fixed effects. The findings are presented in Table 7.

Table 7: Jury selection in the sample

dep. var.:	Republican Juror		Democrat Juror		Independent Juror		Libertarian Juror		Female Juror		Black Juror	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Struck off for cause	-0.0527***	-0.0258**	0.0214*	0.0289**	0.000750	0.000824	-0.0135	-0.000504	-0.0104	-0.0110	0.0231*	0.0141
	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
	[-4.55]	[-2.44]	[1.61]	[2.55]	[0.70]	[0.77]	[-1.25]	[-0.05]	[-0.73]	[-0.77]	[1.75]	[1.16]
Struck off by state	-0.0727***	-0.0262***	0.0779***	0.0316***	-0.000383	-0.000110	-0.0231**	-0.00525	-0.0592***	-0.0687***	0.121***	0.0988***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
	[-6.82]	[-2.68]	[6.12]	[3.00]	[-0.52]	[-0.15]	[-2.33]	[-0.54]	[-4.38]	[-5.12]	[9.58]	[8.56]
Struck off by defense	0.0440***	0.00480	-0.0600***	-0.00185	-0.000119	-0.000328	0.00620	-0.00813	-0.00756	0.00175	-0.118***	-0.106***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
	[4.19]	[0.49]	[-5.79]	[-0.20]	[-0.17]	[-0.46]	[0.70]	[-0.93]	[-0.64]	[0.15]	[-13.88]	[-13.12]
Struck off (Unknown)	0.000704	-0.0000467	0.0245	0.0154	-0.000466	-0.000452	-0.00552	-0.00653	-0.000646	-0.00402	0.00621	-0.000752
	(0.01)	(0.01)	(0.02)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)
	[0.05]	[-0.00]	[1.51]	[1.11]	[-0.34]	[-0.33]	[-0.43]	[-0.52]	[-0.04]	[-0.23]	[0.42]	[-0.05]
Constant	0.261***	0.0425***	0.320***	0.0563***	0.00125***	0.000591	0.173***	0.0585***	0.522***	0.512***	0.299***	0.113***
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
	[59.20]	[8.19]	[68.96]	[8.93]	[3.48]	[1.18]	[45.41]	[10.47]	[102.32]	[31.65]	[56.22]	[15.59]
Trials FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls1	No	Yes	No	Yes	No	Yes	No	Yes	No	No	No	No
Controls2	No	No	No	No	No	No	No	No	No	Yes	No	No
Controls3	No	No	No	No	No	No	No	No	No	No	No	Yes
Observations	17163	17163	17163	17163	17163	17163	17163	17163	17163	17163	13268	13268
N. County	57	57	57	57	57	57	57	57	57	57	57	57
N.Trials	767	767	767	767	767	767	767	767	767	767	767	767

Notes: robust standard errors in parenthesis and t-statistics in brackets. All dependent variables are dummies. * p < 0.1, ** p < 0.05, *** p < 0.01. *Excluded category*: whether the prospective jurors were seated on the jury. *Controls1* includes: female jurors, black jurors, and white jurors. *Controls2* includes: Republican jurors, Democrat jurors, jurors with unknown political affiliation, black jurors, and white jurors. *Controls3* includes: Republican jurors, Democrat jurors, jurors with unknown political affiliation, and female jurors. In Columns (11)-(12) I keep only black or white jurors.

The results in Table 7 indicate that independent jurors are not significantly correlated with a higher level of striking off by state or defence. However, this is not true for the politically affiliated. Republicans are less likely to be struck off for cause and by the state and, conversely, Democrats are more likely to be struck off for cause and by the state. The findings indicate that, while there are some striking patterns for Republicans and Democrats, there is no statistically significant pattern for independent jurors.[38] This is in line with some anecdotal evidence that suggests that attorneys are more aware of (stereotypical) behaviours of liberals and conservatives but not independents.[39]

Finally, female jurors are less likely to be struck off by prosecutors, while black jurors are more likely to be struck off for cause and by the state and less likely to be struck off by the defence. As suggested in Section 3, the *Batson rule* imposes no exclusion due to race or gender, but the findings

[38] Results including all specifications are available upon request.

