

Reviewers' Appendix

Table Appendix 1: Descriptive Statistics – Question Wordings

Variable	Question/Source	Answer Options and Codings
<i>Electoral Violations</i> Dependent Variable (Main Paper)	Do you think there were violations in the counting of ballots during these elections, and, if so, how significant were they?	No violations=1, Insignificant violations=2, somewhat significant violations that did not affect the final results=3, significant violations that affected the results=4
<i>Putin Approval</i>	Do you support or not support the job that Vladimir Putin is doing as Prime Minister	Support=1, Don't Support=0
<i>NonPartisan, Opposition Supporter</i>	Please tell me, is there one political party among the current parties in Russia that, more than the others, reflects your views, interests, and/or needs? If so, which.	Open ended question. From this a series of dummy variables were created. <i>NonPartisan</i> =1 if respondent said there was no such party, 0 otherwise. <i>Opposition Supporter</i> =1 if an opposition party was named, 0 otherwise. <i>URSupporter</i> =1 if United Russia was named, 0 otherwise.
<i>Participated in Political Action</i>	In the past 30 days, have you tried to participate in a mass action in support of a candidate or party?	Everyday=1, Several Times a week=2, Once a week=3, Once or twice=4, Never=5
<i>Social Media User, Facebook User, VKontakte User, Moi Mir User, Live Journal User, Twitter User, MoiKrug User, Odnoklassniki User</i>	Do you regularly spend time on social networking sites? If so, which?	Options: Facebook, VKontakte, Moi Mir, Live Journal, Twitter, Moi Krug, Odnoklassniki
<i>Voted in December Election</i>	Did you vote in the December 4 th Stata Duma elections?	Yes=1, No=0
<i>Consumer of Foreign Media</i>	People find out about news and events in the country in different ways. Where do you mainly get news about events in our country? Is there another place?	Respondent was given multiple options, one of which was "Foreign Sources (foreign television, radio, newspapers, and magazines)" A dummy variable is created equal to 1 if the respondent listed foreign media as a primary or secondary news source.
<i>Internet User</i>	Do you use the Internet? If so, for what uses?	Multiple options given. In the paper, only a binary indicator equal to 1 if the respondent uses the Internet, is used.
<i>Employed</i>	What is the nature of your employment? If you work in several places, answer with respect to your primary place of employment.	Several options given. We construct a binary variable equal to 0 if the respondent reported
<i>Level of Education</i>	What is your level of education	1=primary, 2=secondary,

		3=vocational (no high school), 4=high school, 5=vocational on basis of high school, 6=college, 7=incomplete university, 8=university
<i>Age</i>	What is your age?	Open ended.
<i>Unmarried</i>	What is your family status?	1 if respondent is either “Single, never married”, “separated”, “divorced”, “widowed”, or “cohabitated”, 0 if “married”
<i>Household Income (Logged)</i>	What was the total income of your family last month, including income from work, pensions, stipends, other official and unofficial payments received by you and all members of your family?	Open ended. Natural log taken.
<i>Male</i>	Noted by interviewer	<i>Male</i> =1, <i>Female</i> =0
<i>Size of Settlement</i>	Of respondent. Noted by interviewer.	Population of settlement where respondent lives
<i>Lives in Moscow or St. Petersburg</i>	Noted by interviewer.	1 if respondent lives in Moscow or St. Petersburg
<i>Discussed Elections with Friends and Families</i>	Did your friends, neighbors, coworkers or family members discussed the most recent elections, and if yes, did you participate?	1 The elections were not discussed, 2 the elections were discussed but I did not participate, 3 if the elections were discussed and I participated
<i>Press Freedom</i> Used for split sample analysis in Table 4	Glasnost Defense Foundation http://www.gdf.ru/map/	“Not Free”, “Somewhat Not Free”, “Somewhat Free”

Descriptive Statistics: Robustness Checks

<i>Total Number of Social Networks Used</i> Independent Variable (Robustness Check)	Total number of social networks that a user regularly spends time on (calculated by authors)	Count from 1 to 7
<i>Electoral Satisfaction</i> Dependent Variable (Robustness Check)	On the whole, are you satisfied with the results of these elections?	1=Completely Satisfied, 2=Somewhat Satisfied, 3=Somewhat dissatisfied, 4=Completely dissatisfied
<i>Electoral Fairness</i> Dependent Variable (Robustness Check)	In your opinion, how honest was the conduct of the State Duma elections held on December 4, 2011?	Absolutely honest=1, Rather honest=2, Not very honest=3, Not at all honest=4
<i>Protest Willingness</i> Dependent Variable (Robustness Check)	If protests against electoral fraud soon occur in your city or region, are you prepared to join them?	1=Definitely Yes 2=Mostly Yes 3=Mostly No 4=Definitely No
<i>Awareness of Protests</i> Dependent Variable (Robustness Check)	Have you heard of the recent protests against electoral fraud?	0=No 1=Yes
<i>Trust in Alexey Navalny</i> Dependent Variable (Robustness Check)	Of the following list of politicians, name 5-6 of which	0=No 1=Yes

