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Results

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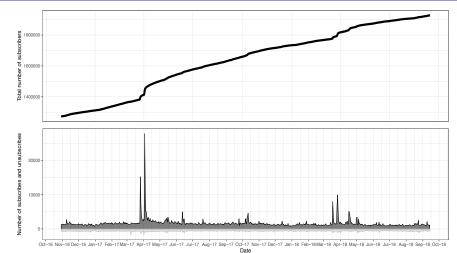
Motivation, Background and Hypotheses

Late-night shows encourage political awareness among those who encounter political information from news outlets (Balmas, 2014; Baumgartner & Morris, 2011; Xenos & Becker, 2009)

Focus on late-modern societies (Bennet & Iyengar, 2008)

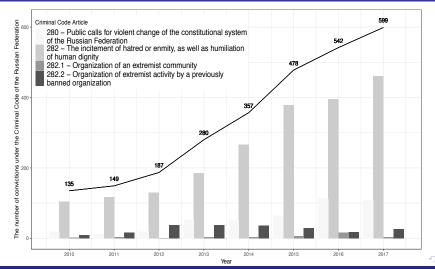
#### Russia:

- Mobile devices
- Internetization
- Multiplication of communication genres



Motivation, Background and Hypotheses

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Motivation, Background and Hypotheses

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Motivation, Background and Hypotheses

#### Political humor is too broad for conceptualization

Gray, Jones and Thompson (2009, p. 12) highlight two inherent parts of political satire

- verbal attack
- stimulating judgment on the object of that attack.

Memes (or humorous images) as a visual form of political satire proliferated in the digital age (Shifman, 2014)

**Selective exposure** – the motivated selection of messages matching one's beliefs or preferences (Stroud, 2014)



# Theories of Humor Origin (Meyer, 2000)

- Relief
  - People experience humor and laugh because they sense stress has been reduced in a certain way.

Results

- 2 Incongruity People laugh at what surprises them, is unexpected, or is odd in a nonthreatening way.
- 3 Superiority People laugh outwardly or inwardly at others because they feel some sort of triumph over them or feel superior in some way to them.

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Motivation, Background and Hypotheses

### $H_1$ : Satire Hypothesis

Satirical content encourages exposure to political information.

### $H_2$ : Visuals Hypothesis

Visual part of a message (in other words, an image) encourages exposure to political information regardless of whether its content is satirical or not

### $H_3$ : Distinct Satire Effect Hypothesis

Satirical content encourages exposure to political information more, comparing this with the influence of a neutral visual content

### Participants are the Higher School of Economics students of different departments and education levels (Age: $\mu = 20$ , sd = 1.29; Gender = 83% are women)

The invitations (N = 273) to participate in the study were sent to study group email addresses in May, 2018

**Incentives:** Students who completed the experiment could win an Apple Watch (average cost in Russia of \$411 U.S.)

A kind of 'Response Rate':

- $N_{total} = 879$
- $\bullet$  Complete = 579 (65.9%)
- $Dropout_{>80\%} = 37 (4.2\%)$



### Procedure

In each condition participants were exposed to a series of political news or a 'news feed' that consisted of **6 news reports**, shown to the participant one by one on a screen. Each news report contained **a title** (in bold) **and a short text** (approx. 150 words).

**Control group** (N = 197) received news reports with entitled texts only

#### Treatment Groups:

- **Neutral Image** (N = 200) got the same news reports with entitled texts + neutral images
- Satirical Image (N = 219) got the same news reports with entitled texts + memes

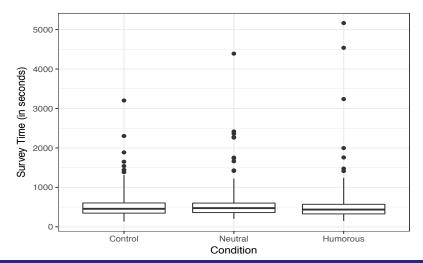






### Instructions for Participants

You will see a number of news reports about events that took place in our country and the world. We ask you to behave as you evaluate the information on the Internet and social media on a daily basis. You can carefully read, view or simply skip the newsletter by clicking the "Next" button. Your time to become acquainted with that news stories is unlimited.





## Dependent Variable

Using metadata, we measure, how long each participant spends to become familiar with a given news report (in milliseconds???).

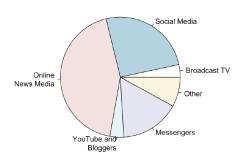
- Correlates with the order in which these reports are given
- Could be extremely long in comparison with the average value

**Solution:** observation omission for *outliers* + data truncation for *suspicious observations* 

Average adults reading speed does not exceed 160 words per minute (Rubin, 2013).

**Cut-off:** 1800 milliseconds (3 minutes)

	Mean	SD	Ν	Tr
SER R#1	238.33 (241.03)	204.08 (228.67)	590	2
SER R#2	285.28 (290.02)	262.83 (294.31)	590	5
SER R#3	215.13 (215.13)	183.82 (183.82)	590	0
SER R#4	201.27 (202.98)	198.47 (214.09)	590	2
SER R#5	250.92 (259.71)	247.06 (345.57)	590	4
SER R#6	214.36 (224.96)	206.62 (348.50)	590	2
SER Overall	1405.28 (1433.83)	954.98 (1081.42)	590	_



Political Awareness. The number of newsletters (max = 6), which participants marked as 'familiar'  $(\mu = 1.08; sd = 1.26)$ 

$$(\mu = 1.08; sa = 1.20)$$

- Prior Source of Information.See on a pie chart.
- Entertainment Media Use. Exposure to Lentach and TJ  $(\mu = 0.62; sd = 0.71)$
- Demographics. Gender and Age of participants.



