



Universität Hamburg

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FACULTY

OF BUSINESS, ECONOMICS  
AND SOCIAL SCIENCES

# WHEN RECOMMENDER SYSTEMS SELECT POLITICAL NEWS

Picture: <https://lecture2go.uni-hamburg.de/l2go/-/get/v/64514>

## EFFECTS OF ALGORITHMIC NEWS CURATION ON PARTY PREFERENCES

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### WATCH THE VIDEO



### RESEARCH QUESTION

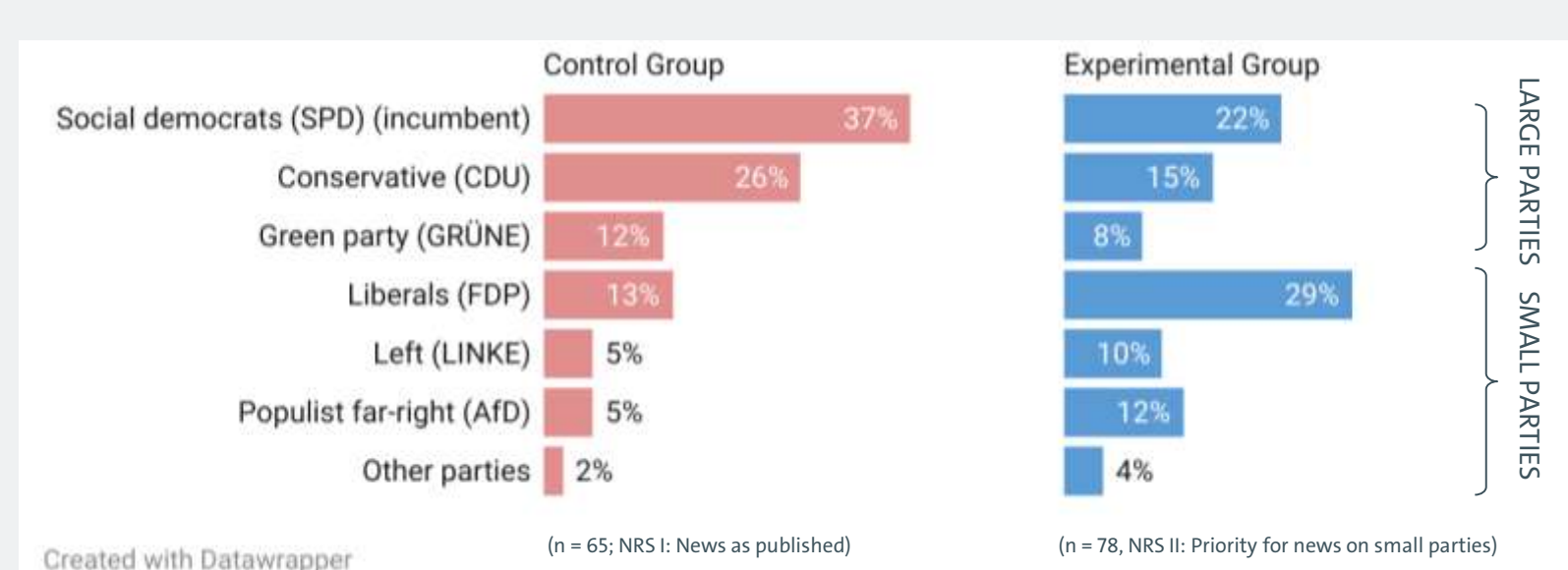
What are effects of **varying party visibilities** (INPUT)

- in **news recommendations** (OUTPUT)
- on political news usage, knowledge, attitudes, and voting behavior? (OUTCOME)

