

Online Appendix for “TikTok and Civic Activity among Young Adults”

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Appendix A: Question Wording for Variables and Summary Statistics

Dependent Variable:

This variable is equal to the sum of the values for each of the following variables:

During 2020, how often have you...

	Never				Very Often	Don't Know
Used the internet to research a candidate's positions or view speeches by a candidate.	0	1	2	3	4	DK
Worn a campaign button or shirt, put a campaign sticker on your car, or placed a sign in your window or in front of your residence.	0	1	2	3	4	DK
Tried to talk to people and explain why they should vote for or against one of the parties or candidates.	0	1	2	3	4	DK
Contacted a newspaper, radio, or TV talk show to express your opinion on an issue.	0	1	2	3	4	DK
Attended any political meetings, rallies, speeches, dinners, or things like that in support of a candidate or party.	0	1	2	3	4	DK
Participated in political activities such as protests, marches, or demonstrations.	0	1	2	3	4	DK
Worked or volunteered on a political campaign for a candidate or party.	0	1	2	3	4	DK
Contacted or visited someone in government who represents your community.	0	1	2	3	4	DK
Worked with a group to solve a problem in a community.	0	1	2	3	4	DK
Made a purchasing decision based on the conduct or values of a company.	0	1	2	3	4	DK
Contributed money to a Republican candidate, political party, or affiliated organization.	0	1	2	3	4	DK
Contributed money to a Democratic candidate, political party, or affiliated organization.	0	1	2	3	4	DK

Treatment Variable and Matching Covariates:

Posting Videos:

During 2020, how often have you used the following social media platforms to share a video that you recorded about your own views on political issues, political candidates, political parties, or political interest groups:

	Never	Rarely	Sometimes	Regularly	Very Often	Don't Know
TikTok	0	1	2	3	4	.

Blog Reading and Internet News:

In a typical week, how often do you...

	Never				Very often	Don't know
Read news on the internet about politics (Q19_6)	1	2	3	4	5	D K
Read internet blogs about politics (Q19_7)	1	2	3	4	5	D K

Interest in Politics:

How interested would you say you are in politics? Are you...

4: Very interested; 3: Somewhat interested; 2: Not very interested; 1: Not at all interested;
(Missing): Don't Know

Age

(drop-down box for month and year of birth)

Race

What racial or ethnic group best describes you?

1: African American; 2: Asian American; 3: Hispanic or Latinx; 4: Caucasian; 5: Native American;
6: Multiracial; 7: Other _____

Strong Partisan

Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or something else?

1: Republican
2: Democrat
3: Independent
4: Other _____

(if Republican was chosen for the previous question)

Do you think of yourself as strongly Republican or not very strong?

1: Strong Republican
0: Not very strong Republican

(if Democrat was chosen for the previous question)

Do you think of yourself as strongly Democratic or not very strong?

1: Strong Democrat
0: Not very strong Democrat

Ideology

Generally speaking, how would you describe your political ideology?

1: Very conservative; 2: Conservative; 3: Moderate; 4: Liberal; 5: Very liberal; 6: Other
_____; (Missing): Don't know

(if Moderate, Other, or Don't know was selected)

If you had to choose, would you consider yourself a liberal or a conservative?

1: Liberal
2: Conservative

Peer Civic Engagement:

This variable is equal to the sum of the values for each of the following variables:

How much do you agree or disagree with the following statements?

	Strongly disagree				Strongly agree	Don't Know
My friends are active in volunteer work in their community	0	1	2	3	4	D K
My friends vote in elections	0	1	2	3	4	D K
My friends encourage me to express my opinions about politics even if they are different from their views	0	1	2	3	4	K

Sex

What is your sex?

1: Male; 2: Female; 3: Other

Campaign Attention

During 2020, how often have you...

	Never				Very Often	Don't Know
Paid attention to political campaigns	0	1	2	3	4	D K

Education

Which of the following best describes your education level:

- 1: I have not graduated high school.
- 2: I am a high school graduate but have never attended college.
- 3: I am currently attending college.
- 4: I attended college but did not graduate.
- 5: I am a college graduate.

Post Videos on Other Platforms

During 2020, how often have you used the following social media platforms to share a video that you recorded about your own views on political issues, political candidates, political parties, or political interest groups:

	Never	Rarely	Sometimes	Regularly	Very Often	Don't Know
Facebook	0	1	2	3	4	.
Instagram	0	1	2	3	4	.
Snapchat	0	1	2	3	4	.
Twitter	0	1	2	3	4	.

