SUPPLEMENTARY MATERIAL

TWEETING BEYOND TAHRIR Ideological Diversity and Political Intolerance in Egyptian Twitter Networks

By Alexandra A. Siegel, Jonathan Nagler, Richard Bonneau, and Joshua A. Tucker

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Supplementary Materials

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Appendix A: Measurement, Data, and Descriptive Statistics

Training a Classifier Using Human Coded Data

We initially developed a 6 category coding scheme for relevant tweets. Tweets were first coded as relevant or irrelevant to civil liberties in Egypt and then classified as follows: 1=Tweets that promote civil liberties and rights for Islamists 2=Tweets that promote civil liberties and rights in general (for all Egyptians or groups of Egyptians that may include both Islamists and non-Islamists) 4=Tweets that support restricting the civil liberties and rights of Secularists (non-Islamists 5=Tweets that support restricting the civil liberties and rights of Secularists (non-Islamists) 6=Tweets that support restricting civil liberties and rights of groups that include both Islamists and non-Islamists.

Under this coding scheme, tweets that promote civil liberties include those that oppose: unfair trials, unlawful detentions, arbitrary arrests, death sentences, torture, censorship, limitations on free speech or assembly, excluding any group from participating in government, electoral fraud, police or military violence against civilians, and banning political parties, NGOs, or other civil society organizations. Tweets that promote civil liberties also include those that call for freedom, democracy, human rights, and an end to discriminatory or exclusionary policies. By contrast, as mentioned in Section 4 of the paper, tweets that support restricting civil liberties include those that favor civilian arrests, death sentences, or torture; those limiting the right to free speech, protest, or assembly; and tweets advocating banning political parties or excluding certain groups from formal or informal political participation.

In order to assess the reliability of our coding scheme, we began by training four undergraduate native-Arabic speaking volunteers to code a small sample of 300 tweets containing keywords relevant to civil liberties in Egypt. A complete list of these keywords are in Figure A2 below.³⁴

Reliability among the coders was fairly high, with average agreement at 88%.³⁵ Having established that these tweets could be consistently coded by native Arabic-speaking college students, we then determined that these tweets could also be reliably classified using crowd-sourced coding. Using Figure8, a data enrichment platform that allows a researcher to launch microtasks to a "crowd" of over five million contributors, we launched the same 300 tweets that we had given to the volunteers to be coded by the Arabic-speaking "crowd." ³⁶ Each of the 300 tweets was coded by three Figure8 users, and the average sentiment confidence was 84%.³⁷ This gave us confidence that while perhaps not quite as reliable as elite native Arabic speaking college students, members of the "crowd" could still code tweets quite consistently.

³⁴Tweets were filtered as a random sample from a collection of tweets geolocated in Egypt collected between January 2014 and April 2015.

³⁵Sentiment confidence was measured as the number of coders choosing the dominant sentiment category divided by the total number of coders.

³⁶Using test questions for quality control, we ensured that the contributors were coding tweets accurately and conscientiously. If a contributor answered a certain percentage of test questions incorrectly, that contributor was removed from the job and their data was erased. This enabled us to ensure that the members of the "crowd" coding my tweets were fluent in Arabic and understood the task at hand.

³⁷Here sentiment confidence was measured as above, but also weighted contributor responses by how "trusted" users were given their percentage of correct answers to test questions, according to Figure8's algorithm.

Sheet1

Figure A1: Arabic civil liberties keywords

قبض	arrest
حظر	ban
مراقبة	censorship
مواطن	citizen
دستور	constitution
انقلاب	coup
محكمة	court
جريمة	crime
ديمقراطية	democracy
كرامة	dignity
تمييز	discrimination
منشق	dissident
انتخابات	elections
اعدام	execution
فاشية	fascism
منع	forbid
ممنوع	forbidden
تزوير	fraud
حرية	freedom
حكومة	government
حبس	imprisonment
ظلم	injustice
القاضىي	judge
القضباء	judiciary
عدالة	justice
قانون	law
قوانين	law
حكم العسكر	military rule
اضطهاد	persecution
سياسة	policy
سجن	prison
تظاهر	protest
عقوبة	punishment
عنصرية	racism
حقوق	rights
حكم	rule
سلامة	safety
طائفية	sectarianism
امن	security
الشريعة	Sharia
الأعتصام	sit in
الاستبداد	tyranny
انتهاك	violation

The English version of the coding instructions provided to the Figure coders is as follows:

Overview: Tweets will be coded according to whether or not they advocate protecting civil liberties and the extension of political freedoms to Islamists, Secularists (non-Islamists), or Egyptian citizens in general.

Process: 1) Read the tweet. 2) Determine if the tweet is relevant to civil liberties in Egypt. 3) Determine if the tweet supports extending civil liberties to Egyptian citizens or not and to which political groups in Egypt (Islamists, Secularists or Non-Islamists, or citizens in general)

Tweets can be classified as: 1) Tweets that promote civil liberties and rights for Islamists. 2) Tweets that promote civil liberties and rights for Secularists (non-Islamists). 3) Tweets that promote civil liberties and rights in general (for all Egyptians or groups of Egyptians that may include both Islamists and non-Islamists) 4) Tweets that support restricting the civil liberties and rights of Islamists. 5) Tweets that support restricting the civil liberties and rights of Secularists (non-Islamists) Tweets that support restricting civil liberties and rights in general (for groups that include both Islamists and non-Islamists).

Tweets that promote civil liberties and rights include those that: Oppose censorship or the arrests of journalists; Oppose unfair trials/ unlawful detentions/ arbitrary arrests /death sentences/ torture; Oppose the protest law or other limitations on free speech, the right to protest or assemble etc.; Oppose excluding any groups of Egyptians from participating in government. Oppose banning political parties, NGO's, or other organizations; Oppose corruption; Oppose labeling all Islamists as terrorists or all Secularists as infidels (kafir) or other terms that suggest that these groups should be excluded from politics; Oppose discriminatory election laws or electoral fraud; Call for an end to sectarianism/discrimination/inequality; Call for the release of activists/journalists/political prisoners; Call for participatory democracy, freedom, and rights; Call for an end to authoritarian rule/policies; Oppose state violence.

Tweets that support restricting civil liberties or rights include those that: Support civilian arrests, death sentences, torture etc; Support limiting the right to protest, free speech etc; Call for banning political parties or excluding groups from politics or elections; Call for violence/undemocratic policies or state actions; Promote sectarianism, discrimination or unequal policies; Label all members of a political group as terrorists or infidels or any label which indicates that they should not be allowed to participate in politics.