### RESULTS

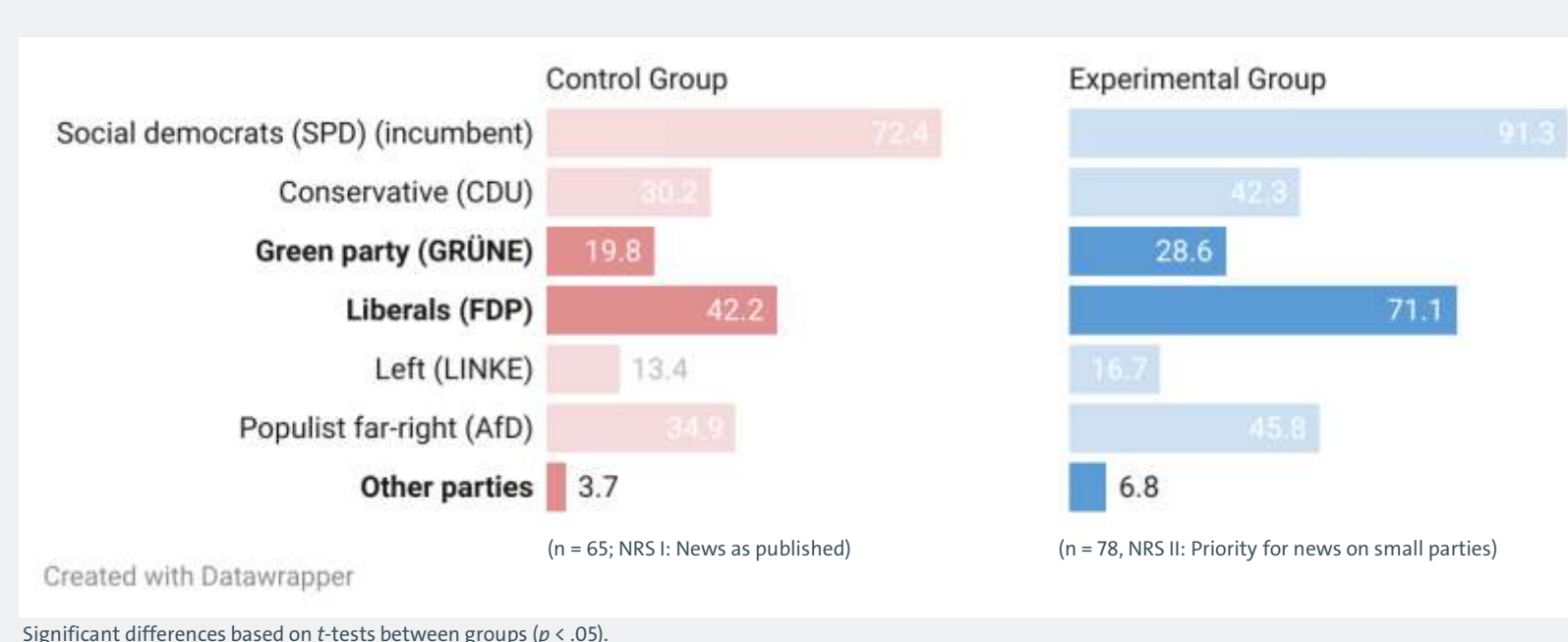
#### 1. OUTPUT: Supply

- ✓ **MORE EXPOSURE TO SMALL PARTIES IN NRS II**



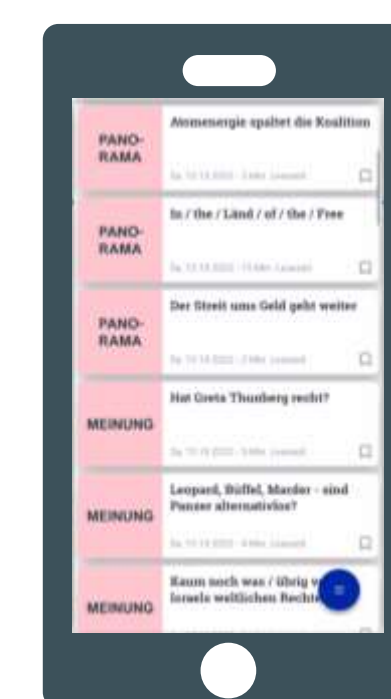
#### 2. OUTCOME: Demand

- ✓ **MORE NEWS USAGE FOR GREENS, LIBERALS, OTHERS**



### FIELD EXPERIMENT

1. News recommender app
2. User study during federal state elections in Lower Saxony (D)