[39] The anecdotal evidence is proposed by Courtroom Science (https://www.courtroomsciences.com/), a company specializing in litigation psychology, jury and trial consulting, witness training, and deposition services. The main sources are a white paper called "The Importance of Political Preference" and some of their podcasts.

in Table 7 indicate that racial and gender discriminations in jury selection are still present.[40]

5.2 Main Results

In this Section, I examine the causal impact on trial outcomes of the presence of independent jurors in jury pools on trials outcomes. The findings are presented in Table 8.

Table 8: Main analysis (Benchmark regressions)

dep. var.:	Percentage of guilty verdicts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of pool indipendent	-0.486**	-0.562**	-0.556**	-0.507**	-0.542**	-0.631**	-0.615*
	(0.20)	(0.22)	(0.22)	(0.26)	(0.25)	(0.32)	(0.32)
	[-2.40]	[-2.56]	[-2.54]	[-1.99]	[-2.18]	[-2.00]	[-1.95]
Proportion of pool Democrats		-0.157	-0.152	-0.110	-0.193	-0.188	-0.173
		(0.18)	(0.18)	(0.21)	(0.20)	(0.30)	(0.30)
		[-0.85]	[-0.83]	[-0.53]	[-0.95]	[-0.62]	[-0.57]
Proportion of pool Libertarians			-3.747*	-3.679*	-3.588	-3.061	-2.921
			(2.19)	(2.20)	(2.35)	(2.38)	(2.35)
			[-1.71]	[-1.67]	[-1.52]	[-1.29]	[-1.25]
Proportion of pool Republicans				0.0951	0.198	0.0484	0.0529
				(0.21)	(0.21)	(0.30)	(0.31)
				[0.45]	[0.94]	[0.16]	[0.17]
Observations	767	767	767	767	767	767	767
Mean DV	0.711	0.711	0.711	0.711	0.711	0.711	0.711
Mean Ind	0.169	0.169	0.169	0.169	0.169	0.169	0.169
N. County	57	57	57	57	57	57	57
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crime controls	No	No	No	No	Yes	Yes	Yes
Pool controls	No	No	No	No	No	Yes	Yes
Defendant controls	No	No	No	No	No	No	Yes

Notes: robust standard errors in parenthesis and t-statistics in brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Crime controls* includes: total number of charges, robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon, unknown crime. *Pool controls* includes: prop. of unknown political affiliation in the jury pool, prop. women in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* includes: male defendant, white defendant, black defendant and over 30. *Excluded restrictions*: jurors with unknown party affiliation.

The findings in Table 8 from Column (1) to Column (12) clearly indicate that the proportion of independent jurors in the jury pool have a negative effect on trial verdicts and remain statistically significant across the different specifications. Conversely Republicans and Democrats do not have any significant impact, while Libertarians are only slightly significant in Columns (3) and (4). Interestingly enough the coefficients of the proportion of pool independents in Columns (1)-(7) are pretty similar across different specifications. To gain a rough idea of the effect's magnitude, I implement a back-of-the-envelope calculation. On average, when, in Columns (1) and (7), I increase the proportion of independent jurors in the jury pool by 1, $1/22.38 \approx 0.044$, then the percentage of guilty verdicts would decrease by about 0.486 X 0.044 $\approx$ 2.13% in Column (1) and decrease by about 0.615 X 0.044 $\approx$ 2.7% in Column (7). The magnitude of the effect is small but comparable with the results proposed by, for example, Flanagan (2018), where one more white man increases the conviction rate by 1.9 percentage points when the defendant is black.

[40] Other works like Anwar et al. (2012, 2014) show no presence of racial or gender discrimination in Florida. However, Flanagan (2018) and Grosso and O'Brien (2011) found a similar discrimination pattern in North Carolina.

5.2.1 Robustness check

The previous literature suggests that the ethnic and gender composition of the jury pool has a strong impact on the verdict (e.g Anwar et al. (2012) and Flanagan (2018)). Moreover, as proposed by Revesz (2015), in the US there is a strong connection between ethnicity, gender, and political affiliation. To evaluate whether the effect measured is generated by political ideology and not by the different ethnic/gender composition of the different political groups, in the following subsections I replicate my analysis separating political affiliation, first, according to ethnicity, second, according to gender.