After coding about five thousand additional tweets on Figure to create a set, we then trained a classifier to predict whether or not a tweet was relevant.³⁸ Assessing the classifier's performance using 5-fold cross validation, the classifier obtained 74% average precision and 76% average recall.³⁹ Because intolerant and tolerant tweets are relatively rare, we needed to collect more data to train our classifier to accurately identify intolerant tweets. We therefore collected up to 50 tweets that the classifier identified as relevant from 837 Egyptian Twitter users that had tweeted keywords relevant to civil liberties in Egypt. This produced a training dataset of over 50,000 tweets classified along the six category coding scheme outlined above. 81% of the tweets in this dataset were relevant, suggesting that the relevance classifier was in fact performing better than expected. Using this training data, we trained a second classifier to classify intolerance. Relevant tweets in categories 4-6 (tweets that support restricting civil liberties and rights for Islamists, Secular Egyptians, or Egyptians in general) were classified as intolerant. The intolerance classifier performed well, with five-fold cross validation yielding average precision of 80% and average recall of 87%, levels of accuracy that were comparable to our levels of intercoder reliability in the human coded data. After testing the performance of several classifiers, we chose to use an AdaBoosted Multinomial Naive Bayes classifier. We chose this classifier because it maximized precision. This means that the tweets that are classified as intolerant are very likely to be intolerant, even if we lose a bit of recall, or fail to classify some tweets that were in fact intolerant. While we might be concerned that selecting a training data set based on keywords could bias our results, because these terms occur commonly in online Egyptian discourse, a training set of tweets containing these terms can be effectively used to characterize Egyptian online discourse as relevant to civil liberties or not. If we had instead used a random sample of our dataset as training data, we would have

³⁸We first cleaned the text of punctuation and other symbols, and then converted words in the tweets to their roots using the ISRI Arabic Stemming Without a Root Dictionary stemmer Then, using word count vectors from the training dataset, we trained a Naive Bayes classifier to predict whether or not a tweet was relevant.

³⁹Precision is a measure of True Positives/(True Positives + False Positives) while Recall is a measure of True Positives/(True Positives + False Negatives).

needed a prohibitively expensive number of human-coded tweets to have sufficient balance in our training data.

Identifying Egyptian Elites on Twitter:

Elites were identified using Twitter Counter, a site that tracks statistics for over 94 million Twitter users worldwide, to rank Egyptian Twitter users by their follower numbers. This allowed us to compile a list of all Egyptian politicians and political movements that have over 10,000 followers on Twitter and well-known political affiliations, resulting in a list of 85 Egyptian political elite users. A list and description of these users is displayed in Table A2.

Locating Twitter Users in Egypt

Geolocation data is determined by the latitude and longitude coordinates detected by those Twitter users that enable geolocation services. Less than 1 percent of tweets in the global Twittersphere contain geolocation metadata, and this finding is reflected in our sample as well. However, location can also be determined using a user's location field in the metadata of their Twitter account. Here Twitter users write in location information. Any user listing Arabic or English words for Egypt or a city in Egypt were classified as Egyptian Twitter users. As demonstrates, a user's country and state can be determined with decent accuracy using self-reported Twitter data, and users often reveal location information with or without realizing it. As argues, because large numbers of users report their location in the "location" field and in aggregate these reports are quite accurate, this seems a reasonable (and commonly used) way to determine a user's location. This is especially true given that we are more interested in obtaining a high degree of precision (ensuring that the users are actually Egyptian) than recall (obtaining the entire population of tweets sent by politically engaged Egyptians).

Figure A2: Summary of Data Collection Process



	Randomly Sampled Relevant Tweets	Randomly Sampled Intolerant Tweets
1	There are many innocent prisoners #freedom	RT @khaledmontaser: The Brotherhood with their stupidity and their terrorism and
		their torture, their Fairmont elite have put a ceiling on our ambitions and they have
		fallen completely after the days of bread freedom and social justice
2	Who are the people you donkey. Egypt is a people ruled by the people. Egypt recognizes	Twitter and facebook activists begin using the hashtag #congratulations on executing
	and condemns any dog but it shakes things up a little bit. Legitimacy, democracy,	the leader [of the Muslim Brotherhood]
	liberalism, military, so what.	
3	Free Mansoura from prisons of the coup #pray _for_them http://t.co/EKP2fVOQw5	Yes, to excluding the Brotherhood from any political activity They do not deserve to
		threaten the security of Egypt and kill its soldiers and justify their killing they do not
		deserve to participate in any electoral or political process.
4	@KhoKhaZ @ANAS_ELSHAER The constitution of the cross will not rule the Muslims.	The Muslim Brotherhood are fascist dictators like the old ones. Either they rule us or
	#Qur date is January 25	there is violence
5	Alexandria: The revolutionaries shout down down with military rule in the Asawi region	RT @ DR Amr K Imam1: Badi will be the leader of the terrorist Muslim Brotherhood
0	during the night march #Rabawi [Muslim Brotherhood supporters after the Rabaa al-	tomorrow. God willing, after the second execution in the enemy trial and the execution
	Adawiya massacrel	of 682 others Congratulations Congratulations
6	The revolutionaries of the village of flags of the Favour Center continued their ac-	I believe the security forces should massacre the Muslim Brotherhood so there will be
0	twittes against the bloody bloody coup by holding a mass march in solidarity	blame and nunishment and the same crime will not be committed twice
	http://t.co/70BSnw7xyc	Stante and pullishinene and the same erine will not be committed twice
7	Follow up on the march of the Pyramid revolutionaries. The national alliance for sup-	The death certificate for Sharia is being written #Muslim Brotherhood #Yes to the
•	port of legitimacy and the rejection of the military coup will hold a march at 9pm	constitution
	http://t.co/b66150o4sy	
8	People formed a human chain in Damietta this morning to reject the coup #Egypt is	RT @Almogaz: The Muslim Brotherhood continues to exploit #children_Al-Jazeera
0	Isolamic	showed a video called "Children Against the Coup" in #Port Said #The Muslim Broth-
	Istanic	erhood is a Terrorist Organization #Egypt
Q	RT @MuhammadMorsi: # President Mohamed Morsi confirms his adherence to consti-	If the government is serious about considering the Muslim Brotherhood as a terrorist
3	tutional legitimacy and rejects any attempt to get out of it and calls on the armed forces	arganization, then why shouldn't heir leaders be arrested from their home? #Complete
	to withdraw their warning	cleaning of Egypt of the sheep
10	The funny thing is that after the disappointments of January 25 and June 30, the army	@SnDrellaSky @ mgabr2004 @eabram Where are the days of security and
10	and the intelligence services decided to rule terret with ordinary logitimacy in July. What	sofar without any Muslim Brothenhood does running or walking in the streat
	revolution hove and girle?	http://t.co/XCfZXkhZBL
11	Talking again about reviving Tashka's failed project confirms the vacuum of the Republic	The problem with releasing and giving amnesty to some of the activists is that the first
11	of July and its representative Sisi. Soon we will have a choice either democracy or chaos	thing they will do is demonstrate in front of the union to insult President Sisi
12	There is nothing worse than the activist who speaks to you about freedom democracy	Amanual khavat what I was saving before is not spin but I acknowledge the reality and
12	instice and rights but at the same time he rejects peace who is he and where does he	hope we can discuss the subject of imprisoning Abdel Fattab al Sisi
	come from?	hope we can discuss the subject of imprisoning ribder ration ar sist
13	This fascism is what the intellectuals want and they are manufacturing a professional	The left-wing nationalist gang that controls the human rights field in Egypt gets all riled
10	state. We are dealing with fascist tendencies in an authoritarian era	up when one of them is attacked
14	That's what the military rulers want military democracy so that they can steal the	$BT \otimes assami55$: Weel Abbas and Weel Choneim the state security bees and their snakes
14	country and take all of it's resources	must stop you from committing terrorism Oh sons of dogs traitors
15	#Against the protest law #Worker Mohamad Jahar	The death penalty for terrorists is not a surprise in my opinion. The punishment of
10	#Against the protest law # worker wohanad Jabai	murderers is right and just #Found
16	Freedom for the Mancura Cirls Freedom for Almancoura Cirls, Disgrace to Fount's great	The corrupt people who wanted to escape from prison need to have death sentences or
10	army imprisoned Citle #EvenMancouraCitle	military trials. The correspondence was the formation from the death sentances of
17	BT @ titotaraks: In Machara the blood flowed, do not forget Moone Daniel and Imad	Breaking: The militian of the coup attacked the march that left from the al Bauran
11	If the thousands of Al Asher did by the bullets of those of Dorgen down with military rule	measure in Meadi with took one Ecoup attacked the maintent that left from the al-reayyan
10	PT @bapactanmia: Former detained. There are executions of detained in military fulle	Any terrenist dog objecting or commenting on the wordists of the judiciony must feed
10	anne in Sinoi. Heithem Chasim a human rights activist analy about one of them	Any teriorist dog objecting of commenting on the verdicts of the judiciary, must face
	http://t.co/	that minimulatory ,,, when we remove the dift from this country
10	Intep.//t.00/ BT @simmisry URGENT The Presidential Floation Commission officially approximate	The security solution is required but it is not the only solution. All of our problems over
13	the extension of the third day voting period due to the severe heat wave "deimension	ne security solution is required but it is not the only solution. All of our problems over
	the extension of the third-day voting period due to the severe field wave $\#$ ajillillist http://t.co/kSPCSSDj	past years have reduced security and that s it.
20	BT @gamalaid Univer and unfair #down with protect law	@RT @Bico Sharm. Immediate arrest of all transpance activists and immediate death
20	iti sgamaetu Unjust anu uman #uown_with_protest_law	with without and an and and