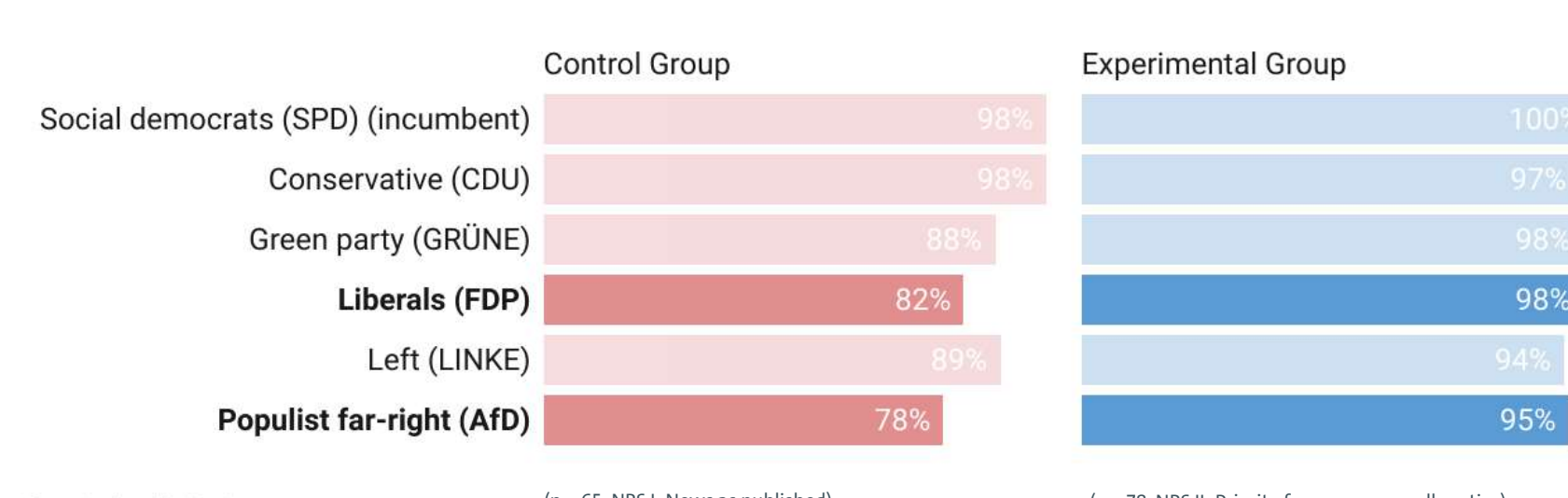
Study Outline

INPUT			OUTPUT	OUTCOME	
Recommender Pipeline			Supply	Demand	Effects
Real-world news	→	Data base	→	Named entity recognition	→
			→	NRS I (news as published)	→
			→	NRS II (priority for news on small parties)	→
			→	Control group (n = 65)	→
			→	Experimental group (n = 78)	→
				Usage	Political knowledge, attitudes, voting behavior