Results

Common statistical tests (one-way ANOVA, t-tests, difference in proportions);

Multiple comparisons (Bonferroni correction, Tukey HSD multiple comparisons of means)

**OLS** regression model

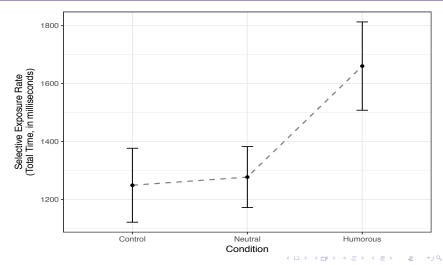
$$SER_{i} = \beta_{0} + \beta_{1}X_{i}^{(1)} + \beta_{2}X_{i}^{(2)} + \sum_{i} \beta_{k}Z_{i}^{(k)} + \varepsilon_{i}$$

Mixed effects linear regression model

$$SER_{ij} = \gamma_{00} + \gamma_{01}X_j^{(1)} + \gamma_{02}X_j^{(2)} + \sum \gamma R_{ij} + \sum \gamma Z_j^{(k)} + \delta_{0j} + \delta_{1j} + \varepsilon_{ij}$$



## Results: One-way ANOVA



Results 0000

	ANOVA	$\Delta$ N-C	$\Delta$ H-C	$\Delta$ H-N
SER R#1	3.42(df = 2)*	13.17	50.94*	37.77
SER R#2	4.62(df = 2)*	23.89	77.17**	53.28
SER R#3	2.651(df = 2)	3.14	37.73	34.59
SER R#4	24.61(df = 2)***	-2.90	113.60***	116.50***
SER R#5	5.79(df = 2)**	-20.66	59.13*	79.80**
SER R#6	7.41(df = 2)***	11.49	72.67**	61.18**
SER Overall	12.21(df = 2)***	28.12	411.24***	383.12***

Note: Significance codes are \*\*\*p<.001, \*\*p<.01, \*p<.05.

Results 0000

	OLS	5
	(1)	(2)
Neutral Image Treatment	46.115 (98.031)	158.665 (283.252)
Satirical Image Treatment	424.703* <sup>*</sup> * (95.351)	743.664* <sup>*</sup> (276.790)
Controls	+ /	+ /
Observations	568	591
$R^2$	0.068	0.029
Adjusted R <sup>2</sup>	0.050	0.010
F Statistic	3.701*** (11, 556)	1.545 (11, 579)

	LME		
	(3)	(4)	
Neutral Image Treatment	8.379	-0.535	
	(15.124)	(31.171)	
Satirical Image Treatment	72.029***	70.479*	
	(14.711)	(30.459)	
Controls	+	+	
Observations	3,408	3,546	
Log Likelihood	-22,477.940	-27,796.710	

Bayesian evaluation of informative hypotheses (BEIH) instead of null hypothesis significance testing (NHST)

- Something is going on, but we don't know what;
- Multiple comparisons are used to compare pairs one by one, however this approach does not provide evidence for the particular order of means
- The meaning of null hypothesis such that "nothing is going on" (Cohen, 1994) does not reliable for us.

## Robustness: Bayesian Analysis

#### 3! = 6 possible orderings

### 4 informative hypotheses

Bayesian linear regression to obtain posterior probabilities (using non-informative, punishing priors)

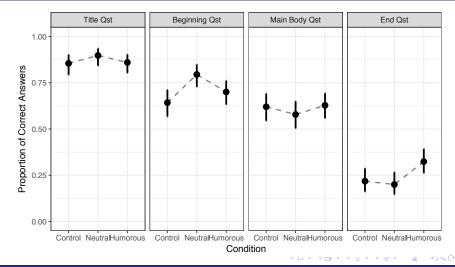
Hypothesis	Prior	Posterior	BF	PMP
$H_{1a}: \{\mu_C\} < \{\mu_N\} < \{\mu_H\}$	16.7%	31.5%	1.888	27.6%
$H_{1b}: \{\mu_C\} < \{\mu_H\} < \{\mu_N\}$	16.7%	0.00%	0.003	0.00%
$H_{1c}: \{\mu_C, \mu_N\} < \{\mu_H\}$	33.3%	99.9%	2.998	43.9%
$H_{1d}: \{\mu_C\} < \{\mu_N, \mu_H\}$	33.3%	31.5%	0.946	13.8%
$H_2: \{\mu_C, \mu_N, \mu_H\}$	100.00%	100.00%	1.000	14.6%

We asked our participants four different questions about randomly selected news reports;

Each question separately refers to the information placed in

- 1 a newsletter title;
- 2 the first sentence of the newsletter;
- 3 the main body of the text;
- 4 the last sentence.

### Treatment Effect Check



### Discussion

#### **Major findings:**

- The presence of an image slightly encourages exposure to political information;
- Satirical content encourages exposure to political information comparing with both neutral visual content and control condition.

### Two options for authoritarian government:

- to expand repressions beyond political system and mass media, transforming itself to more severe political forms,
- 2 to decentralize censorship relying on people avoidance of unwanted information



### Limitations

- Artificial rather than natural conditions
- Student sample
- Particular content