penalty for the leaders of the Muslim Brotherhood. Lock up any media that incites

Table A1: Randomly Selected Relevant and Intolerant Tweets (English Translations)

Table A2: Top Egyptian Politicians and Political Movements by TwitterFollowers

Handlo	Namo	Followors	Political Orientation	Biography
@amalabalad	Ame Khalad	2667000	Islamist	Earner hand of the Errort Dente Describer
@amrknaled	Amr Knaled	2667999	Islamist	Former nead of the Egypt Party, Preacher
@ElBaradei	Mohamed El Baredei	2435248	Secular	Former VP, Constitution Party Head
@MuhammadMorsi	Muhammad Morsi	2026386	Islamist	Former President of Egypt
@HamdeenSabahy	Hamdeen Sabahy	1954326	Secular	Head of Popular Current Party
@HamzawyAmr	Amr Hamzawy	1838439	Secular	Head of Masr Al-Huriya Party
@DrAbolfotoh	Abdel Moneim Aboul Fotouh	1545437	Islamist	Former Pres. Candidate, Strong Egypt Party
@NaguibSawiris	Naguib Sawiris	1445649	Secular	Head of Free Egyptians Party
@AymanNour	Avman Nour	1217582	Secular	Head of Al-Gahad Party Former Pres Candidate
@CameelaIsmail	Cameela Ismail	1126805	Secular	Constitution Party Former Presidential Candidate
Gameetaisman	Gameera Isman	1120803	Secular	E La La Contra Data
@amremoussa	Amre Moussa	1112843	Secular	Former Head of Conference Party
@naderbakkar	Nader Bakkar	863505	Islamist	Al Nour Party Spokesperson
@shabab6april	April 6th Youth	806764	Secular	April 6th Youth Movement Official Twitter
@Essam_Elerian	Essam Elarian	689893	Islamist	Vice Chairman of the Freedom and Justice Party
@FJparty	Freedom and Justice Party	633982	Islamist	Freedom and Justice Party Official Twitter
@Saad_Elkatatny	Saad Elkatatny	623642	Islamist	Freedom and Justice Party Chairman
@bothainakamel1	Bothaina Kamel	568562	Socular	Independent Presidential Candidate
@UenersCalebTW	Usersen Aber Ismail	500002	Jecular	Earner Calaf Desidential Candidate
@ hazemisalali 1 W		151045		Former Salah Presidential Calididate
@AnmedSnankEG	Anmed Snank	474945	Secular	Former PM and Head of the Egyptian Patriotic Mov.
@AsmaaMahfouz	Asmaa Mahfouz	421758	Secular	Founder of April 6th Movement
@lassecgen	Nabil Elaraby	393189	Secular	Former member of Mubarak Gov't
@almorshid	Mohammed Badie	390546	Islamist	Supreme Guide of the Muslim Brotherhood
@GameelaElex2014	Gameela Ismail's Election Campaign	380975	Secular	Gameela Ismail's Election Campaign Official Account
@DrEssamSharaf	Essam Sharaf	357727	Secular	Former Prime Minister Former NDP
@khairat Alshator	Khairat Al Shater	3/1208	Jelamiet	First Deputy Chairman of the Muslim Brotherhood
© LL 'C 'LL'	It. C. LL	091250		
@DrHaniSarieldin	Hani Sarieldin	334355	Secular	Founder of Free Egyptians Party
@MohamedElgawady	Mohamed El-Gawady	307958	Islamist	Brotherhood Activist
@M6april	April 6th News	305240	Secular	April 6th Movement Official News Portal
@ElBaradeiOffice	Mohamed El-Baradei's Office	288314	Secular	El-Baradei's Office Official Account
@Alwasatpartveg	Al-Wasat Party	279991	Islamist	Al- Wasat Party
@wael	Wael Khalil	269138	Secular	Former prominent member of the Revolutionary Socialists
@waci	A	269415	Jalamiat	Former prominent member of the revolutionary boeranses
@a_sayyad	Ayman Sayyad	202410	Garal	Former member of Morsi's advisory board
@HatemAzzam	Hatem Azzam	255592	Secular	Former MP, Civilization Party
@DoctorMahsoob	Mohamed Mahsoob	222381	Islamist	Former Islamist MP
@3arabawy	Hossam El-Hamalawy	208453	Secular	Prominent Member of the Revolutionary Socialists
@GhostyMaher	Ahmed Maher	195243	Secular	Founder of the April 6th Movement
@AlsisiOfficial	Abdel Fatah El-Sisi	194612	Secular	El-Sisi's Official Twitter
@ AlDostourP	Constitution Party	194217	Secular	Constitution Party Official Twitter
@Miss AlOssoin	Steam Errort Denter	196447	Jalamiat	Street Front Danty Official Twitten
@MISTAIQawia	Strong Egypt Farty	180447	Garal	Strong Egypt Farty Official Twitter
@ma7mod_badr	Mahmoud Badr	177167	Secular	Founder of Tamarod Movement
@RevSocMe	Revolutionary Socialists Party	159835	Secular	Revolutionary Socialists Party Official Twitter