Internal Efficacy

The following are statements some people make about government and politics. For each statement, please indicate whether you agree strongly, agree, neither agree nor disagree, disagree, or disagree strongly with the statement?

	Agree Strongly	Agree	Neither Agree or Disagree	Disagree	Disagree Strongly	Don't Know
"I consider myself well-qualified to participate in politics."	1	2	3	4	5	DK

Table A1: Summary Statistics for Variables

<u>Variable</u>	<u>Number of Observations</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Minimum</u>	<u>Maximum</u>
Offline Civic Engagement	818	23.19	14.18	0	48
Sharing Videos on TikTok	384	2.33	1.41	0	4
Internet News Readership	915	2.92	1.01	0	4
Blog Readership	915	2.57	1.25	0	4
Interest in Politics	967	2.27	.70	0	3
Age	703	23.33	1.60	18	25
Race	968	3.51	1.19	1	7
Strong Partisan	969	.63	.48	0	1
Peer Civic Engagement	910	8.82	2.23	0	12
Ideology	962	.45	.50	0	1
Sex	967	1.35	.48	1	3
Campaign Attention	950	2.92	1.08	0	4
Sharing Videos on Platforms Other than TikTok	950	.76	.43	0	1
Education	967	4.33	1.06	1	5
Internal Political Efficacy	960	2.41	1.15	1	5

Appendix B: Matching Technique Assumptions

The validity of any matching analyses hinges on satisfying four assumptions.¹ First, we presume that each treatment variable is binary. To make our treatment variables binary, we generated a series of dichotomous variables for each response option, relative to never having posted videos on TikTok. There are four binaries for posting videos on TikTok: rarely, sometimes, regularly, and very often. These binaries are coded one for each of these categories, zero for never having participated in the respective activity (e.g., posting videos), and missing for those who declined to answer the question, and for the remaining scalar options. For instance, the binary for having rarely posted videos on TikTok is coded one for those who did so, zero for never having done so, and missing for those who opted not to answer this question and for those who reported having posted videos more than rarely. We expect positive signs for all ATTs.

Second, we assume common support (or overlap), which means that it is possible that treated units may face an intervention that could have assigned them to the control group (see Imbens and Rubin 2015; King et al 2017). Our data meet this requirement because all respondents could have chosen not to use TikTok at all, much less post videos on this app.

Third, we must fulfill the stable unit treatment value (SUTVA) assumption, which means that “the potential outcomes for any unit do not vary with the treatments assigned to other units, and for each unit, there are no different forms or versions of each treatment level, which lead to different potential outcomes” (Imbens and Rubin 2015, 10). We have met the first part of this assumption

¹ Matching analyses are highly sensitive to minor violations of these assumptions (Imbens and Rubin 2015).

because the possible outcomes for offline civic activity do not vary with the levels of our treatment variable.²

The second aspect of this assumption is more complex because we have different variations on our treatment variables: rarely, sometimes, regularly, and very often. Yet, we can compare the effects of having posted videos on TikTok with varying frequencies relative to those who never did so. For example, we can compare those who rarely posted videos on TikTok to those who never did so, provided that we exclude those who posted videos at all other frequencies from that analysis.³ This is necessary if we hope to perform a matching analysis without an alternative treatment. When we compute our ATTs in this manner, we ultimately satisfy the SUTVA assumption because we have neither interference, nor any hidden variations of the treatments (Imbens and Rubin, 2015, 10-11).

Finally, the treatment assignment must be conditionally independent of the outcome variable given a set of matching covariates (D'Agostino 1998, 2266). Thus, each respondent's assignment to any treatment (i.e., posting videos on TikTok) is dissociated with their level of offline civic engagement, given the values of the remaining explanatory variables. We observe greatly varied participatory levels with respect to offline civic activity, and the mean level of civic activity is relatively low given the minimum (0) and maximum values (48) possible with this index. Moreover, the activities that comprise offline civic activity do not cause an individual to be assigned to one or more treatment categories.

² If civic engagement were related to varying activities on TikTok, then civic activity and these activities would be highly correlated. To test whether this happens, we correlated our dependent variable (offline civic engagement) and our treatment variable: posting videos on TikTok. This correlation is low enough given our number of observations ($r = .762$) such that we can conclude that the first part of the SUTVA assumption is satisfied.