5.2.1.1 By ethnic group

Table 9: Political affiliation separated by ethnic groups

dep. var.:	Percentage of guilty verdicts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of pool indipendent White	-0.380*	-0.510**	-0.509**	-0.640*	-0.650*	-0.657*	-0.652*
	(0.23)	(0.25)	(0.25)	(0.36)	(0.36)	(0.35)	(0.35)
	[-1.65]	[-2.04]	[-2.02]	[-1.76]	[-1.83]	[-1.85]	[-1.84]
Proportion of pool indipendent Black	-1.570**	-1.708**	-1.548**	-1.702**	-1.498**	-1.415*	-1.367*
	(0.66)	(0.68)	(0.69)	(0.74)	(0.74)	(0.74)	(0.74)
	[-2.37]	[-2.52]	[-2.25]	[-2.29]	[-2.01]	[-1.91]	[-1.85]
Proportion of pool indipendent Other	-0.922	-1.154	-1.116	-1.234	-1.163	-1.213	-1.204
	(0.94)	(0.94)	(0.94)	(0.97)	(0.99)	(1.00)	(0.99)
	[-0.98]	[-1.22]	[-1.18]	[-1.27]	[-1.18]	[-1.22]	[-1.21]
Observations	767	767	767	767	767	767	767
Mean DV	0.711	0.711	0.711	0.711	0.711	0.711	0.711
Mean Ind White	0.141	0.141	0.141	0.141	0.141	0.141	0.141
Mean Ind Black	0.0161	0.0161	0.0161	0.0161	0.0161	0.0161	0.0161
Mean Ind Other	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120
N. County	57	57	57	57	57	57	57
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Democrats	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls Libertarians	No	No	Yes	Yes	Yes	Yes	Yes
Controls Republicans	No	No	No	Yes	Yes	Yes	Yes
Crime Controls	No	No	No	No	Yes	Yes	Yes
Pool Controls	No	No	No	No	No	Yes	Yes
Defendant Controls	No	No	No	No	No	No	Yes

Notes: Robust standard errors in parenthesis and t statistics in square brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Controls Democrats* includes: Proportion of pool Democrats White, Proportion of pool Democrats Black, Proportion of pool Democrats Other. *Controls Libertarians* includes: Proportion of pool Libertarians White, Proportion of pool Libertarians Black, Proportion of pool Libertarians Other. *Controls Republicans* includes: Proportion of pool Republicans White, Proportion of pool Republicans Black, Proportion of pool Republicans Other. *Crime controls* includes: total number of charges, robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon, unknown crime. *Pool controls* includes: prop. of unknown political affiliation in the jury pool, prop. women in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* includes: male defendant, white defendant, black defendant and over 30. *Excluded restrictions*: jurors with unknown party affiliation.

The findings in Table 9 indicate that the effect is not driven by different ethnic composition

across political groups.[41] The results remain negative and significant for white and black independent jurors, although they are not significant for independent jurors of other ethnic backgrounds. However, Table 9 confirms that the findings in Table 8 are not only driven by the different ethnic background. The previous literature (e.g. Anwar et al. (2012)) suggests that white jurors are more likely to convict, but in this case, the proportion of white independent jurors has a negative effect on the percentage of guilty verdicts. The findings indicate that the measure effect in Table 8 is driven by political ideology. In terms of magnitude, in Columns (1) and (7), increasing the proportion of white independent jurors in the jury pool by 1 decreases the percentage of guilty verdicts by about 0.380 X (1/22.38) ≈ 1.67% in Column (1) and decreases by about 0.652 X (1/22.38) ≈ 2.87% in Column (7).

Additionally, the effect for black independent jurors is stronger, with the effect of ethnicity and political affiliation going in the same direction, as suggested by Anwar et al. (2012). In terms of magnitude, in Columns (1) and (7), increasing the proportion of black independent jurors in the jury pool by 1 decreases the percentage of guilty verdicts by about 1.57 X (1/22.38) ≈ 6.9% in Column (1) and decreases by about 1.367 X (1/22.38) ≈ 6% in Column (7).