Check)	that you most trust? (list of 45 well-known Russian politicians given)	
<i>Trust in Mikhail Prokhorov</i> Dependent Variable (Robustness Check)	Of the following list of politicians, name 5-6 of which that you most trust? (list of 45 well-known Russian politicians given)	0=No 1=Yes

Table Appendix 2: Summary Statistics

	count	mean	sd	min	max
Male	1600	0.45	0.50	0	1
Age	1600	44.10	16.48	18	88
Household Income (Logged)	1600	8.40	3.19	2	13
Size of Settlement	1600	3.04	2.10	1	7
Unmarried	1600	0.36	0.48	0	1
Level of Education	1600	5.29	1.90	1	8
Internet User	1600	0.49	0.50	0	1
Employed	1600	0.60	0.49	0	1
Consumer of Foreign Media	1600	0.16	0.37	0	1
Voted in December Election	1597	0.30	0.46	0	1
Putin Approval	1600	0.63	0.48	0	1
Nonpartisan	1600	0.59	0.49	0	1
Opposition Supporter	1600	0.21	0.41	0	1
Participated in Political Action	1600	4.86	0.61	1	5
Lives in Moscow or St. Petersburg	1600	0.10	0.31	0	1
Twitter and/or Facebook User	1600	0.07	0.28	0	2
Vkontakte User	1600	0.23	0.42	0	1
Moi Krug User	1600	0.03	0.18	0	1
Moi Mir User	1600	0.11	0.31	0	1
Odnoklassniki User	1600	0.25	0.43	0	1
LiveJournal User	1600	0.02	0.14	0	1
Facebook User	1600	0.05	0.22	0	1
Twitter User	1600	0.02	0.13	0	1
User of Any Social Network	1600	0.39	0.49	0	1
Total Number of Social Networks Used	1600	0.72	1.12	0	7
Press Freedom	1600	2.04	0.64	1	3
Electoral Satisfaction	1361	2.40	0.94	1	4
Electoral Fairness	1292	2.69	0.84	1	4
Protest Willingness	723	3.30	0.85	1	4
Aware of Protests	1470	0.85	0.35	0	1
Trust in Navalny	1600	0.02	0.13	0	1
Trust in Prokhorov	1600	0.04	0.20	0	1
Regional GRP (logged)	1579	13.11	1.13	11	16
UR Vote Percentage 2011 (Regional)	1600	45.52	12.84	29	83
Urbanization	1579	.41	.25	0	1

Table Appendix 3: Robustness Checks, Determinants of Electoral Fraud

In Appendix Table 3, we run a series of robustness checks on our main model of interest (Column 1 from Table 3 in the main text). Models 1-3 utilize the same dependent variable, a four-point ordinal variable measuring a respondent's perception of electoral fairness. In Model 1, we restrict the sample to only respondents living in Moscow and St. Petersburg. Though we control for these two urban centers in the original model, residents of Moscow and St. Petersburg may still be driving the results. Reducing the sample size returns a robust and sizable coefficient on our main variable of interest - "Twitter and/or Facebook User". Next, in Model 2, we introduce fixed effects on the Primary Sample Unit, of which there were 130 used in the survey sampling procedure. Our main result is robust to this alternate specification which accounts for differences across these localities. Model 3 replaces our main variable of interest (Twitter or Facebook Users) with a count of the number of social networks that a given respondent is a member of. Russian internet users, like many of their counterparts around the world, often maintain accounts on any number of popular networks. We test here whether a count, or proxy for overall social media activity online, is correlated with perceptions of electoral fairness. The coefficient on this variable is negative and insignificant. Lastly, in Model 4, we run an ordinal logit model with a different dependent variable called *Electoral Fairness*. This variable measures the degree of which a respondent was thought electoral results were "fair" on a four-point scale with greater values indicating less fairness. Using our original specification, we find a positive and significant coefficient on the main variable of interest as predicted by our theory.