@DrHigazy	Mostafa Higazy	145727	Secular	Sisi Advisor, NASAQ Foundation for Strategic and Humani
@TayarSha3by	Popular Current	132848	Secular	Popular Current Party Official Site
@Ikhwanweb	Ikhwan Web	126472	Islamist	Official Account of the Muslim Brotherhood
@ikhwantawasol	Ikhwan Online	112472	Islamist	Official Muslim Brotherhood News Portal
@DrMohamadVousri	Mohamad Yousrilbrahim	100186	Ielamiet	Salafi Politician
©D M'N	Monamad Tousinbrahim	100070	Tala int	
@DrMorsinews	Morsi News	100879	Islamist	Morsi News Official Twitter
Walmogheer	Ahmed Al-Mogheer	98146	Islamist	Prominent Brotherhood Member
@Dr_pakinam	Pakinam El-Sharkawy	96348	Islamist	Morsi Aid
@bkhafagy	Bassem Khafagy	92880	Islamist	Former Islamist Presidential Candidate
@tamarrod	Tamarod Movement	91801	Secular	Tamarod Official Twitter
@alwafdwebsite	Al-Wafd Party	91234	Secular	Al-Wafd Party
Omrmeit	Mohammed Adel	85473	Secular	Founder of April 6th Movement
@ablaasal	Abdullah Kamal	82520	Camples	Former MD National Democratic Dente
@abkamai	Abdullah Kamal	00029	Secular	Pormer MF National Democratic Farty
@hossam_moanis	Hossam Moanis	83263	Secular	Popular Current Party Spokesperson
@gelhaddad	Gehad el-Haddad	72067	Islamist	Media Spokesperson for the Muslim Brotherhood
@Elsisi_General	President Sisi	65614	Secular	President of Egypt
@basemkamel	Basem Kamel	56292	Secular	MP and member of the Social Democratic Party
@amr_darrag	Amr Darrag	51291	Islamist	Former Secretary General of the Egyptian Constituent Asse
@MasreveenAhrrar	Free Egyptians Party	48460	Secular	Free Egyptians Party Official Twitter
Osalafynews	Salafi News	41217	Islamist	Pro-Salafi News Twitter
Otomroud	Tempred Account	40120	Socular	Tomared Assount
©D 1 II		40130	Tele in	
@RabaaHeros	Rabaa Heros	30/82	Islamist	Rabaa al-Adawiya Twitter Account
@FJPartyAlex1	Alexandria FJP	35945	Islamist	Alexandria Official FJP Twitter
@MasrAlhureyya	Masr Al-Huriya Party	34243	Secular	Egypt Freedom Party Official Twitter
@drtarekelzomor	Tarek El-Zomor	33548	Islamist	Head of Building and Devleopment Party
@A_khaleel_kh	Ahmed Khalil Khairallah	32622	Islamist	Former Salafi MP
@anasalafv1	Lam Salafi	30663	Islamist	Pro-Salafi Twitter
@AZELHABIBY	Abu Azol Hariry	30625	Socular	Former MP and member of the Popular Socialist Alliance P
@FladlParty	Instige Party	20510	Secular	Justice Party Official Twitter
@Liadir alty	New Dela	07400	Secular Laboration	VD full Chic Chi full to the full No. De t
auryasserborhamy	A 1 CH X H	2/409	151amist	A the balan Can, founder of Al-Nour Party
@6AprilYouth	April 6th Youth	20116	Secular	April oth Movement Official Twitter
@NabdRab3a	Kabaa al-Adawiya	19842	Islamist	Rabaa al-Adawiya Twitter Account
@DrSayedElbadawy	Sayed El-Badawy	19251	Secular	Head of al-Wafd Party
@FjpartyOrg	FJP English Official	18100	Islamist	The official English Twitter of the Freedom and Justice Par
@HalaShuk	Hala Shukralla	16446	Secular	Head of Egyptian Constitution Party
@ch4hazim	Hazem Abu Ismail Support Page	14816	Islamist	Hazem Abu Ismail Suport Twitter
@elnourparturnews	Al Nour Party Nour	13675	Ielamiet	Al Nour Party Official Nous Portal
Semon partynews	AITING TO A NUMBER OF A DECEMBER	10070	151dHHSt	Al W CI D. (N D. ()
walwaldportal	al-wald Party News	13365	Secular	Al-wald Party News Portal
@yonosmakhyoun	Yunos Makhyoun	13093	Islamist	Prominent Salafi
@DrAbdelhafeez	Mohamed Abdelhafeez	12389	Islamist	Prominent Freedom and Justice Party Member
@ashoukry	Ahmed Shoukry	11595	Islamist	Strong Egypt Party Prominent Member
@abd _mon_sh	Abdel Moneim El-Shahat	11581	Islamist	Leader of Salafi Call, Islamist Preacher
				· · · · · · · · ·

Statistic	Ν	Mean	St. Dev.	Min	Max
Elite Diversity	9,400	0.575	0.388	0	1
Non-Elite Diversity	9,400	0.434	0.305	0	1
Elite Friends	9,400	9.365	11.022	0	62
Non-Elite Friends	9,400	751.514	1,267.665	0	48,800
Intolerant Tweet Count	9,400	0.885	2.218	0	40
Days on Twitter	9,400	1,848.189	436.857	1,107	3,725
Relevant Tweet Count	9,400	2,071.186	920.251	. 1	3,206

Table A3: Descriptive Statistics (Full Sample)