5.2.1.2 By gender group

Table 10: Political affiliation separated by gender

dep. var.:	Percentage of guilty verdicts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of pool indipendent Male	-0.933***	-1.019***	-1.020***	-0.970***	-1.056***	-1.130***	-1.142***
	(0.31)	(0.32)	(0.32)	(0.34)	(0.33)	(0.39)	(0.39)
	[-3.05]	[-3.22]	[-3.23]	[-2.86]	[-3.19]	[-2.92]	[-2.96]
Proportion of pool indipendent Female	-0.168	-0.259	-0.238	-0.170	-0.125	-0.236	-0.197
	(0.28)	(0.30)	(0.30)	(0.33)	(0.32)	(0.37)	(0.37)
	[-0.59]	[-0.87]	[-0.80]	[-0.51]	[-0.39]	[-0.64]	[-0.53]
Observations	767	767	767	767	767	767	767
Mean DV	0.711	0.711	0.711	0.711	0.711	0.711	0.711
Mean Ind Male	0.0849	0.0849	0.0849	0.0849	0.0849	0.0849	0.0849
Mean Ind Female	0.0839	0.0839	0.0839	0.0839	0.0839	0.0839	0.0839
N. County	57	57	57	57	57	57	57
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Democrats	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls Libertarians	No	No	Yes	Yes	Yes	Yes	Yes
Controls Republicans	No	No	No	Yes	Yes	Yes	Yes
Crime Controls	No	No	No	No	Yes	Yes	Yes
Pool Controls	No	No	No	No	No	Yes	Yes
Defendant Controls	No	No	No	No	No	No	Yes

Notes: Robust standard errors in parenthesis and t statistics in square brackets. * p < 0.1, ** p < 0.05, *** p < 0.01. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. All regressions include *Proportion of pool unknown gender*. *Controls Democrats* includes: Proportion of pool Democrats Female, Proportion of pool Democrats Male. *Controls Libertarians* includes: Proportion of pool Libertarians Female, Proportion of pool Libertarians Male. *Controls Republicans* includes: Proportion of pool Republicans Female, Proportion of pool Republicans Male. *Crime controls* includes: total number of charges, robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon, unknown crime. *Pool controls* includes: prop. of unknown ethnic groups in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* includes: female defendant, white defendant, black defendant and over 30. *Excluded restrictions*: jurors with unknown party affiliation.

The findings presented in Table 10 suggest that independent male jurors drive the results in

[41] Complete results available upon request.

Table 8.[42] The coefficients for the proportion of female independent jurors are negative but not statistically significant, despite the similar presence of female and male independent jurors. The previous literature suggests that leadership is crucial in jury duty (for more details, see Section 6) and that men tend to dominate discussion in mixed-gender groups (Porter et al., 1985). Additionally, men are more likely to emerge as leader (Kerr, 1982). This implies that, while independent men and women may have the same political views, independent men are more able to sway the jury towards not-guilty verdicts than independent women. In terms of magnitude, in Columns (1) and (7), increasing the proportion of male independent jurors in the jury pool by 1 decreases the percentage of guilty verdicts by about 0.933 X (1/22.38) $\approx$ 4.1% in Column (1) and decreases by about 1.142 X (1/22.38) $\approx$ 5% in Column (7).

5.2.2 Heterogeneity Checks

In this Section, I check for the different heterogeneities present in the sample. First, I address the heterogeneity at county level and, second, at defendant level.[43]

5.2.2.1 By county

Counties in North Carolina are extremely different for many reasons, such as population, income, and education. Overall, there is also a huge heterogeneity in trial distributions, with some counties holding more than 50 trials in the analysed period and others just 1 trial in the same period.[44] To understand if these outlying counties are the ones leading my results, I replicate my analysis by removing the counties with trials in the top 15% percentile of the distribution and remove the counties with trials in the lower 15% percentile of the distribution. The results are presented in Table 11.

[42] Complete results available upon request.

[43] I also implement a heterogeneity check based on the type of crime. The findings do not show a clear pattern.

[44] Counties with fewer than 5 trials count for 7.88% of the sample and include 25 counties. Mecklenburg is the largest county and contains Charlotte. It makes up 15.65% of the sample, while the second largest county, Lincoln, makes up only the 7.18%.