Table Appendix 3: Robustness Checks

	(1) Model	(2) Model	(3) Model	(4) Model
Male	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.00 (0.01)
Age	0.00** (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Household Income (Logged)	-0.01** (0.00)	-0.01*** (0.00)	-0.01** (0.00)	-0.00** (0.00)
Size of Settlement	-0.00 (0.00)	-0.09*** (0.01)	-0.00 (0.01)	-0.01 (0.01)
Unmarried	-0.02 (0.02)	-0.03* (0.02)	-0.02 (0.01)	-0.01 (0.01)
Level of Education	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Internet User	0.04** (0.02)	0.03* (0.02)	0.05*** (0.02)	0.04** (0.02)
Employed	0.03** (0.02)	0.01 (0.02)	0.02 (0.02)	0.01 (0.01)
Consumer of Foreign Media	-0.02 (0.03)	-0.01 (0.03)	-0.00 (0.02)	0.01 (0.03)
Voted in December Election	0.09*** (0.02)	0.10*** (0.02)	0.08*** (0.02)	0.10*** (0.02)
Putin Approval	-0.14*** (0.03)	-0.15*** (0.02)	-0.16*** (0.03)	-0.20*** (0.02)
Nonpartisan	0.14*** (0.03)	0.12*** (0.02)	0.15*** (0.03)	0.18*** (0.03)
Opposition Supporter	0.17*** (0.04)	0.16*** (0.03)	0.18*** (0.04)	0.23*** (0.03)
Participated in Political Action	0.00 (0.01)	-0.02 (0.02)	-0.00 (0.02)	-0.00 (0.01)
Twitter and/or Facebook User	0.04** (0.02)	0.05*** (0.01)		0.05*** (0.02)
Lives in Moscow or St. Petersburg		0.66*** (0.06)	0.09*** (0.02)	0.06* (0.03)
Total Number of Social Networks Used			-0.01 (0.01)	
PSU Fixed Effects	No	Yes	No	No
Observations	1061	1213	1213	1289

Marginal effects; Standard errors in parentheses

Standard Errors Clustered on Primary Sample Unit.

Models 1-3 Dependent Variable : Awareness of Electoral Fraud (Ordinal Logit).

Model 1: Sample with Moscow and St. Petersburg Excluded.

Model 2: Main Model with Primary Sampling Unit Fixed Effects.

Model 3: Count of Social Networks Used as Independent Variable.

Model 4 Dependent Variable: Electoral Fairness (Ordinal Logit), Main Model.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table Appendix 4: Models Used to Create Figure 2 in the Main Text

We opted to include a graphic representation (Figure 2) of the varying effect of Facebook and Twitter usage on perception of fraud, conditional on levels of regional media freedom. Appendix Table 4 presents the full results of the models used to create that figure. The point estimates in Figure 2 are those from the variable Twitter and/or Facebook User. All models employ an ordinal logit specification, cluster errors on the primary sampling unit and include the full battery of control variables. Model 1 however subsets the sample to respondents living in regions with a media environment coded “Not Free”, Model 2 only looks at respondents living in “Somewhat Not Free” media environments, and Model 3 subsets to respondents living in “Somewhat Free” media environments. The coding for media freedom comes from the Glasnost Defense Foundation. We also employed several controls at the regional level, including GDP per capita (Rosstat), United Russia’s vote share in the 2011 Parliamentary Elections, and the level of urbanization in each region (the urban share of the population taken from Rosstat).

Table Appendix 4: Conditional Effect of Online Social Media

	(1) Model	(2) Model	(3) Model
Male	0.03 (0.04)	0.00 (0.02)	0.02 (0.03)
Age	0.00* (0.00)	0.00 (0.00)	-0.00 (0.00)
Household Income (Logged)	-0.01* (0.01)	-0.00 (0.00)	-0.01*** (0.01)
Unmarried	-0.06* (0.04)	-0.02 (0.02)	-0.01 (0.03)
Level of Education	-0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
Size of Settlement	0.00 (0.02)	-0.01*** (0.00)	0.00 (0.02)
Internet User	0.08** (0.04)	0.04* (0.02)	-0.02 (0.04)
Employed	0.02 (0.06)	0.00 (0.03)	0.01 (0.03)
Consumer of Foreign Media	0.05 (0.04)	-0.02 (0.03)	-0.02 (0.05)
Voted in December Election	0.08*** (0.03)	0.10*** (0.03)	0.03 (0.03)
Putin Approval	-0.18*** (0.06)	-0.15*** (0.03)	-0.13** (0.05)
Nonpartisan	0.13 (0.08)	0.13*** (0.03)	0.17*** (0.05)
Opposition Supporter	0.15 (0.10)	0.18*** (0.04)	0.16*** (0.04)
Participated in Political Action	-0.05 (0.06)	-0.03 (0.02)	0.04 (0.03)
Lives in Moscow or St. Petersburg	0.00 (.)	-0.06 (0.09)	0.16 (0.20)
Twitter and/or Facebook User	0.02 (0.04)	0.04** (0.02)	0.12* (0.06)
Regional GRP (logged)	0.03 (0.06)	0.02 (0.03)	0.11** (0.04)
UR Vote Percentage 2011 (Regional)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
Urbanization	0.19 (0.26)	0.12 (0.13)	-0.25 (0.31)
Observations	224	686	286