³ If we do not conduct our analysis in this manner, then we cannot satisfy SUTVA, as there would be alternative treatment forms (see Imbens and Rubin 2015, 10-13).

References

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Appendix C: Matching Balance Statistics

Table C1: Balance Statistics for Posting Videos on TikTok, Rarely or Sometimes Models

Variable		Rarely						Sometimes					
		Mean Treated	Mean Control	T-Test P-Value	K-S-Test P-Value	Var. Ratio (Tr/Co)	Mean eQQ Difference	Mean Treated	Mean Control	T-Test P-Value	K-S-Test P-Value	Var. Ratio (Tr/Co)	Mean eQQ Difference
Online News Readership	Before Matching	2.500	2.831	.259	.036	.827	.444	2.906	2.831	.744	.604	.753	.250
	After Matching	2.500	2.778	.318	.206	.968	.389	2.906	3.063	.477	.518	1.028	.219
Blog Reading about Politics	Before Matching	2.278	1.678	.063	.063	.582	.611	2.844	1.678	2.658*10 ⁻⁶	6.343*10 ⁻⁵	.329	1.188
	After Matching	2.278	1.889	.138	.492	.825	.389	2.844	2.375	.054	.601	.512	.469
Interest in Politics	Before Matching	1.889	2.203	.133	.287	1.057	.389	2.125	2.203	.589	.345	.682	.188
	After Matching	1.889	2.111	.152	.165	2.588	.333	2.125	2.406	.045	.188	1.183	.281
Age	Before Matching	23.333	22.576	.066	.185	.714	.778	23.844	22.576	.0002	.003	.671	1.344
	After Matching	23.333	23.556	.531	.958	2.732	.444	23.844	23.906	.770	.087	1.586	.625
Race	Before Matching	3.389	3.407	.953	1.000	.841	.278	3.719	3.407	.161	.361	.557	.406
	After Matching	3.389	3.389	1.000	1.000	.910	.111	3.719	3.375	.050	.188	.960	.344
Strong Partisanship	Before Matching	.389	.373	.906	N/A	1.058	0	.656	.373	.010	N/A	.979	.281
	After Matching	.389	.500	.318	N/A	.951	.111	.656	.688	.317	N/A	1.050	.031
Peer Civic Engagement	Before Matching	8.389	7.441	.125	.012	.725	1.333	9.031	7.441	.0003	.0001	.340	1.719
	After Matching	8.389	8.111	.604	.159	1.403	.944	9.031	8.844	.432	.063	.815	.625
Ideology	Before Matching	.611	.610	.994	N/A	1.040	0	.531	.610	.476	N/A	1.062	.063
	After Matching	.611	.500	.152	N/A	.951	.111	.531	.594	.154	N/A	1.032	.063
Sex	Before Matching	1.389	1.424	.798	N/A	1.013	.056	1.313	1.424	.296	N/A	.893	.094
	After Matching	1.389	1.389	1.000	N/A	1.000	0	1.313	1.219	.079	N/A	1.257	.094
Campaign Attention	Before Matching	2.611	2.695	.787	.982	1.020	.111	2.594	2.695	.675	.923	.897	.188
	After Matching	2.611	2.444	.581	.610	1.542	.389	2.594	2.531	.672	.799	1.192	.250
Sharing Videos on Other Platforms	Before Matching	.944	.237	3.249*10 ⁻¹²	N/A	.302	.722	1.000	.237	<2.2*10 ⁻¹⁶	N/A	0	.781
	After Matching	.944	.889	.318	N/A	.531	.056	1.000	.875	.041	N/A	0	.125
Education	Before Matching	4.111	3.966	.625	.664	.913	.222	4.625	3.966	.001	.008	.443	.719
	After Matching	4.111	3.889	.347	.255	1.113	.444	4.625	4.438	.273	.514	.800	.188
Internal Efficacy	Before Matching	2.889	2.356	.071	.118	1.261	.500	2.313	2.356	.834	.892	.939	.125
	After Matching	2.889	2.556	.152	.237	3.069	.444	2.313	2.344	.836	.279	2.033	.281

Table C2: Balance Statistics for Posting Videos on TikTok, Regularly or Very Often Models

