Preliminary Results

Group 3
April 25, 2016

The data in this document were pulled from a database on April 28 2016 at 19:24. As like and tweet data is collected on a rolling basis, not all likes and tweets made up to that time are included.

Descriptive Statistics

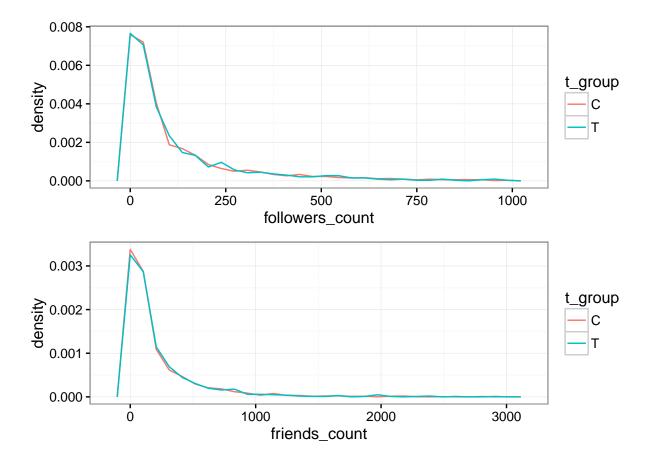
We show summary statistics for the treatment and control groups in the period before the treatment started, and plot frequency density plots of followers and friends counts.

Table 1: Summary statistics - treatment group

variable	mean	median	SE
average_keywords	2.0506986	0.9166667	0.1044059
average_likes	0.3861277	0.1666667	0.0213701
$average_MAGA$	0.1528942	0.0000000	0.0115541
average_mentions	1.1585828	0.5000000	0.0682121
average_rts	0.4712575	0.0000000	0.0504768
$followers_count$	114.4233129	53.0000000	5.4618539
$friends_count$	205.9877301	93.0000000	11.2105786

Table 2: Summary statistics - control group

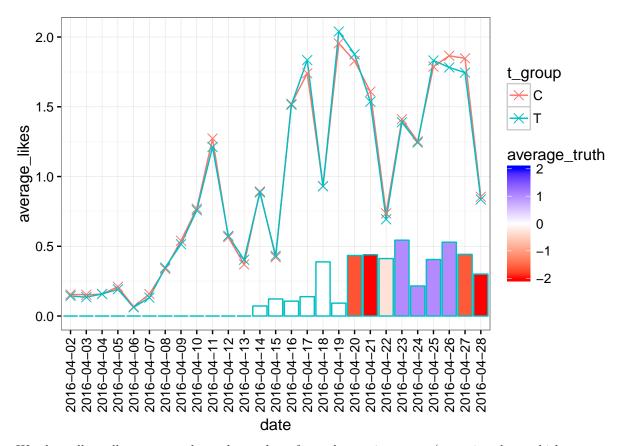
variable	mean	median	SE
average_keywords	2.0730134	0.8333333	0.0587536
average_likes	0.3962562	0.1666667	0.0117583
$average_MAGA$	0.1666667	0.0000000	0.0075718
average_mentions	1.1839525	0.4166667	0.0377538
average_rts	0.4786148	0.0000000	0.0261345
$followers_count$	120.7957895	54.0000000	3.0646110
friends_count	210.4631579	93.0000000	5.9043233



Results

We measure likes of trump tweets on each day, compare treatment and control groups, and show the fraction of the treatment group receiving treatment on each day with colour coded bars. The truth values of the bars are colour coded according to the following schema

Truth	Truth value
True	2
Mostly true	1
Half true	0
Mostly false	-1
False	-2



We also collect all tweets sent by each member of our observation group (removing those which are a retweet or a reply to one of our accounts). We categorise those tweets to measure various indicators of engagement with Trump. These are shown below.

Numerical results

We have run simple regressions interacting the time variable and the treatment variable, to see if the differences between T and C groups on each day were significant.