Marginal effects; Standard errors in parentheses and clustered on Primary Sampling Unit
 Dependent Variable : Awareness of Electoral Fraud (Ordinal Logit).

Model 1: Sample restricted to regions with press freedom score 'Not Free'

Model 2: Sample restricted to regions with press freedom score 'Somewhat Not Free'

Model 3: Sample restricted to regions with press freedom score 'Somewhat Free'

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table Appendix 5: Robustness Checks, Determinants of Electoral Fraud

Our argument presupposes that membership on a social network has an independent effect on political awareness; this characteristic is not endogenous to other political attributes that would also be correlated with perceptions of electoral fraud. To examine this proposition in greater detail, we look at the effect of being a Twitter and/or Facebook user on a number of different dependent variables all related to political behavior and attitudes surrounding the December 2011 Parliamentary Elections in Russia. The results are presented in Appendix Table 5 and discussed in the text. Fueled by accusations of electoral fraud in the election, widespread protests occurred across most of the major cities in Russia. We find no significant relationship between usage of a politicized social media network and either an awareness of the protests (Column 3) or a willingness to protest (Column 1). Usage of a politicized social network is also not correlated with overall satisfaction with the results of the election, as indicated by a four-point ordinal variable indicating overall satisfaction with the parliamentary election results (Column 2).

We also do not find a relationship between using politicized social media networks and trusting two of the most popular and important opposition leaders in Russia - Alexey Navalny and Mikhail Prokhorov (Columns 4 and 5). Users of these networks are not necessarily more likely to have turned out to vote in general (Column 6), nor are they less likely to have voted for the ruling United Russia party led by Vladimir Putin (Column 7). In fact, there is a positive but insignificant relationship between users of the two social media networks and support for the competitive authoritarian ruling party, casting doubt on the claim that only opposition-minded citizens populate Facebook and Twitter. Lastly, we do not find a significant relationship between Twitter and Facebook usage and one's approval rating of then Prime Minister Vladimir Putin. Therefore, the only significant relationship we find between Twitter and Facebook usage and political outcomes concerns the level of awareness of electoral fraud, lending support to our informational theory of online social media.

Table Appendix 5: Robustness Checks: Effect of Online Social Media on Other Dependent Variables