Variable		Regularly						Very Often					
		Mean Treated	Mean Control	T-Test P-Value	K-S- Test P-Value	Var. Ratio (Tr/Co)	Mean eQQ Difference	Mean Treated	Mean Control	T-Test P-Value	K-S- Test P-Value	Var. Ratio (Tr/Co)	Mean eQQ Difference
Online News Readership	Before Matching	3.067	2.831	.228	.344	.532	.311	3.326	2.831	.016	.050	.644	.543
	After Matching	3.067	3.311	.025	.296	1.746	.244	3.326	3.500	.267	.250	2.823	.217
Blog Reading about Politics	Before Matching	2.933	1.678	1.018*10 ⁻⁶	6.772*10 ⁻⁵	.560	1.289	3.370	1.678	2.331*10 ⁻¹¹	2.192*10 ⁻⁸	.390	1.717
	After Matching	2.933	2.711	.231	.153	1.244	.311	3.370	3.130	.052	.037	1.112	.283
Interest in Politics	Before Matching	2.356	2.203	.224	.184	.514	.178	2.652	2.203	.0004	.003	.508	.457
	After Matching	2.356	2.378	.797	1.000	.979	.022	2.652	2.544	.297	.285	1.090	.152
Age	Before Matching	23.489	22.576	.008	.003	1.033	.978	23.457	22.576	.004	.003	.710	.957
	After Matching	23.489	23.689	.292	.048	2.287	.689	23.457	23.609	.238	.283	2.419	.457
Race	Before Matching	3.400	3.407	.978	.660	1.199	.178	3.544	3.407	.573	.660	1.119	.217
	After Matching	3.400	2.844	.034	.014	1.170	.556	3.544	3.217	.004	.536	1.119	.326
Strong Partisanship	Before Matching	.756	.373	5.435*10 ⁻⁵	N/A	.794	.400	.848	.373	1.063*10 ⁻⁷	N/A	.554	.478
	After Matching	.756	.533	.016	N/A	.742	.222	.848	.608	.001	N/A	.542	.239
Peer Civic Engagement	Before Matching	9.711	7.441	4.250*10 ⁻⁵	6.056*10 ⁻⁶	.255	2.400	10.565	7.441	1.900*10 ⁻¹²	1.247*10 ⁻¹⁰	.291	3.217
	After Matching	9.711	9.022	.016	.086	.561	.822	10.565	9.761	.003	.0003	.670	.848
Ideology	Before Matching	.378	.610	.019	N/A	.994	.222	.391	.610	.026	N/A	1.006	.217
	After Matching	.378	.533	.017	N/A	.944	.156	.391	.696	.0004	N/A	1.125	.304
Sex	Before Matching	1.356	1.424	.484	N/A	.943	.067	1.500	1.424	.463	.693	1.208	.087
	After Matching	1.356	1.333	.317	N/A	1.031	.022	1.500	1.326	.029	.202	1.336	.174
Campaign Attention	Before Matching	3.178	2.695	.029	.024	.895	.533	3.500	2.695	6.005*10 ⁻⁵	.0001	.545	.848
	After Matching	3.178	2.844	.025	.012	1.408	.600	3.500	3.370	.155	.419	1.097	.261
Sharing Videos on Other Platforms	Before Matching	1.000	.237	<2.2*10 ⁻¹⁶	N/A	0	.778	1.000	.237	<2.2*10 ⁻¹⁶	N/A	0	.761
	After Matching	1.000	.889	.022	N/A	0	.111	1.000	.739	.0002	N/A	0	.261
Education	Before Matching	4.533	3.966	.006	.003	.699	.600	4.391	3.966	.053	.012	.923	.457
	After Matching	4.533	4.156	.034	.019	1.034	.511	4.391	3.978	.016	.0004	1.606	.630
Internal Efficacy	Before Matching	2.356	2.356	.999	.034	2.027	.444	2.413	2.356	.814	.008	2.147	.587
	After Matching	2.356	2.267	.529	.016	2.858	.622	2.413	2.391	.885	.008	1.565	.630

Appendix D: Table One Robustness Checks

Table D0: Posting Videos on TikTok and Civic Engagement

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	1.643	60.861	13.035	-.114
Abadie-Imbens Standard Error	10.434	22.043	12.049	11.350
95% Confidence Interval Lower Bound	-20.362	15.893	-11.244	-22.973
95% Confidence Interval Upper Bound	23.648	105.829	37.314	222.745
T-Statistic	.157	2.761	1.082	-.010
P-Value	.875	.006	.279	.992
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D1: Posting Videos on TikTok and Civic Engagement while omitting Internet News Readership

