External Appendix to: Exclusion of Extreme Jurors and Minority Representation: The Effect of Jury Selection Procedures*

Andrea Moro and Martin Van der Linden

January 7, 2022

Contents

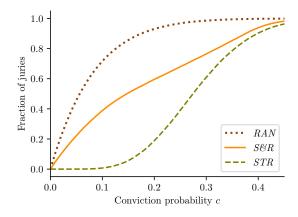
\mathbf{B}	B Additional simulations	ditional simulations				
	B.1 Excluding extremes, uniform distribution of conviction pro	babilities	2			
	B.2 Minority representation when minorities favor conviction .		3			
	B.3 Excluding unbalanced juries, simulations from mild and mo	oderate polarization	4			

^{*}Moro and Van der Linden (2021). Moro: Vanderbilt University, andrea@andreamoro.net. Van Der Linden: Emory University martin.van.der.linden@emory.edu.

B Additional simulations

B.1 Excluding extremes, uniform distribution of conviction probabilities

Figure B.1: Fraction of juries with at least one extreme juror



Note: Results from 50,000 simulations of jury selections with parameters $j=12, d=p=6, \text{ and } C \sim U[0,1]$

B.2 Minority representation when minorities favor conviction

Table B.1: Representation of Group-a jurors in the effective jury when Group-a is a minority of the jury pool

Polarization Procedure		reme STR		$\frac{\text{erate}}{STR}$	Mi S&R	ild STR	(All) RAN
Average fraction of minorities Standard deviation Fraction of juries with at least 1	0.11	0.11	0.12	0.12	0.23 0.12 0.96	0.12	0.12

(a) Group-a represents 25% of the jury pool

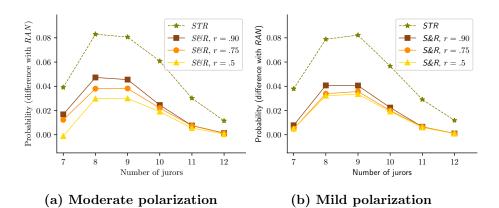
Polarization Procedure		STR		erate STR	Mi S&R		(All) RAN
Average fraction of minorities Standard deviation Fraction of juries with at least 1	0.01 0.03 0.09	0.02	0.06	0.04 0.06 0.38		0.08 0.08 0.64	0.10 0.09 0.72

(b) Group-a represents 10% of the jury pool

Note: The rows report the average number and standard deviation of group-a jury members, and the percent of juries with at least one group-a jurors, out of 50,000 simulations of jury selection with parameters j=12 and d=p=6. Conviction probabilities are drawn for from Beta(1,5), Beta(5,1), respectively for Group-a, Group-b jurors (Extreme), from Beta(2,4), Beta(4,2) (Moderate), and from Beta(3,4), Beta(4,3) (Mild); see Figure 3 for the shape of these distributions.

B.3 Excluding unbalanced juries, simulations from mild and moderate polarization

Figure B.2: Probability of selecting jurors below the median, difference with RAN



Note: The chart displays the probability of selecting a number of jurors with c_i below the median under STR (green dashed line) and $S\mathscr{E}R$ (orange lines) relative to the same probability under RAN, i.e. $\mathbb{I}_M(x;med[C]) - \mathbb{I}_{RAN}(x;med[C])$. The model parameters are j=12, d=p=6 and $C\sim r*Beta(2,4)+(1-r)*Beta(4,2)$ for Panel (a) and $C\sim r*Beta(3,4)+(1-r)*Beta(4,3)$, for $r=\{0.1,0.25,0.5\}$ Values for $S\mathscr{E}R$ are the results from 50,000 simulations of jury selection, whereas values for RAN and STR are computed analytically and are independent of r (see Footnote 30).

References

Moro, Andrea, and Martin Van der Linden. 2021. "Exclusion of Extreme Jurors and Minority Representation: The Effect of Jury Selection Procedures." arXiv preprint arXiv:2102.07222. (Cited on page 1)