	(1) Model	(2) Model	(3) Model	(4) Model	(5) Model	(6) Model	(7) Model	(8) Model
Male	-0.05 (0.04)	0.00 (0.01)	0.03 (0.03)	0.00 (0.00)	-0.00 (0.01)	0.05*** (0.02)	-0.00 (0.02)	-0.07*** (0.02)
Age	0.00* (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00*** (0.00)	0.00 (0.00)	-0.01*** (0.00)	-0.00 (0.00)	-0.00*** (0.00)
Household Income (Logged)	0.00 (0.01)	-0.00* (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.01*** (0.00)	-0.00 (0.00)	0.01 (0.00)
Size of Settlement	-0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.00 (0.00)	-0.00 (0.00)	0.01 (0.01)	-0.02*** (0.01)	-0.01 (0.01)
Unmarried	0.02 (0.03)	0.00 (0.01)	0.01 (0.02)	-0.01 (0.01)	-0.01 (0.01)	0.04** (0.02)	0.01 (0.02)	0.03 (0.02)
Level of Education	0.01 (0.01)	-0.00 (0.00)	0.02*** (0.01)	0.00 (0.00)	0.00 (0.00)	-0.02*** (0.01)	0.00 (0.01)	-0.01*** (0.01)
Internet User	0.02 (0.04)	0.04** (0.02)	-0.03 (0.02)	0.00 (0.00)	0.04*** (0.01)	-0.09*** (0.03)	-0.07*** (0.02)	0.01 (0.03)
Employed	-0.00 (0.05)	0.01 (0.02)	0.01 (0.02)	-0.00 (0.01)	-0.00 (0.01)	-0.03 (0.03)	-0.00 (0.02)	-0.01 (0.02)
Consumer of Foreign Media	-0.04 (0.04)	-0.02 (0.02)	0.04 (0.03)	-0.01 (0.00)	0.01 (0.01)	0.01 (0.04)	0.04 (0.03)	-0.02 (0.03)
Voted in December Election	0.09** (0.04)	0.07*** (0.02)	-0.04* (0.03)	-0.02** (0.01)	-0.02 (0.02)			-0.08*** (0.02)
Putin Approval	0.18*** (0.05)	-0.20*** (0.03)	-0.05** (0.02)	-0.03*** (0.01)	0.01 (0.01)	-0.08*** (0.02)	0.23*** (0.02)	
Nonpartisan	-0.15** (0.06)	0.17*** (0.02)	-0.07*** (0.02)	-0.02 (0.02)	0.03* (0.02)	0.29*** (0.05)	-0.33*** (0.03)	-0.52*** (0.06)
Opposition Supporter	-0.19*** (0.06)	0.22*** (0.02)	-0.00 (0.03)	-0.00 (0.01)	0.03** (0.02)	0.05 (0.05)	-0.66*** (0.04)	-0.71*** (0.07)
Participated in Political Action	0.14*** (0.04)	0.01 (0.01)	0.02 (0.01)	-0.00 (0.00)	0.00 (0.01)	-0.00 (0.02)	0.04 (0.03)	0.07*** (0.02)
Lives in Moscow or St. Petersburg	0.07 (0.04)	0.03 (0.03)	0.19*** (0.04)	0.05** (0.02)	0.01 (0.01)	0.02 (0.03)	0.01 (0.03)	0.03 (0.03)
Twitter and/or Facebook User	0.03 (0.05)	0.02 (0.02)	0.08 (0.05)	0.00 (0.00)	0.02 (0.02)	-0.05 (0.04)	0.02 (0.04)	-0.02 (0.05)
Observations	722	1359	1467	1597	1597	1597	1112	1597

Marginal effects; Standard errors in parentheses and clustered on Primary Sample Unit.

Model 1 DV: Ordinal Variable - Likelihood of Protesting in Protests (Ordinal Logit).

Model 2 DV: Ordinal Variable - Satisfaction with Electoral Results (Ordinal Logit).

Model 3 DV: Dummy Variable - Awareness of Protests (Logit).

Model 4 DV: Dummy Variable - Trust in Alexei Navalny (Logit).

Model 5 DV: Dummy Variable - Trust in Mikhail Prokhorov (Logit).

Model 6 DV: Dummy Variable - Respondent Turned Out to Vote in December 2011 Parl. Election (Logit).

Model 7 DV: Dummy Variable - Respondent Voted for United Russia in December 2011 Parl. Election (Logit).

Model 8 DV: Dummy Variable - Respondent Approves of Vladimir Putin (Logit).

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table Appendix 6: Replication of Table 3 in Main Text Showing All Controls

For simplicity of presentation, Table 3 in the main text did not include individual point estimates for seven basic demographic controls: Male, Age, Household Income (logged), Size of Settlement, Unmarried, and Employed. Table Appendix 6 below presents the full results for the same models, including the coefficients for these seven variables.

Table Appendix 6: Determinants of Electoral Fraud Awareness

	(1) Model	(2) Model	(3) Model	(4) Model	(5) Model	(6) Model	(7) Model	(8) Model
Male	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Household Income (Logged)	-0.01** (0.00)	-0.01** (0.00)	-0.01** (0.00)	-0.01** (0.00)	-0.01** (0.00)	-0.01** (0.00)	-0.01** (0.00)	-0.01** (0.00)
Size of Settlement	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Unmarried	-0.02 (0.02)	-0.02 (0.01)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)	-0.02 (0.02)
Level of Education	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Internet User	0.04** (0.02)	0.05*** (0.02)	0.05*** (0.02)	0.05*** (0.02)	0.04** (0.02)	0.04** (0.02)	0.04** (0.02)	0.05*** (0.02)
Employed	0.02 (0.02)	0.01 (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)
Consumer of Foreign Media	-0.00 (0.03)	0.00 (0.03)	-0.00 (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.00 (0.03)	-0.00 (0.02)	-0.00 (0.02)
Voted in December Election	0.09*** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.08*** (0.02)
Putin Approval	-0.16*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)
Nonpartisan	0.15*** (0.03)	0.15*** (0.03)	0.14*** (0.03)	0.15*** (0.03)	0.15*** (0.03)	0.15*** (0.03)	0.15*** (0.03)	0.15*** (0.03)
Opposition Supporter	0.18*** (0.04)	0.18*** (0.04)	0.18*** (0.04)	0.18*** (0.04)	0.18*** (0.04)	0.18*** (0.04)	0.18*** (0.04)	0.18*** (0.04)
Participated in Political Action	-0.00 (0.02)	-0.00 (0.02)	-0.01 (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.00 (0.02)
Lives in Moscow or St. Petersburg	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Twitter and/or Facebook User	0.04*** (0.02)							
Vkontakte User		-0.03 (0.02)						
Moi Mir User			-0.04 (0.04)					
Odnoklassniki User				-0.01 (0.02)				
LiveJournal User					0.04 (0.04)			
Facebook User						0.05** (0.02)		
Twitter User							0.06* (0.03)	
User of Any Social Network								-0.02 (0.02)
Observations	1213	1213	1213	1213	1213	1213	1213	1213