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	60.521	-7.294	17.417	37.306
Abadie-Imbens Standard Error	25.087	5.816	5.359	6.263
95% Confidence Interval Lower Bound	7.813	-19.141	6.624	24.692
95% Confidence Interval Upper Bound	113.229	4.553	28.210	49.920
T-Statistic	2.413	-1.254	3.250	5.957
P-Value	.016	.210	.001	2.576*10 ⁻⁹
N	19	33	46	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D2: Posting Videos on TikTok and Civic Engagement while Omitting Blog Readership

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	7.577	9.151	11.005	-4.803
Abadie-Imbens Standard Error	5.557	3.457	4.360	4.498
95% Confidence Interval Lower Bound	-4.098	2.109	2.237	-13.862
95% Confidence Interval Upper Bound	19.252	16.193	19.773	4.256
T-Statistic	1.364	2.647	2.524	-1.068
P-Value	.173	.008	.012	.286
N	19	33	49	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D3: Posting Videos on TikTok and Civic Engagement while Omitting Interest in Politics

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	1.699	8.254	5.400	16.743
Abadie-Imbens Standard Error	8.585	3.406	4.800	2.221
95% Confidence Interval Lower Bound	-16.407	1.306	-4.272	12.270
95% Confidence Interval Upper Bound	19.805	15.202	15.072	21.216
T-Statistic	.198	2.423	1.125	3.967
P-Value	.843	.015	.261	7.282×10^{-5}
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D4: Posting Videos on TikTok and Civic Engagement while Omitting Age

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	-5.345	2.631	10.599	15.847
Abadie-Imbens Standard Error	4.961	4.559	4.739	2.604
95% Confidence Interval Lower Bound	-15.609	-6.505	1.154	10.644
95% Confidence Interval Upper Bound	4.919	11.767	20.044	21.050
T-Statistic	-1.077	.577	2.237	6.086
P-Value	.281	.564	.025	1.155×10^{-9}
N	24	56	75	64

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D5: Posting Videos on TikTok and Civic Engagement while Omitting Race

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	12.690	10.762	-18.614	38.769
Abadie-Imbens Standard Error	8.565	4.702	21.631	10.366
95% Confidence Interval Lower Bound	-5.374	1.170	-62.200	17.892
95% Confidence Interval Upper Bound	30.754	20.354	24.972	59.646
T-Statistic	1.482	2.289	-.861	3.740
P-Value	.138	.022	.390	.0002
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D6: Posting Videos on TikTok and Civic Engagement while Omitting Strong Partisanship

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	11.102	27.470	14.356	19.738
Abadie-Imbens Standard Error	8.281	10.815	7.110	6.135
95% Confidence Interval Lower Bound	-6.363	5.407	.029	7.382
95% Confidence Interval Upper Bound	28.567	49.533	28.683	32.094
T-Statistic	1.341	2.540	2.019	3.217
P-Value	.180	.011	.043	.001
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D7: Posting Videos on TikTok and Civic Engagement while Omitting Peer Civic Engagement

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	9.705	22.473	13.727	11.830
Abadie-Imbens Standard Error	7.723	6.229	4.524	11.292
95% Confidence Interval Lower Bound	-6.459	9.797	4.616	-10.901
95% Confidence Interval Upper Bound	25.869	35.149	22.838	34.561
T-Statistic	1.257	3.608	3.034	1.048
P-Value	.209	.0003	.002	.295
N	20	34	46	47

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D8: Posting Videos on TikTok and Civic Engagement while Omitting Ideology

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	7.152	12.851	16.654	14.256
Abadie-Imbens Standard Error	6.936	5.387	5.336	5.901
95% Confidence Interval Lower Bound	-7.421	1.878	5.907	2.378
95% Confidence Interval Upper Bound	21.725	23.824	27.401	26.135
T-Statistic	1.031	2.386	3.121	2.416
P-Value	.302	.017	.002	.016
N	19	33	46	47

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D9: Posting Videos on TikTok and Civic Engagement while Omitting Sex

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	7.855	26.941	11.957	-17.478
Abadie-Imbens Standard Error	12.150	18.705	7.039	8.201
95% Confidence Interval Lower Bound	-17.769	-11.217	-2.220	-33.995
95% Confidence Interval Upper Bound	33.479	65.099	26.134	-.961
T-Statistic	.647	1.440	1.699	-2.131
P-Value	.518	.150	.089	.033
N	18	32	46	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D10: Posting Videos on TikTok and Civic Engagement while Omitting Campaign Attention