Table 11: Heterogeneity checks: removing top/lower 15% percentile counties

dep. var.:	Percentage of guilty verdicts													
	Excl. lower 15%							Excl. Top 15%						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Proportion of pool indipendent	-0.464**	-0.514**	-0.509**	-0.465*	-0.512*	-0.597*	-0.577*	-0.405*	-0.543**	-0.537**	-0.542*	-0.581*	-0.635*	-0.615
	(0.21)	(0.23)	(0.23)	(0.27)	(0.26)	(0.34)	(0.34)	(0.24)	(0.26)	(0.26)	(0.30)	(0.30)	(0.37)	(0.37)
	[-2.19]	[-2.20]	[-2.19]	[-1.72]	[-1.94]	[-1.77]	[-1.71]	[-1.71]	[-2.11]	[-2.09]	[-1.81]	[-1.96]	[-1.70]	[-1.65]
Proportion of pool Democrats		-0.103	-0.0988	-0.0594	-0.162	-0.133	-0.104		-0.275	-0.271	-0.275	-0.359	-0.391	-0.386
		(0.20)	(0.20)	(0.22)	(0.22)	(0.33)	(0.33)		(0.22)	(0.22)	(0.26)	(0.26)	(0.36)	(0.37)
		[-0.52]	[-0.50]	[-0.27]	[-0.73]	[-0.40]	[-0.32]		[-1.23]	[-1.22]	[-1.07]	[-1.40]	[-1.07]	[-1.06]
Proportion of pool Libertarians			-4.687**	-4.640**	-4.773**	-4.178*	-4.024*			-2.234	-2.239	-2.049	-1.341	-1.309
			(2.13)	(2.14)	(2.25)	(2.27)	(2.25)			(2.37)	(2.38)	(2.58)	(2.65)	(2.70)
			[-2.20]	[-2.17]	[-2.12]	[-1.84]	[-1.79]			[-0.94]	[-0.94]	[-0.79]	[-0.51]	[-0.49]
Proportion of pool Republicans				0.0892	0.181	0.0481	0.0805				-0.00926	0.0992	-0.0382	-0.0585
				(0.23)	(0.23)	(0.33)	(0.33)				(0.26)	(0.26)	(0.37)	(0.37)
				[0.39]	[0.80]	[0.15]	[0.24]				[-0.04]	[0.38]	[-0.10]	[-0.16]
Observations	668	668	668	668	668	668	668	598	598	598	598	598	598	598
Mean DV	0.704	0.704	0.704	0.704	0.704	0.704	0.704	0.710	0.710	0.710	0.710	0.710	0.710	0.710
Mean Ind	0.173	0.173	0.173	0.173	0.173	0.173	0.173	0.162	0.162	0.162	0.162	0.162	0.162	0.162
Mean Libertarian	0.00128	0.00128	0.00128	0.00128	0.00128	0.00128	0.00128	0.00143	0.00143	0.00143	0.00143	0.00143	0.00143	0.00143
Mean Dem	0.320	0.320	0.320	0.320	0.320	0.320	0.320	0.330	0.330	0.330	0.330	0.330	0.330	0.330
Mean Rep	0.261	0.261	0.261	0.261	0.261	0.261	0.261	0.254	0.254	0.254	0.254	0.254	0.254	0.254
N. County	29	29	29	29	29	29	29	55	55	55	55	55	55	55
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crime controls	No	No	No	No	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes
Pool controls	No	No	No	No	No	Yes	Yes	No	No	No	No	No	Yes	Yes
Defendant controls	No	No	No	No	No	No	Yes	No	No	No	No	No	No	Yes

Notes: robust standard errors in parenthesis and t-statistics in brackets. * p < 0.1, ** p < 0.05, *** p < 0.01. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Crime controls* includes: total number of charges, robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon, unknown crime. *Pool controls* includes: prop. of unknown political affiliation in the jury pool, prop. women in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* includes: male defendant, white defendant, black defendant and over 30. *Excluded restrictions*: jurors with unknown party affiliation.

The coefficients are all negative and (almost) all significant, with one slightly exception in Column (14). The results are mostly robust to the exclusion of major and minor counties and reinforce the findings in Table 8.