Table A4: Descriptive Statistics by Political Orientation

	Political Orientation	Ν	Mean	St. Dev.	Median	Min	Max
Elite Diversity	Islamist	1341	0.31	0.29	0.29	0	0.79
	Moderate	3748	0.97	0.06	1.00	0.80	1
	Secular	4311	0.32	0.27	0.33	0.00	0.79
Non-Elite Diversity	Islamist	1341	0.62	0.24	0.65	0.00	1
	Moderate	3748	0.56	0.30	0.60	0	1
	Secular	4311	0.27	0.24	0.18	0	1
Elite Total Friends	Islamist	1341	10.14	9.47	7	1	47
	Moderate	3748	5.83	10.94	0	0	62
	Secular	4311	12.20	10.67	9	1	61
Non-Elite Total Friends	Islamist	1341	791.16	1032.79	430	1	11526
	Moderate	3748	687.99	1379.41	306	0	27156
	Secular	4311	794.41	1229.93	494	0	48800
Intolerant Tweet Count	Islamist	1341	0.85	1.63	0	0	14
	Moderate	3748	0.56	1.71	0	0	33
	Secular	4311	1.18	2.68	0	0	40
Days on Twitter	Islamist	1341	1794.06	412.60	1788	1107	3589
	Moderate	3748	1750.42	411.81	1709.50	1107	3440
	Secular	4311	1950.03	442.97	1974	1107	3725
Relevant Tweet Count	Islamist	1341	1801.51	891.96	2030	0	3157
	Moderate	3748	2178.03	882.57	2608	0	3196
	Secular	4311	2062.18	943.20	2528	0	3206

Figure A3: Histograms of Twitter Friend Counts



This Figure shows variation in the counts of Secular and Islamist elites and non-elites followed by the users in our study.

Appendix B: Regression Tables

	Quasi-Poisson	Quasi-Poisson	OLS	OLS
(Intercept)	0.4246**	* -2.5587**	0.0008***	0.0035***
	(0.0459)	(0.8608)	(0.0000)	(0.0006)
Elite Diversity	-0.4273^{**}	$* -0.4143^{***}$	-0.0002^{***}	-0.0002^{**}
	(0.0676)	(0.0766)	(0.0000)	(0.0001)
Non-Elite Diversity	-0.8253^{**}	$* -0.3995^{***}$	-0.0004^{***}	-0.0002^{*}
	(0.0924)	(0.1057)	(0.0001)	(0.0001)
Log Non-Elite Friends		-0.1881^{***}		-0.0001^{***}
		(0.0245)		(0.0000)
Log Elite Friends		0.5333^{***}		0.0002^{***}
		(0.0265)		(0.0000)
Log Relevant Tweets		0.7553^{***}		-0.0001^{***}
		(0.0493)		(0.0000)
Log Days on Twitter		-0.3765^{***}		-0.0002^{**}
		(0.1079)		(0.0001)
Islamist		-0.0253		-0.0001^{*}
		(0.0789)		(0.0001)
N	9400	9400 9	9396	9396
R^2			0.0079	0.0336
adj. R^2			0.0076	0.0329
Resid. sd			0.0018	0.0017

Table B1: Network Diversity and Intolerance: Quasi-Poisson and OLS ModelsExcluding Moderates in Non-Elite Diversity Measure

Standard errors in parentheses

[†] significant at p < .10; *p < .05; **p < .01; ***p < .001

This Table displays the results of quasi-Poisson models (with and without controls) evaluating the relationship between network diversity and users' number of intolerant tweets as well as the results of OLS regressions evaluating the relationship between network diversity and the proportion of users' intolerant tweets.

	Quasi-Poisson	Quasi-Poisson	OLS	OLS
(Intercept)	1.0253**	* -1.0061	0.0011***	0.0040**
	(0.0617)	(0.8596)	(0.0001)	(0.0006)
Elite Diversity	-0.2473^{**}	$* -0.2373^{**}$	-0.0001^{**}	-0.0001^{\dagger}
	(0.0687)	(0.0755)	(0.0001)	(0.0001)
Non-Elite Diversity w Moderates	-2.1920^{**}	$* -1.5000^{***}$	-0.0009^{***}	-0.0006^{**}
	(0.1384)	(0.1615)	(0.0001)	(0.0001)
Log Non-Elite Friends		-0.1401^{***}		-0.0001^{**}
		(0.0249)		(0.0000)
Log Elite Friends		0.4564^{***}		0.0002^{**}
		(0.0271)		(0.0000)
Log Relevant Tweets		0.7199^{***}		-0.0001^{**}
		(0.0482)		(0.0000)
Log Days on Twitter		-0.5083^{***}		-0.0003^{**}
		(0.1070)		(0.0001)
Islamist		0.1190		-0.0001
		(0.0759)		(0.0001)
N	9336	9336	9332	9332
R^2			0.0143	0.0358
adj. R^2			0.0140	0.0350
Resid. sd			0.0018	0.0018

Table B2:	Network Diversity and Intolerance:	Quasi-Pois	son and O	LS Models
	Including Moderates in Non-Elit	e Diversity	Measure	

Standard errors in parentheses

[†] significant at p < .10; *p < .05; **p < .01; ***p < .001

This Table displays the results of quasi-Poisson models (with and without controls) evaluating the relationship between network diversity and users' number of intolerant tweets as well as the results of OLS regressions evaluating the relationship between network diversity and the proportion of users' intolerant tweets. These regressions measure non-elite network diversity including moderates.

Table B3: Network	Diversity	and Intolerance Human Coded	e Quasi-Poisson Data	and OLS	Models
		OLS Model	Quasi-Poisson Model		
	(Intercept)	0.667^{*}	2.914		

(Intercept)	0.667^{*}	2.914
	(0.120)	(1.539)
Elite Diversity	-0.041*	-0.468^{*}
	(0.017)	(0.192)
Non-Elite Diversity	-0.072^{*}	-0.614^{*}
	(0.026)	(0.283)
Log Non-Elite Friends	0.005	0.078
	(0.003)	(0.044)
Log Elite Friends	-0.007	-0.099
	(0.005)	(0.067)
Islamist	-0.061*	-0.833^{*}
	(0.011)	(0.147)
Log Days on Twitter	-0.070^{*}	-0.605^{*}
	(0.016)	(0.216)
N	837	837
R^2	0.091	
adj. R^2	0.085	
Resid. sd	0.136	
Standard arrors in	paranthagag	

Standard errors in parentheses * indicates significance at p < 0.05

This table includes the results of an OLS and quasi-Poisson model of the relationship between network diversity and intolerance using only human-coded (rather than machine-coded) measures of intolerance.