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	18.725	29.978	22.205	21.518
Abadie-Imbens Standard Error	9.690	9.322	11.044	5.551
95% Confidence Interval Lower Bound	-1.711	11.008	-.049	10.338
95% Confidence Interval Upper Bound	39.161	48.948	44.459	32.698
T-Statistic	1.932	3.216	2.011	3.876
P-Value	.053	.001	.044	.0001
N	18	34	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D11: Posting Videos on TikTok and Civic Engagement while Omitting Sharing Videos across Social Media Platforms

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	10.502	9.858	12.878	23.660
Abadie-Imbens Standard Error	3.187	3.180	3.208	4.175
95% Confidence Interval Lower Bound	3.781	3.371	6.414	15.252
95% Confidence Interval Upper Bound	17.223	16.345	19.342	32.068
T-Statistic	3.295	3.100	4.014	5.667
P-Value	.001	.002	5.962×10^{-5}	1.457×10^{-8}
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D12: Posting Videos on TikTok and Civic Engagement while Omitting Education

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	-4.105	6.390	4.640	26.706
Abadie-Imbens Standard Error	8.384	3.423	3.169	4.837
95% Confidence Interval Lower Bound	-21.787	-.593	-1.746	16.964
95% Confidence Interval Upper Bound	13.577	13.373	11.026	36.448
T-Statistic	-.490	1.867	1.464	5.522
P-Value	.624	.062	.143	3.359*10 ⁻⁸
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Table D13: Posting Videos on TikTok and Civic Engagement while Omitting Internal Efficacy

	<u>Rarely</u>	<u>Sometimes</u>	<u>Regularly</u>	<u>Very Often</u>
Effect on Offline Civic Engagement	4.373	3.013	3.424	19.345
Abadie-Imbens Standard Error	4.678	3.419	6.359	4.431
95% Confidence Interval Lower Bound	-5.493	-3.962	-9.389	10.421
95% Confidence Interval Upper Bound	14.239	9.988	16.237	28.269
T-Statistic	.935	.881	.538	4.366
P-Value	.350	.378	.590	1.267×10^{-5}
N	18	32	45	46

Notes: In each two-column set, the frequency with which one has posted videos is compared with one who has never done so on TikTok, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Appendix E: Reverse Causality Checks for Models in Table One

Table E1: Posting Videos on TikTok and Civic Engagement

	<u>Low Civic Engagement</u>	<u>Medium Civic Engagement</u>	<u>High Civic Engagement</u>
Effect of Civic Engagement on Posting Videos	-.532	.024	-.159
Abadie-Imbens Standard Error	.387	.653	.602
95% Confidence Interval Lower Bound	-1.307	-1.309	-1.352
95% Confidence Interval Upper Bound	.243	1.357	1.034
T-Statistic	-1.375	.037	-.265
P-Value	.169	.970	.791
N	57	31	108

Notes: In each two-column set, each level of civic engagement is compared to one who is completely unengaged, respectively. Second, the covariates on which the matching is based are described in the text. Third, the effects on offline civic engagement are the average treatment effect for the treated (ATET). Finally, the matching results are from 1:1 genetic matching with post-matching bias adjustment. Thus, the N represents the matched number of observations.

Appendix F: Regression Analysis

Table F1: Effects of Posting Videos on TikTok on Offline Civic Engagement

<u>Independent Variable</u>	<u>Model</u>
Posting Videos on TikTok	3.605*** (.571)
Internet News Readership	-.211 (.693)
Blog Readership	1.646** (.598)
Interest in Politics	-1.444 (.993)
Age	1.291** (.398)
Race	.352 (.475)
Strong Partisanship	4.226** (1.268)
Peer Civic Engagement	1.021** (.306)
Ideology	-2.607* (1.148)
Sex	-1.409 (1.111)
Campaign Attention	2.824*** (.568)
Sharing Videos on Other Social Media Platforms	4.672* (1.925)
Education	.263 (.573)
Internal Political Efficacy	.080 (.501)
Intercept	-36.897*** (9.352)
N	200
R ²	.748
Adjusted R ²	.730
F	39.36
P-Value (F-Statistic)	<2.2*10 ⁻¹⁶
Residual Standard Error	7.553

Notes: First, * denotes p<.05, ** denotes p<.01, and *** denotes p<.001, all two-tailed tests. Second, the values in parenthesis are standard errors.