5.2.2.2 Defendant ethnicity

In this Section I investigate the impact of defendants' ethnicity. The previous literature (Anwar et al., 2012; Flanagan, 2018) suggests that the ethnicity of defendants is an important factor in determining the probability of conviction.[45] As a heterogeneity check, I replicate the analysis, interacting my variables with a dummy variable for black defendants.[46] The results are presented in Table 12.

[45] Some literature, for example Anwar et al. (2014), also investigates the effect of the gender of the defendant. Unfortunately, due to the low number of female defendants in my sample (102 observations), I cannot implement this analysis.

[46] From this analysis, I remove defendant of unknown ethnic groups and "other" ethnic group defendants. Overall, I remove 38 observations.

Table 12: Heterogeneity checks: Black defendant

dep. var.:	Percentage of guilty verdicts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of pool indipendent	0.358	0.357	0.290	0.345	0.412	1.356*	1.486*
	(0.42)	(0.42)	(0.44)	(0.49)	(0.45)	(0.77)	(0.79)
	[0.84]	[0.84]	[0.66]	[0.71]	[0.91]	[1.75]	[1.88]
DefBlackXPoliticalPoolIndependent	-1.060**	-1.046**	-0.884*	-1.036*	-1.103*	-2.627***	-2.831***
	(0.51)	(0.51)	(0.53)	(0.61)	(0.58)	(0.90)	(0.92)
	[-2.09]	[-2.07]	[-1.68]	[-1.70]	[-1.90]	[-2.92]	[-3.09]
Observations	667	667	667	667	667	667	667
Mean Ind	0.169	0.169	0.169	0.169	0.169	0.169	0.169
N. County	50	50	50	50	50	50	50
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Democrats	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls Libertarians	No	No	Yes	Yes	Yes	Yes	Yes
Controls Republicans	No	No	No	Yes	Yes	Yes	Yes
Crime Controls	No	No	No	No	Yes	Yes	Yes
Pool Controls	No	No	No	No	No	Yes	Yes
Defendant Controls	No	No	No	No	No	No	Yes

Notes: Robust standard errors in parenthesis and t statistics in square brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Controls Democrats* includes: Proportion of pool Democrats, Proportion of pool Democrats X DefBlack. *Controls Libertarians* includes: Proportion of pool Libertarians, Proportion of pool Libertarians X DefBlack. *Controls Republicans* includes: Proportion of pool Republicans, Proportion of pool Republicans X DefBlack. *Crime controls* includes: total number of charges, robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon, unknown crime. *Pool controls* includes: prop. of unknown political affiliation in the jury pool, prop. women in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* includes: female defendant and over 30. *Excluded restrictions*: jurors with unknown party affiliation.

The findings in Columns(1)-(7) of Table 12 indicate that the negative effect seems to be stronger for black defendants, also due to their higher number. Independents' political ideology counterbalances the bias present from other categories such as race and age and reduces the conviction rate for black defendants. In terms of magnitude, in Columns (1) and (7), increasing the proportion of independent jurors in the jury pool by 1 decreases the percentage of guilty verdicts by about (0.358-1.060) X (1/22.38) $\approx$ 3.09% in Column (1) and decreases by about (1.486-2.831) X (1/22.38) $\approx$ 5.9% in Column (7) if the defendant is black.

5.3 IV approach

In this Section, I examine the effect of the composition of the seated jury on trial outcomes, following Flanagan (2018) and Anwar et al. (2014). The IV strategy requires an additional assumption with respect to the reduced form presented in Section 5.2, that the proportion of independent jurors in the jury pool affects the percentage of guilty verdicts only through the effect of the proportion of independent jurors in the seated jury. The results for the first stage are presented in Table 13.