Marginal effects; Standard errors in parentheses

Dependent Variable : Awareness of Electoral Fraud (Ordinal Logit). Standard Errors Clustered on Primary Sample Unit.

Models 1-8: Different variables used to indicate social media usage.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table Appendix 7: Robustness Checks, Determinants of Electoral Fraud

Table Appendix 7 presents robustness checks for the set of models looking at the conditional effect of politicized social media depending on regional freedom. The table is identical to Appendix Table 4, except that our main variable of interest here is a dummy variable for whether a respondent uses Facebook. Similar to the results in the main text, users of Facebook see more electoral violations in regions with higher levels of press freedom. The coefficient on Facebook is significant at the 95% level for respondents in regions with a 'Somewhat Not Free' press freedom rating. It is not significant for the 'highest' levels of press freedom, but this is likely due to the small sample size there.

Table Appendix 7: Robustness Check: Conditional Effect of Online Social Media on Reg. Press Freedom

	(1) Model	(2) Model	(3) Model
Male	0.03 (0.04)	0.00 (0.02)	0.02 (0.03)
Age	0.00* (0.00)	0.00 (0.00)	-0.00 (0.00)
Household Income (Logged)	-0.01 (0.01)	-0.00 (0.00)	-0.01** (0.01)
Unmarried	-0.06* (0.03)	-0.02 (0.02)	-0.01 (0.03)
Level of Education	-0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
Size of Settlement	0.01 (0.02)	-0.01*** (0.00)	0.00 (0.02)
Internet User	0.08** (0.04)	0.04* (0.02)	-0.01 (0.03)
Employed	0.03 (0.06)	0.00 (0.03)	0.01 (0.04)
Consumer of Foreign Media	0.05 (0.04)	-0.02 (0.03)	-0.03 (0.05)
Voted in December Election	0.07*** (0.03)	0.10*** (0.03)	0.02 (0.04)
Putin Approval	-0.18*** (0.06)	-0.15*** (0.03)	-0.14*** (0.05)
Nonpartisan	0.13 (0.08)	0.13*** (0.03)	0.15*** (0.05)
Opposition Supporter	0.15 (0.10)	0.17*** (0.04)	0.15*** (0.04)
Participated in Political Action	-0.06 (0.06)	-0.03 (0.02)	0.03 (0.02)
Lives in Moscow or St. Petersburg	0.00 (.)	-0.09 (0.09)	0.26 (0.28)
Regional GRP (logged)	-0.04 (0.08)	0.03 (0.03)	0.08** (0.03)
UR Vote Percentage 2011 (Regional)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Percentage with Higher Ed (Reg)	0.01 (0.02)	0.00 (0.00)	-0.01 (0.01)
Facebook User	0.06 (0.06)	0.05** (0.02)	0.11 (0.11)
Observations	224	686	286

Marginal effects; Standard errors in parentheses

Dependent Variable : Awareness of Electoral Fraud (Ordinal Logit).

Dummy Variable for Facebook Users Included.

Model 1: Sample restricted to regions with press freedom score 'Not Free'

Model 2: Sample restricted to regions with press freedom score 'Somewhat Not Free'

Model 3: Sample restricted to regions with press freedom score 'Somewhat Free'

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table Appendix 8: Replication of Table 5 in Main Text Showing All Controls

For simplicity of presentation, Table 5 (Robustness Checks) in the main text did not include individual point estimates for seven basic demographic controls: Male, Age, Household Income (logged), Size of Settlement, Unmarried, and Employed. Table Appendix 8 below presents the full results for the same models, including the coefficients for these seven variables.