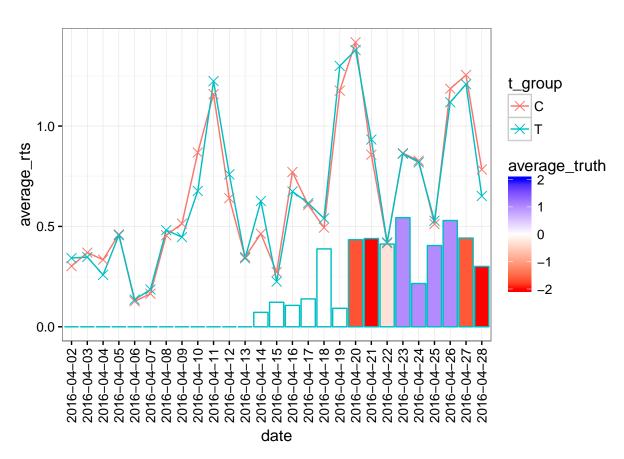


Figure 1: Average retweets of Trump

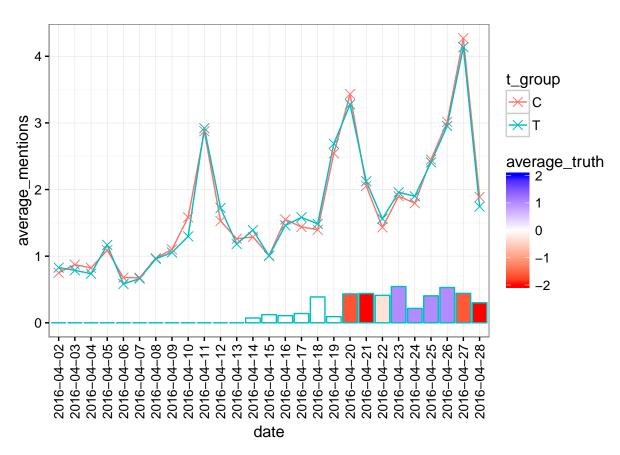


Figure 2: Averages tweets containing @RealDonaldTrump

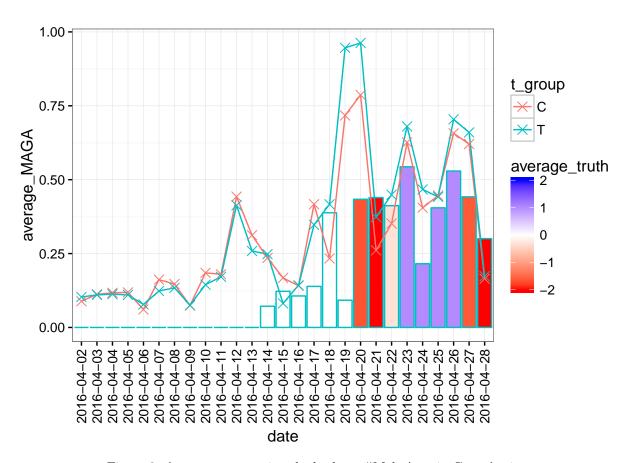


Figure 3: Average tweets using the hashtag #MakeAmericaGreatAgain

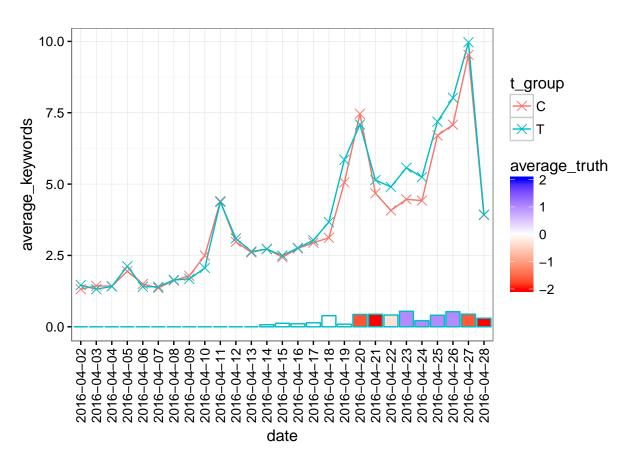


Figure 4: Average tweets containing the word Trump

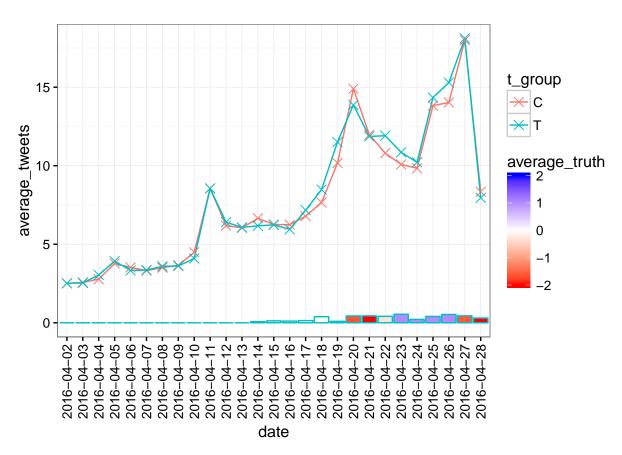


Figure 5: Average tweets

Table 4:

	Dependent variable:				
	like_n	trumprtn	MAGA_n	trump_keyword_n	
	(1)	(2)	(3)	(4)	
t_groupT	-0.011 (0.081)	$0.040 \ (0.098)$	$0.014 \ (0.071)$	$0.140 \ (0.440)$	
$t_groupT:date2016-04-03$	-0.006 (0.115)	-0.062 (0.138)	-0.016 (0.101)	-0.254 (0.622)	
$t_groupT:date2016-04-04$	0.012 (0.115)	-0.116 (0.138)	-0.019(0.101)	-0.150 (0.622)	
$t_groupT:date2016-04-05$	-0.007 (0.115)	-0.044(0.138)	-0.023(0.101)	$0.036 \ (0.622)$	
$t_groupT:date2016-04-06$	$0.007 \ (0.115)$	-0.032(0.138)	$0.003\ (0.101)$	-0.236(0.622)	
$t_groupT:date2016-04-07$	-0.014 (0.115)	-0.019(0.138)	-0.053 (0.101)	-0.095 (0.622)	
$t_groupT:date2016-04-08$	$0.021\ (0.115)$	-0.015 (0.138)	-0.027(0.101)	-0.121 (0.622)	
t_groupT:date2016-04-09	-0.013(0.115)	-0.107(0.138)	-0.013(0.101)	-0.248(0.622)	
t_groupT:date2016-04-10	-0.001 (0.115)	$-0.231^* (0.138)$	-0.054(0.101)	-0.577(0.622)	
t_groupT:date2016-04-11	-0.049(0.115)	0.025 (0.138)	-0.023(0.101)	-0.168(0.622)	
t_groupT:date2016-04-12	$0.021 \ (0.115)$	0.079(0.138)	-0.044(0.101)	-0.022(0.622)	
t_groupT:date2016-04-13	$0.045\ (0.115)$	-0.047(0.138)	-0.068(0.101)	-0.108(0.622)	
t_groupT:date2016-04-14	$0.005\ (0.115)$	$0.122 \ (0.138)$	-0.002(0.101)	$-0.151\ (0.622)$	
t_groupT:date2016-04-15	0.023(0.115)	-0.087(0.138)	$-0.100\ (0.101)$	-0.077(0.622)	
t_groupT:date2016-04-16	$0.006\ (0.115)$	-0.137(0.138)	-0.013(0.101)	-0.122(0.622)	
t_groupT:date2016-04-17	$0.106 \ (0.115)$	-0.031(0.138)	-0.084(0.101)	-0.053(0.622)	
t_groupT:date2016-04-18	$0.011\ (0.115)$	$0.006 \ (0.138)$	0.169*(0.101)	$0.412\ (0.622)$	
t_groupT:date2016-04-19	$0.096\ (0.115)$	$0.083\ (0.138)$	$0.215^{**}(0.101)$	$0.654\ (0.622)$	
t_groupT:date2016-04-20	0.059(0.114)	-0.079(0.137)	$0.162\ (0.100)$	-0.514(0.615)	
$t_groupT:date2016-04-21$	$-0.061\ (0.115)$	$0.036 \ (0.138)$	0.099(0.101)	$0.323 \ (0.622)$	
$t_groupT:date2016-04-22$	$-0.031 \ (0.115)$	-0.036(0.138)	$0.083\ (0.101)$	0.688(0.622)	
$t_groupT:date2016-04-23$	-0.010 (0.115)	-0.043 (0.138)	$0.040 \ (0.101)$	$0.966 \ (0.622)$	
$t_groupT:date2016-04-24$	$0.002 \ (0.115)$	-0.049(0.138)	$0.048 \; (0.101)$	$0.681 \ (0.622)$	
$t_groupT:date2016-04-25$	$0.056 \ (0.115)$	-0.024 (0.138)	-0.018(0.101)	$0.345 \ (0.622)$	
$t_groupT:date2016-04-26$	-0.072 (0.115)	-0.107 (0.138)	0.033(0.101)	$0.801 \ (0.622)$	
$t_groupT:date2016-04-27$	-0.091 (0.115)	-0.086 (0.138)	0.025 (0.101)	$0.302 \ (0.622)$	
t_groupT:date2016-04-28	-0.007(0.115)	-0.172(0.138)	-0.005(0.101)	-0.126(0.622)	
Constant	$0.155^{***} (0.038)$	$0.302^{***} (0.046)$	0.089*** (0.034)	1.320*** (0.208)	
Observations	101,082	101,082	101,082	101,082	
\mathbb{R}^2	0.088	0.019	0.015	0.035	
Adjusted R^2	0.087	0.019	0.015	0.035	
Residual Std. Error ($df = 101028$)	2.075	2.492	1.812	11.197	
F Statistic (df = 53 ; 101028)	183.776***	37.025***	29.107***	69.373***	

*p<0.1; **p<0.05; ***p<0.01