Table 13: First stage regressions

	Prop. Independent (Seated jury)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of pool indipendent	1.037***	1.037***	1.037***	1.031***	1.032***	1.028***	1.026***
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)	(0.05)
	[31.75]	[28.95]	[28.90]	[25.38]	[25.04]	[21.05]	[21.08]
Observations	791	791	791	791	791	791	791
Mean Ind (seat)	0.171	0.171	0.171	0.171	0.171	0.171	0.171
N. County	72	72	72	72	72	72	72
F-stat	1008.0	838.0	835.1	644.0	626.8	443.2	444.5
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Democrats	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls Libertarians	No	No	Yes	Yes	Yes	Yes	Yes
Controls Republicans	No	No	No	Yes	Yes	Yes	Yes
Crime Controls	No	No	No	No	Yes	Yes	Yes
Pool Controls	No	No	No	No	No	Yes	Yes
Defendant Controls	No	No	No	No	No	No	Yes

Notes: robust standard errors in parenthesis and t statistics in square brackets. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Controls Democrats* includes: Proportion of pool Democrats. *Controls Libertarians* includes: Proportion of pool Libertarians. *Controls Republicans* includes: Proportion of pool Republicans. *Crime controls* include: robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon. *Pool controls* include: prop. of democrats political affiliation in the jury pool, prop. of unknown political affiliation in the jury pool, prop. women in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* include: male defendant, white defendant, black defendant and over 30. *Excluded restrictions*: Unknown jurors political affiliations.

The findings presented in Table 13 indicate a strong first stage. The effect is similar across the specifications and indicates a strong relationship between the instrument and the endogenous variable. Regardless of the specification used, all the coefficients in the first stage are significant at 1% level. Moreover, the F-statistics on the excluded instruments from the first stage are well above the rule-of-thumb of 10.[47]

[47] The F-statistics are also well above the Stock et al. (2005) 10% critical value, which is 16.38.

Table 14: IV Regressions

dep. var.:	Percentage of guilty verdicts						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Proportion of seat indipendent	-0.469***	-0.542***	-0.536***	-0.492**	-0.525**	-0.614**	-0.599**
	(0.17)	(0.19)	(0.19)	(0.22)	(0.21)	(0.27)	(0.27)
	[-2.69]	[-2.86]	[-2.85]	[-2.23]	[-2.47]	[-2.27]	[-2.22]
Observations	791	791	791	791	791	791	791
Mean Ind (seat)	0.171	0.171	0.171	0.171	0.171	0.171	0.171
N. County	72	72	72	72	72	72	72
F-stat	1008.0	838.0	835.1	644.0	626.8	443.2	444.5
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Judge FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls Democrats	No	Yes	Yes	Yes	Yes	Yes	Yes
Controls Libertarians	No	No	Yes	Yes	Yes	Yes	Yes
Controls Republicans	No	No	No	Yes	Yes	Yes	Yes
Crime Controls	No	No	No	No	Yes	Yes	Yes
Pool Controls	No	No	No	No	No	Yes	Yes
Defendant Controls	No	No	No	No	No	No	Yes

Notes: robust standard errors in parenthesis and t statistics in square brackets. * p < 0.1, ** p < 0.05, *** p < 0.01. *Proportion of pool* indicates the proportion of jurors with a certain characteristic in the jury pool. *Controls Democrats* includes: Proportion of pool Democrats. *Controls Libertarians* includes: Proportion of pool Libertarians. *Controls Republicans* includes: Proportion of pool Republicans. *Crime controls* include: robbery, drug, sex, property crimes, other crimes, murder, other violent crimes, weapon. *Pool controls* include: prop. of democrats political affiliation in the jury pool, prop. of unknown political affiliation in the jury pool, prop. women in the jury pool, prop. of white and prop. of black in the jury pool. *Defendant controls* include: male defendant, white defendant, black defendant and over 30. *Excluded restrictions*: Unknown jurors political affiliations.

In Tables 14, I present the findings for IV on the impact of the proportion of independent jurors in the seated jury on trial outcome variables. Overall, the results of the IV are similar to those in Table 8 and consistently negative and significant. These findings underline that the impact of independent jurors is present through the seated juries.

6 Mechanisms

The final question is about the mechanisms behind these results. Table 4 shows that independent jurors in jury pools are, on average, a minority. How can limited numbers of jurors in the jury pool sway the verdicts?

First, seated jury composition is strongly connected to the jury pool composition, as mentioned above. Table 13 suggests that a higher number of independent jurors in the jury pool leads to a higher number of jurors within the seated jury. Additionally, Table 4 and Table 5 underline the absence of striking patterns for independent jurors and reinforce the correlation between independent jurors in seated juries and the jury pool.