Table Appendix 8: Determinants of Electoral Fraud Awareness: Robustness Checks

	(1) Model	(2) Model	(3) Model	(4) Model
Male	-0.01 (0.01)	0.07** (0.03)	0.00 (0.02)	0.01 (0.01)
Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Household Income (Logged)	-0.01** (0.00)	0.00 (0.01)	-0.00 (0.00)	-0.01** (0.00)
Size of Settlement	-0.00 (0.00)	-0.00 (0.02)	-0.01 (0.01)	-0.00 (0.01)
Unmarried	-0.01 (0.01)	-0.07* (0.04)	-0.00 (0.02)	-0.02 (0.01)
Level of Education	0.00 (0.00)	0.01 (0.01)	-0.00 (0.01)	0.00 (0.00)
Internet User	0.02* (0.01)	0.08* (0.04)		0.06*** (0.02)
Employed	0.02 (0.01)	-0.01 (0.07)	0.04 (0.04)	0.02 (0.02)
Consumer of Foreign Media	-0.03 (0.02)	0.07** (0.03)	-0.03 (0.03)	-0.00 (0.03)
Voted in December Election	0.07*** (0.02)	0.04 (0.05)	0.05 (0.04)	0.08*** (0.02)
Nonpartisan	0.08*** (0.02)	0.37*** (0.10)	0.19*** (0.04)	0.14*** (0.03)
Opposition Supporter	0.12*** (0.03)	0.33*** (0.11)	0.22*** (0.05)	0.18*** (0.04)
Participated in Political Action	-0.02 (0.01)	0.01 (0.03)	-0.02 (0.03)	-0.00 (0.02)
Lives in Moscow or St. Petersburg	0.04*** (0.01)	0.22*** (0.07)	0.10*** (0.03)	0.09*** (0.02)
Twitter and/or Facebook User	0.03** (0.02)	0.03 (0.04)	0.05** (0.02)	0.05*** (0.02)
Putin Approval			-0.18*** (0.04)	-0.16*** (0.03)
Vkontakte User				-0.02 (0.02)
Odnoklassniki User				-0.01 (0.02)
Moi Krug User				0.01 (0.04)
Moi Mir User				-0.05 (0.04)
LiveJournal User				0.03 (0.04)
Observations	725	488	486	1213

Marginal effects; Standard errors in parentheses

Dependent Variable : Awareness of Electoral Fraud (Ordinal Logit). Standard Errors Clustered on Primary Sample Unit.

Model 1: Sample restricted to Putin supporters.

Model 2: Sample restricted to Putin non-supporters.

Model 3: Sample restricted to only users of online social media.

Model 4: All social network usage variables included. Reference category is non-users.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table Appendix 9: Conditional Effect of Urbanization

Appendix Table 9 presents the full results of a model that examines the effect of Facebook and Twitter usage across levels of *Urbanization*. *Urbanization* could be confounding the modifying effects of Press Freedom identified in Appendix Table 2. All models employ an ordinal logit specification, cluster errors on the primary sampling unit and include the full battery of control variables. We use the variable of urbanization from Rosstat which measures the share of the population living in urban areas in each region. Model 1 subsets the sample to respondents living in regions with a low level of urbanization (the lowest tercile), Model 2 only looks at respondents living in regions with a medium level (the middle tercile), and Model 3 subsets to respondents living in place of high urbanization (the top tercile). We also employed several controls at the regional level, including GDP per capita (Rosstat) and United Russia's vote share in the 2011 Parliamentary Elections.

No consistent relationship emerges between the level of urbanization and the use of Twitter and Facebook on perceptions of electoral integrity. The signs on the main variable of interest (Twitter and/or Facebook User) are all positive, yet large and statistically significant for respondents living *both* in regions with the highest and the lowest levels of urbanization. Most importantly, the directionality of the conditional effect is not in line with the directionality of the conditional effect induced by subsetting on levels of *Press Freedom* (see Appendix Table 4).