#### 3. OUTCOME: Effects

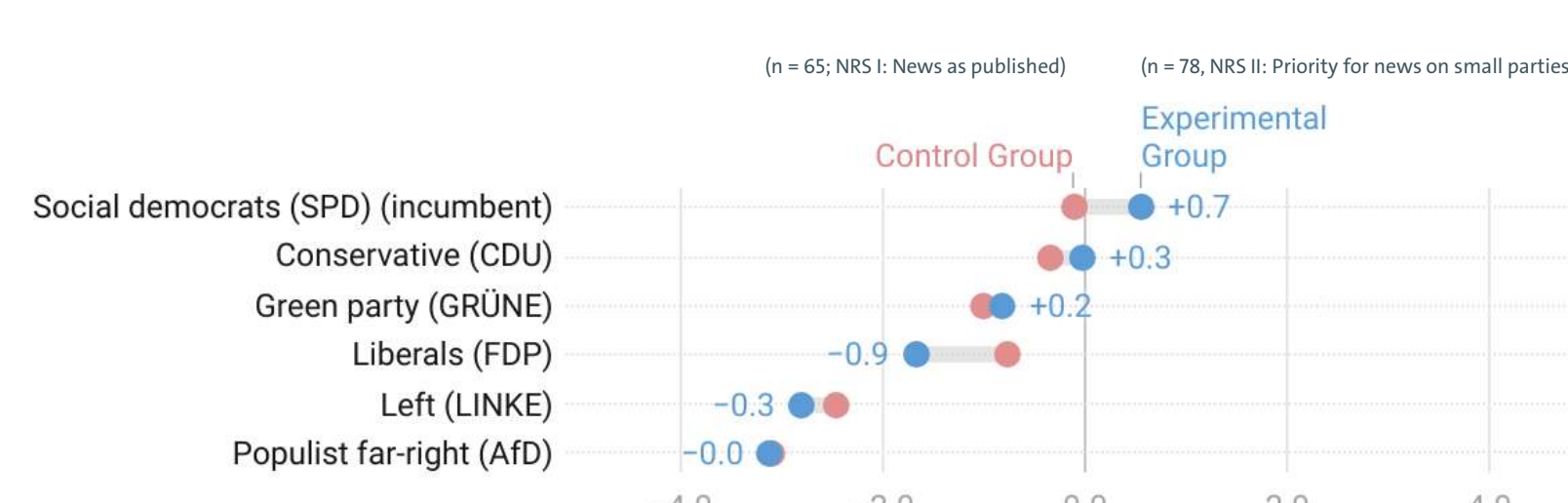
##### 3.1 Political knowledge

- ✓ **DIFFERS FOR LIBERALS AND FAR-RIGHT**



##### 3.2 Political attitudes

- ✗ **PARTY PREFERENCES DO NOT DIFFER**

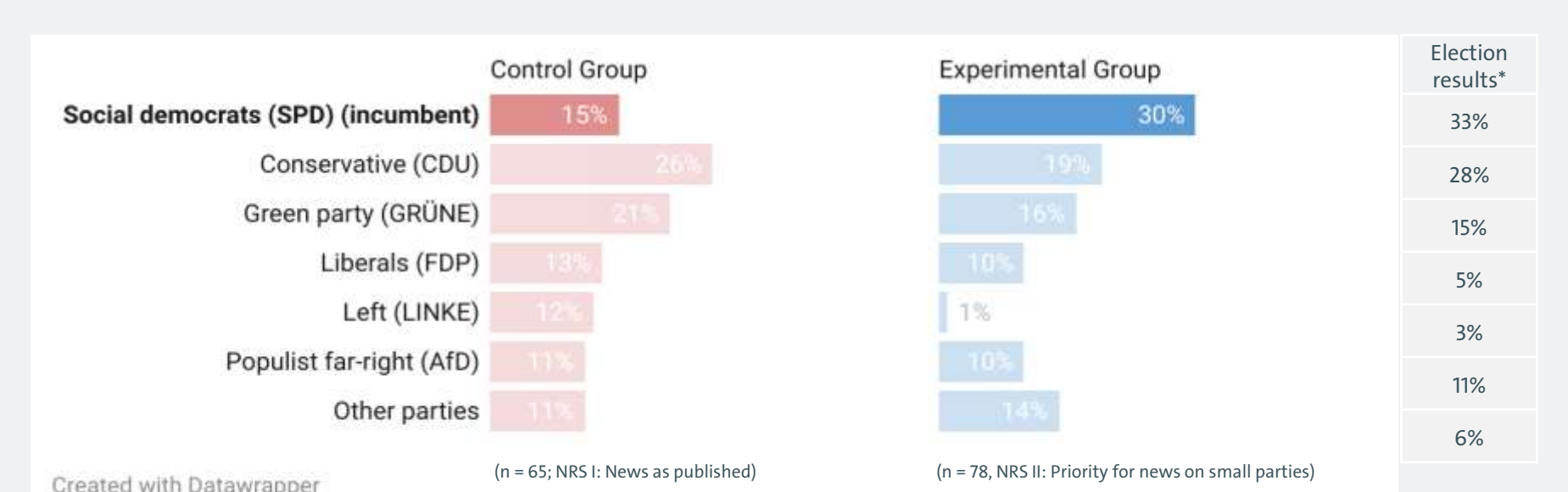


### CONCLUSIONS

- News recommender system (NRS) design has a measurable impact on the audience:
- Political news is unlikely to sway party preferences or votes, but
- Users read and know more when exposed to small-party news.
- **Let's invest in developing socially responsible NRSs!**

#### 3.3 Voting behavior

- ✓ **DIFFERS FOR SOCIAL DEMOCRATS,**



- ✗ **BUT UNRELATED TO EXPERIMENT**

According to a logistic regression analysis to predict the likelihood of voting for Social Democrats or not ( $n = 143$ ),

- with a dummy variable for the experimental groups, ex-ante and ex-post party preferences, governance ability evaluations, news usage, and candidate knowledge of the Social Democrats
- Only **ex-ante party preference** ( $B = .909$ ,  $SE = 0.316$ ,  $p = .004$ ) and **ex-post party preference** for the Social Democrats ( $B = .685$ ,  $SE = .323$ ,  $p = .034$ ) were significant predictors of voting for the Social Democrats.

Hence, the experimental conditions cannot be ascribed to the difference in voting behavior.

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