Table B4: Network Diversity and Tolerance:	Quasi-Poisson and OLS Models
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	Quasi-Poisson Q	uasi-Poisson	OLS	OLS
(Intercept)	7.6130***	-0.0141^{***}	0.9992***	0.9970***
	(0.0095)	(0.0006)	(0.0000)	(0.0006)
Elite Diversity	0.0420***	0.0001^{*}	0.0002***	0.0001^{**}
	(0.0125)	(0.0000)	(0.0000)	(0.0001)
Non-Elite Diversity	-0.0042	0.0002^{***}	0.0004^{***}	0.0002^{*}
	(0.0158)	(0.0001)	(0.0001)	(0.0001)
Log Non-Elite Friends		0.0000^{**}		0.0001^{***}
		(0.0000)		(0.0000)
Log Elite Friends		-0.0001^{***}		-0.0002^{***}
		(0.0000)		(0.0000)
Log Relevant Tweets		1.0016^{***}		
		(0.0000)		
Log Days on Twitter		0.0001^{\dagger}		0.0003^{***}
		(0.0001)		(0.0001)
Islamist		0.0001^{*}		0.0001^{\dagger}
		(0.0000)		(0.0001)
N	9400	9400	9396	9396
AIC				
BIC				
$\log L$				
R^2			0.0079	0.0287
adj. R^2			0.0076	0.0280
Resid. sd			0.0018	0.0018
Standard errors in parentheses				
[†] significant at $p < .10$; * $p < .05$	5; **p < .01; ***p < .01	001		

This Table replicates the analysis provided in Table B1 using tolerant tweets rather than intolerant tweets as the outcome variable.

Table B5: Network Diversity and Irrelevant Tweets: Quasi-Poisson and OLS Models

	Quasi-Poisson	Quasi-Poisson	OLS	OLS					
(Intercept)	5.9243***	* 4.1476***	0.1475^{***}	0.2531***					
	(0.0213)	(0.3541)	(0.0029)	(0.0468)					
Elite Diversity	-0.0638^{*}	0.1310***	-0.0139^{***}	0.0206***					
	(0.0270)	(0.0312)	(0.0038)	(0.0041)					
Non-Elite Diversity	0.4642^{**}	* 0.2616***	0.0743^{***}	0.0497^{***}					
	(0.0339)	(0.0402)	(0.0049)	(0.0055)					
Log Non-Elite Friends		0.0710^{***}		0.0019					
		(0.0097)		(0.0012)					
Log Elite Friends		0.0400***		0.0152^{***}					
		(0.0095)		(0.0013)					
Log Relevant Tweets		-0.0484		-0.0215^{***}					
		(0.0458)		(0.0062)					
Log Days on Twitter		0.2093^{***}							
		(0.0145)							
Islamist		0.3850^{***}		0.0688^{***}					
		(0.0299)		(0.0045)					
N	9400	9400	9400	9400					
AIC	NA	NA							
BIC	NA	NA							
$\log L$	NA	NA							
R^2			0.0243	0.0709					
adj. R^2			0.0241	0.0703					
Resid. sd			0.1373	0.1340					
Standard errors in parentheses									

[†] significant at p < .10; *p < .05; **p < .01; ***p < .001

This table replicates the analysis provided in Table B1 using irrelevant tweets rather than intolerant tweets as the outcome variable.

Negative Binomial Model
-0.4184^{***}
(0.0646)
-0.5195^{**}
(0.0885)
-0.1557^{**}
(0.0210)
0.5077***
(0.0215)
0.7352^{**}
(0.0338)
-0.2575^{**}
(0.0977)
-0.0309
(0.0691)
-3.3922^{**}
(0.7530)
9400
21297.1079
21554.4527
-10612.5540
5; ** $p < .01$; *** $p < .001$

Table B6: Network Diversity and Intolerant Tweets: Negative Binomial Model

This table replicates the analysis provided in table B1 using a negative binomial model instead of a quasi-Poisson model to evaluate the relationship between network diversity and users' number of intolerant tweets.

	Model 55	Model 60	Model 65	Model 70	Model 75	Model 80	Model 85
Elite Network Diversity 55	-0.4034^{***}						
Non-Elite Network Diversity 55	(0.0724) -0.4582^{***} (0.1066)						
Islamist 55	(0.1000) 0.0476 (0.0753)						
Elite Network Diversity	(0.0100)	-0.4143^{***}					
Non-Elite Network Diversity 60		-0.3995^{***}					
Islamist 60		-0.0253 (0.0789)					
Elite Network Diversity 65		(0.0105)	-0.4303^{***}	¢			
Non-Elite Network Diversity 65			(0.0131) -0.4036^{***} (0.0997)	¢			
Islamist 65			(0.0001) -0.0540 (0.0830)				
Elite Network Diversity 70			(0.0000)	-0.4517^{***}	ĸ		
Non-Elite Network Diversity 70				-0.3747^{***} (0.0963)	ĸ		
Islamist 70				-0.1343 (0.0904)			
Elite Network Diversity 75				(0.0001)	-0.4771^{**}	*	
Non-Elite Network Diversity 75					-0.3606^{**}	*	
Islamist 75					(0.0345) -0.2399^{*} (0.1015)		
Elite Network Diversity 80					(0.1013)	-0.4858^{***}	:
Non-Elite Network Diversity 80						-0.3710^{***}	:
Islamist 80						(0.0010) -0.3071^{**} (0.1113)	
Elite Network Diversity 85						(0.1110)	-0.4860^{**}
Non-Elite Network Diversity 85							-0.3716^{**}
Islamist 85							-0.3061^{**} (0.1176)
Log Non-Elite Friends	-0.1863^{***}	-0.1881^{***}	-0.1866^{***}	(0.0243)	(0.0243)	* -0.1870***	-0.1879^{**}
Log Elite Friends	(0.0244) 0.5272^{***} (0.0262)	(0.0243) 0.5333^{***} (0.0265)	(0.0243) 0.5278^{***} (0.0260)	(0.0243) (0.5263^{***}) (0.0261)	(0.0243) * 0.5243^{**} (0.0260)	(0.0242) * 0.5209^{***} (0.0260)	(0.0242) 0.5204^{**}
Log Relevant Tweets	(0.0202) 0.7549^{***} (0.0494)	(0.0203) 0.7553^{***} (0.0403)	(0.0200) 0.7503^{***}	(0.0201) (0.7493^{***})	* 0.7465*** (0.0488)	(0.0200) * 0.7454^{***} (0.0487)	(0.0200) 0.7473^{**} (0.0487)
Log Days on Twitter	(0.0494) -0.3802^{***} (0.1077)	(0.0495) -0.3765^{***} (0.1070)	(0.0491) -0.3884^{***} (0.1077)	(0.0409) (-0.3910^{***}) (0.1076)	(0.0400) * -0.3996^{**} (0.1074)	(0.0407) * -0.4083^{***} (0.1074)	$(0.0407)^{*}$ -0.4077*** (0.1074)
Constant	-2.5113^{**} (0.8603)	(0.1079) -2.5587^{**} (0.8608)	(0.1077) -2.4108^{**} (0.8603)	-2.3674^{**} (0.8592)	-2.2626^{**}	(0.1074) -2.1714^{*} (0.8577)	-2.1816^{*} (0.8583)
N	9400	9400	9400	9400	9400	9400	9400
··	0 100	0.100	0 100	- 100	0.100	0.100	0.100

Table B7: Network Diversity and Intolerant Tweets: Quasi-Poisson ModelsThresholds for Classifying Users as Islamist or Secular Range from .55 to .85

Standard errors in parentheses

[†] significant at p < .10; *p < .05; **p < .01; ***p < .001

This table replicates the analysis in table B1 using quasi-Poisson models to evaluate the relationship between network diversity and user's number of intolerant tweets. Each model uses a different threshold to classify users as Secular or Islamist ranging from .55 to .85. The threshold used in the other analyses in the paper is .6, bolded in the table.