Second, not all jurors are the same or have the same impact. As mentioned in Section 3, juries in North Carolina are composed of 12 jurors and required a unanimous verdict. The previous literature, mainly based on post-trial surveys and mock trials, suggests that not all jurors are equal and jury decisions are group decisions and not the sum of single individual decisions (e.g. Latane and Darley (1968)).[48] For example, Gordon (2014) suggests that as many as 33% of jurors do not actively participate in the deliberation process and that 25% of mock jurors do not speak at all during deliberations. Moreover, other factors can contribute to an increase in juror' apathy, such as loss of motivation in groups (Henningsen et al., 2000), cognitive biases (Kerr et al., 1996), and the profound influence other members of the group have on individual jurors' cognition and behaviours (Fiske, 2018). Among the people that actually influence the jurors, according to Treger

[48] In their ground-breaking work, Latane and Darley (1968) put their subjects in a smoke-filling room either alone or in groups. They find that subjects were less likely to report when in groups than when alone.

(1992), there are leaders, both official and unofficial.[49] Specifically, the main official leader is the foreperson, the person elected by jurors to manage, among other things, the jury decision process. According to Foley and Pigott (1997), forepersons have significantly more influence than other jurors and are more confident in their decisions.[50] According to Anwar et al. (2019), this influence can be classified into four different categories. First, there is the *sway effect*. The individual changes her/his views toward the views of a peer due to persuasion or the sharing of relevant information. In this framework, the two jurors will vote in the same way. Second, there is the *Dig-in effect*. An individual can harden her/his own initial position in the presence of a particular kind of peer. An extreme case is the hung jury. But given the fact that in the North Carolina case unanimous verdicts are required and hung juries are extremely rare (not present in the sample), I consider this effect marginal. Third, there is the *Conformity effect*. An individual's vote may be influenced by her/his basic desire to reach the same judgement as her/his peers. Finally, there is *Dissent aversion effect*, a willingness to switch one's vote to avoid formal dissent (or a preference for unanimity). All these effects and the reality of my sample point towards the strong influence of one (or more) leader on overall jury verdicts. If independent jurors, even as a minority, are in a leadership position, they could easily sway the entire jury in their preferred direction. Looking at my data, while overall independents are only 0.17% of the seated jurors, they constitute 13% of forepersons.[51] This seems to suggest that independent jurors are more likely to be a foreperson and they are more likely to be in a position of influence, thus swaying other jurors.

7 Conclusion

In this article, I evaluate the effect of politically independent jurors on jury selection processes and trial outcomes in North Carolina, exploiting the day-to-day random variation in the jury pool. First, I evaluate the impact of independent jurors on the jury selection process. The results indicate the presence of some strategic exclusion in jury pools based on political affiliation, but mainly focus on Republicans and Democrats, without any significant results for independent jurors. Additionally, the effect is mainly generated by striking for state and removal from the judges. Second, I directly evaluate role of political affiliation on trials outcomes. The main results indicate that the proportion of independents in the jury pool has a negative effect on the percentage of guilty verdicts. Additionally, my results are robust if I divide jurors per ethnicity and gender, if I remove outlying counties and interact the proportion of pool independents with a dummy of black defendant. Given that verdicts are reached by the seated jury, I also investigate the role of seated juries using an instrumental variable approach. I use the proportion of independents in the jury pool as an instrument for the proportion of independents in the seated jury. The findings are similar to those of the main analysis.

The main implications of these findings are that independent jurors matter. Independent jurors either interpret the evidence differently to other jurors, having less trust in the judiciary system and in the police, and displaying a tendency to be more lenient towards the defendants. In both cases, independent jurors have an impact upon the percentage of guilty verdicts and any demographic change in the political affiliation of the jury pool therefore can have an impact on trial outcomes. This topic is worthy of further analysis to ensure the fairness of the justice system.

[49] Other influencers are called strong dissenters.

[50] Other works in this line are: Bevan et al. (1958), Eakin (1975), Boster et al. (1991) and Diamond and Casper (1992).

[51] It is important to notice that the dataset does not always indicate who is the foreperson.

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