Table Appendix 9: Conditional Effect of Online Social Media

	(1) Model	(2) Model	(3) Model
Male	-0.01 (0.02)	0.04 (0.03)	-0.00 (0.02)
Age	0.00** (0.00)	0.00 (0.00)	-0.00 (0.00)
Household Income (Logged)	-0.01 (0.01)	-0.00 (0.00)	-0.01*** (0.00)
Unmarried	-0.04 (0.04)	-0.02 (0.02)	-0.07*** (0.02)
Level of Education	-0.00 (0.01)	-0.00 (0.01)	0.01 (0.01)
Size of Settlement	-0.01 (0.01)	0.01 (0.01)	-0.02* (0.01)
Internet User	0.03 (0.02)	0.05** (0.02)	0.01 (0.04)
Employed	0.03 (0.04)	0.02 (0.03)	-0.01 (0.05)
Consumer of Foreign Media	0.03 (0.04)	-0.02 (0.05)	-0.03 (0.04)
Voted in December Election	0.04 (0.03)	0.09*** (0.03)	0.10** (0.05)
Putin Approval	-0.08** (0.04)	-0.17*** (0.04)	-0.24*** (0.04)
Nonpartisan	0.24*** (0.05)	0.09** (0.04)	0.14*** (0.05)
Opposition Supporter	0.29*** (0.06)	0.14*** (0.04)	0.10* (0.06)
Participated in Political Action	0.02 (0.02)	-0.03 (0.03)	-0.07** (0.03)
Lives in Moscow or St. Petersburg	0.00 (.)	0.00 (.)	0.25** (0.11)
Twitter and/or Facebook User	0.09** (0.04)	0.01 (0.05)	0.07*** (0.02)
Regional GRP (logged)	0.04 (0.03)	0.01 (0.02)	-0.05 (0.04)
UR Vote Percentage 2011 (Regional)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Observations	440	446	403

Marginal effects; Standard errors in parentheses and clustered on the Primary Sampling Unit
 Dependent Variable : Awareness of Electoral Fraud (Ordinal Logit).

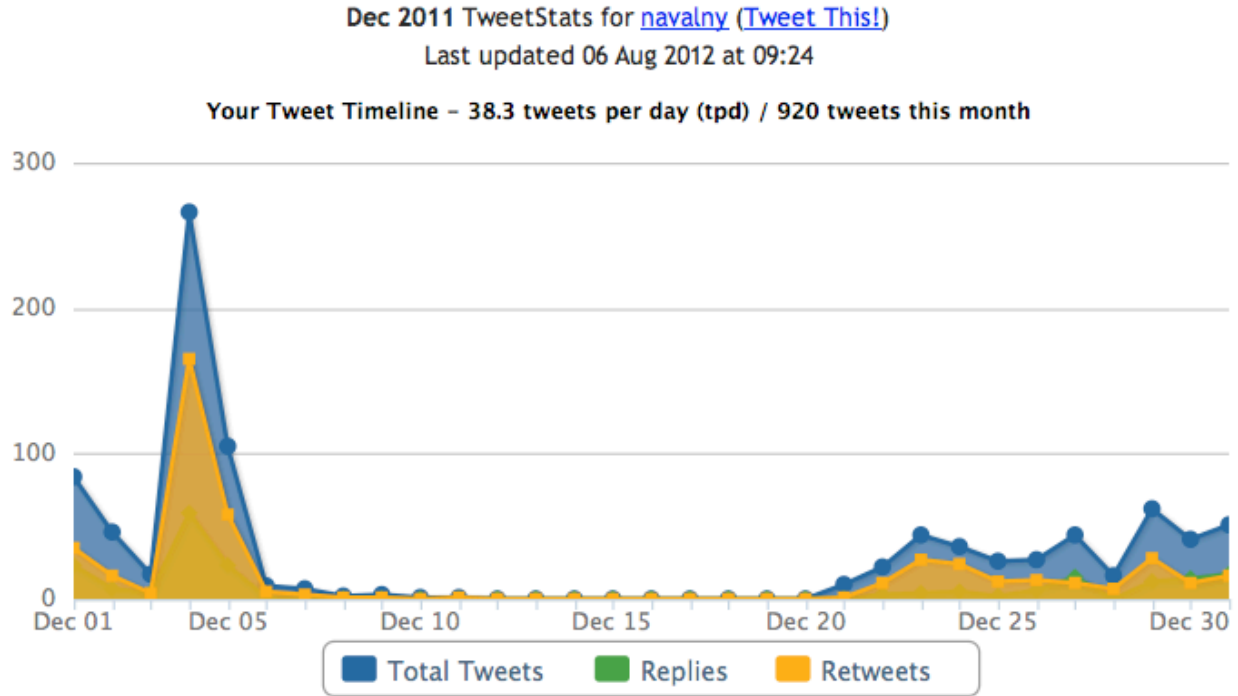
Model 1: Low Urbanization

Model 2: Middle Urbanization

Model 3: High Urbanization

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Figure 1: Alexei Navalny (@navalny) Twitter Usage, December 2011



As one can clearly see, there is a noticeable uptick on activity on Alexei Navalny’s Twitter account (@navalny) in the days surrounding the December 4th election. The peak occurred on election day with roughly 260 total tweets, a large number of them retweets of other content. Even if he were awake for all 24 hours of election day, that would average nearly 10 tweets an hour, an astonishing rate. The downturn in activity beginning December 5th is due to Navalny’s arrest and incarceration for 15 days for illegal protest activity. He was restricted from using the Internet during this period.