Elite Network Diversity	-0.6876^{***}	$* -0.5485^{**}$	-0.5580^{***}	-0.4118^{***}
	(0.1361)	(0.1214)	(0.1392)	(0.1229)
Non-Elite Network Diversity	-0.7864^{**}	* -0.5980***	k	
(No Moderates)	(0.1877)	(0.1812)		
Non-Elite Network Diversity	· · · · ·	× ,	-1.9172^{***}	-1.7351^{***}
(Including Moderates)			(0.2791)	(0.2724)
Log Non-Elite Friends		0.0677		0.1236**
		(0.0448)		(0.0455)
Log Elite Friends		0.3590***	k	0.2847***
-		(0.0434)		(0.0448)
Log Days on Twitter		-0.1046		-0.2749
		(0.1888)		(0.1906)
Log Islamist		-0.0196		0.0835
		(0.1345)		(0.1320)
Δ Relevant Tweets		0.0009***	k	0.0009***
		(0.0000)		(0.0000)
Intolerant Tweet Count Pre-May 2015	0.0315	0.2168***	* 0.0130	0.2122***
·	(0.0623)	(0.0325)	(0.0653)	(0.0329)
(Intercept)	-1.5798^{**}	* -2.9253*	-1.0563^{***}	-1.3479
	(0.0908)	(1.4416)	(0.1257)	(1.4717)
N	7843	7843	7802	7802
Standard errors in parentheses				
† significant at $n < 10$ * $n < 05$ * * $n < 05$	$01 \cdot ***n < 0$	01		

Table B8: Network Diversity and Intolerance Over Time (Quasi-Poisson Models)

This table displays the results of quasi-Poisson lagged dependent variable models evaluating the association between network diversity (with and without moderates) and the change in a user's intolerant tweet count after spending one additional year in a network. Users in our sample who do not have relevant tweets both before May 2015 and after May 2016 were excluded from the analysis.

Elite Network Diversity	-0.0755^{***}	-0.0670***	-0.0595^{***}	-0.0514^{**}
	(0.0151)	(0.0160)	(0.0153)	(0.0165)
Non-Elite Network Diversity	-0.0767^{***}	-0.0614^{**}		. ,
(No Moderates)	(0.0194)	(0.0215)		
Non-Elite Network Diversity			-0.1958^{***}	-0.2387^{**}
(Including Moderates)			(0.0295)	(0.0350)
Log Non-Elite Friends		0.0102^{*}		0.0346^{**}
		(0.0051)		(0.0053)
Log Elite Friends		0.0284^{***}		-0.0054
		(0.0051)		(0.0054)
Log Days on Twitter		-0.0108		-0.0137
		(0.0245)		(0.0254)
Islamist		-0.0159		-0.0018
		(0.0176)		(0.0179)
Δ Relevant Tweets		0.0001^{***}		
		(0.0000)		
Intolerant Tweet Count Pre-May 2015	0.0043	0.0332^{***}	0.0018	0.0009
	(0.0083)	(0.0082)	(0.0083)	(0.0083)
(Intercept)	0.1839^{***}	0.0939	0.2416^{***}	0.1635
	(0.0116)	(0.1865)	(0.0158)	(0.1948)
N	7843	7843	7802 7	802
R^2	0.0076	0.0683	0.0112	0.0169
adj. R^2	0.0072	0.0674	0.0108	0.0160
Resid. sd	0.4934	0.4782	0.4932	0.4919
Standard errors in parentheses				
† significant at $p < .10; \ ^{*}p < .05; \ ^{**}p <$.01; ***p < .00	1		

Table B9: Network Diversity and Intolerance Over Time (OLS Models)

This table displays the results of OLS lagged dependent variable models evaluating the association between network diversity (with and without moderates) and the change in a user's intolerant tweet count after spending one additional year in a network. Users in our sample who do not have relevant tweets both before May 2015 and after May 2016 were excluded from the analysis.

Table B10: Network Diversity and Intolerance Over Time:Lagged Dependent Variable ModelsWith Fixed Effect

	Intolerant	Intolerant	Intolerant	Intolerant
	Tweet Count	Tweet Count	Proportion	Proportion
	post-May 2016	post-May 2016	post-May 2016	post-May 2016
	1 0	1 0	1 0	1 0
Elite Network Diversity	-0.0670**	* -0.0566	-0.0005^{**}	-0.0005^{**}
	(0.0160)	(0.0345)	(0.0002)	(0.0002)
Non-Elite Network Diversity	-0.0614^{**}	-0.0615	0.0002	0.0001
	(0.0215)	(0.0405)	(0.0002)	(0.0002)
Log Elite Friends	0.0284^{**}	* 0.0291***	* 0.0001**	0.0001^{**}
	(0.0051)	(0.0052)	(0.0000)	(0.0000)
Log Non-Elite Friends	0.0102^{*}	0.0101^{*}	-0.0000	-0.0000
	(0.0051)	(0.0051)	(0.0000)	(0.0000)
Log Days on Twitter	-0.0108	-0.0095	-0.0002	-0.0002
	(0.0245)	(0.0246)	(0.0001)	(0.0001)
Islamist	-0.0159	-0.0171	-0.0002^{*}	-0.0002^{*}
	(0.0176)	(0.0177)	(0.0001)	(0.0001)
Δ Relevant Tweets	0.0001^{**}	* 0.0001**'	ĸ	
	(0.0000)	(0.0000)		
Δ Elite Network Diversity		0.0340		-0.0000
		(0.0229)		(0.0001)
Δ Non-Elite Network Diversity		0.0155		-0.0001
		(0.0421)		(0.0002)
Diverse Elite Network Dummy		-0.0029	0.0003^{*}	0.0003^{*}
		(0.0257)	(0.0001)	(0.0001)
Diverse Non-Elite Network Dummy		-0.0001	-0.0001	-0.0001
		(0.0233)	(0.0001)	(0.0001)
Prop Intolerant Tweets pre-May 2015			0.0170^{+}	0.0171^{\dagger}
			(0.0092)	(0.0092)
Intolerant Tweet Count pre-May 2015	0.0332^{**}	* 0.0334***	¢	
	(0.0082)	(0.0082)		
Constant	0.0939	0.0793	0.0016^{\dagger}	0.0017^{\dagger}
	(0.1865)	(0.1870)	(0.0009)	(0.0009)
N	7843	7843	7843	7843
R^2	0.0683	0.0686	0.0048	0.0048
adj. R^2	0.0674	0.0672	0.0037	0.0034
Resid. sd	0.4782	0.4782	0.0023	0.0023
Standard errors in parenthese	es			
[†] significant at $p < .10$; * $p <$.05; **p < .01	; *** $p < .001$		

Table includes results of lagged dependent variable models evaluating the relationship between network diversity and the change in users' intolerant tweet counts and proportion of intolerant tweets after spending an additional year in their respective networks. This replicates the over time analysis adding fixed effects or dummy variables for high (greater than .5) elite and non-elite network diversity at time t_1 (May 2015).

Appendix C: Sensitivity Analysis

In an attempt to address the possibility of unobserved confounders driving our results, we conduct sensitivity analysis using the sensmakr R package. Figure A4 demonstrates that the negative coefficient estimates on elite network diversity and non-elite network diversity are robust to hypothetical unobserved confounders that are between one and three times as large as any of the covariates included in our models. The horizontal axis shows the hypothetical residual share of variation of the treatment that unobserved confounding explains. The vertical axis shows the hypothetical partial R^2 of unobserved confounding with the outcome. The contours show what would be the estimate for change in intolerance that

we would have obtained in the full regression model including unobserved confounders with such hypothetical strengths. The plots are parameterized in way that hurts our hypothesis, by pulling the estimates towards zero. The bounds on the strength of confounding are also shown in the plots.

Figure C1: Sensitivity Analysis

Elite Network Diversity 0.10 Partial R^2 of confounder(s) with the outcome 0.08 0.06 0.04 0.02 0.00 0.00 0.02 0.04 0.06 0.08 0.10 Partial R² of confounder(s) with the treatment Non-Elite Network Diversity 0.4 Partial R^2 of confounder(s) with the outcome 0.3 0.2 0.1 0.0 0.0 0.3 0.1 0.2 0.4 0.5 Partial R² of confounder(s) with the treatment

These results are also displayed numerically in the tables below:

	bound_label	r2dz.x	r2yz.dx	treatment	$adjusted_{estimate}$	$adjusted_se$	adjusted_t	adjusted_lower_CI	adjusted_upper_CI
1	1x Islamist	0.1441	0.0001	Elite Diversity	-0.0602	0.0173	-3.4678	-0.0942	-0.0262
2	2x Islamist	0.2882	0.0003	Elite Diversity	-0.0516	0.0190	-2.7123	-0.0889	-0.0143
3	3x Islamist	0.4322	0.0005	Elite Diversity	-0.0402	0.0213	-1.8880	-0.0820	0.0015
4	1x Log Non-Elite Friends	0.0041	0.0005	Elite Diversity	-0.0649	0.0161	-4.0385	-0.0965	-0.0334
5	2x Log Non-Elite Friends	0.0083	0.0010	Elite Diversity	-0.0628	0.0161	-3.9009	-0.0944	-0.0313
6	3x Log Non-Elite Friends	0.0124	0.0016	Elite Diversity	-0.0607	0.0161	-3.7631	-0.0924	-0.0291
7	1x Log Days on Twitter	0.0011	0.0000	Elite Diversity	-0.0668	0.0161	-4.1594	-0.0983	-0.0353
8	2x Log Days on Twitter	0.0022	0.0000	Elite Diversity	-0.0666	0.0161	-4.1428	-0.0981	-0.0351
9	3x Log Days on Twitter	0.0032	0.0001	Elite Diversity	-0.0663	0.0161	-4.1262	-0.0978	-0.0348
10	1x Non-Elite Diversity	0.1457	0.0014	Elite Diversity	-0.0451	0.0174	-2.5997	-0.0791	-0.0111
11	2x Non-Elite Diversity	0.2914	0.0029	Elite Diversity	-0.0177	0.0190	-0.9286	-0.0550	0.0196
12	3x Non-Elite Diversity	0.4371	0.0047	Elite Diversity	0.0190	0.0213	0.8889	-0.0229	0.0608

 $\label{eq:c1: Elite Network Diversity Sensitivity Analysis} \\$

Table C2: Non-Elite Network Diversity Sensitivity Analysis (Including Moderates)

	bound_label	r2dz.x	r2yz.dx	treatment	adjusted_estimate	$adjusted_se$	$adjusted_t$	adjusted_lower_CI	adjusted_upper_CI
1	1x Islamist	0.1220	0.0000	Non-Elite Diversity	-0.1919	0.0364	-5.2732	-0.2633	-0.1206
2	2x Islamist	0.2440	0.0000	Non-Elite Diversity	-0.1906	0.0392	-4.8584	-0.2675	-0.1137
3	3x Islamist	0.3660	0.0000	Non-Elite Diversity	-0.1889	0.0428	-4.4097	-0.2728	-0.1049
4	1x Log Non-Elite Friends	0.0932	0.0016	Non-Elite Diversity	-0.1546	0.0358	-4.3199	-0.2247	-0.0844
5	2x Log Non-Elite Friends	0.1864	0.0032	Non-Elite Diversity	-0.1110	0.0377	-2.9416	-0.1850	-0.0370
6	3x Log Non-Elite Friends	0.2795	0.0050	Non-Elite Diversity	-0.0608	0.0401	-1.5166	-0.1393	0.0178
7	1x Log Days on Twitter	0.0518	0.0002	Non-Elite Diversity	-0.1841	0.0350	-5.2558	-0.2527	-0.1154
8	2x Log Days on Twitter	0.1036	0.0003	Non-Elite Diversity	-0.1745	0.0360	-4.8449	-0.2451	-0.1039
9	3x Log Days on Twitter	0.1553	0.0005	Non-Elite Diversity	-0.1643	0.0371	-4.4277	-0.2370	-0.0915
10	1x Elite Diversity	0.1421	0.0018	Non-Elite Diversity	-0.1410	0.0368	-3.8325	-0.2131	-0.0689
11	2x Elite Diversity	0.2842	0.0038	Non-Elite Diversity	-0.0763	0.0402	-1.8963	-0.1552	0.0026
12	3x Elite Diversity	0.4263	0.0061	Non-Elite Diversity	0.0091	0.0449	0.2023	-0.0789	0.0971