Holier Than Thou: Partisan Gap in the Consumption of Pornography Online*

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Abstract

Consumption of pornography has been blamed for a variety of societal ills, including the rise in misogyny, sex crimes, and the coarsening of culture. Using passively collected browsing data from YouGov, we investigate how much pornography Americans consume online. We find that there is a sharp positive skew in the consumption of pornography, with a small number of users consuming lots of pornography and most consuming small amounts. Only about 32 percent of respondents consumed pornography online during the month-long observation period. Of the people who consumed pornography, the median consumer spent about three-quarters of an hour consuming pornography and 95 percent of the consumers spent less than five and a half hours. Lastly, we find that, in line with previous research (MacInnis and Hodson, 2015; Edelman, 2009), which was based on aggregated data, Republicans consume somewhat more pornography online than Democrats. Adjusting for immutable characteristics like age and gender makes the differences go away.

^{*}You can download the replication materials from https://github.com/soodoku/adult.

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Consumption of pornography is associated with a variety of disturbing attitudes, beliefs, emotions, and behaviors. Consuming pornography is associated with support for violence against women (Hald, Malamuth and Yuen, 2010; Malamuth, Hald and Koss, 2012; Donnerstein, 1984), belief in rape myths (Foubert, Brosi and Bannon, 2011), increased gender role conflict, lesser sexual satisfaction (Szymanski and Stewart-Richardson, 2014; Stewart and Szymanski, 2012), poorer relationship quality (Szymanski and Stewart-Richardson, 2014; Szymanski, Feltman and Dunn, 2015), and sexually risky behaviors such as engaging in paid sex, and having extramarital sex (Wright and Randall, 2012). A lot of popular pornography also contains a healthy dose of violence. An analysis of popular pornography revealed that 88.2% of the scenes contained physical aggression, and 48.7% verbal aggression (Bridges et al., 2010). For all these reasons, there are serious concerns about the consumption of pornography.

In this paper, we investigate how much pornography Americans consume online. Using passive browsing data from YouGov, we find that there is a sharp skew in the consumption of pornography, with a small set of users consuming a large chunk of pornography. About 68 percent of respondents abstained from consuming pornography online during the month-long observation period. Of the people who consumed pornography, the median consumer spent about 45 minutes consuming pornography and the 95th percentile consumer spent about five and a half hours.

We also use the data to shed light on an age-old debate—whether Democrats consume more pornography than Republicans or vice versa. Both parties claim the higher moral ground. And in surveys both parties think consumption of pornography is abhorrent. Like previous research, which relied on aggregated data, we find that Republicans consume somewhat more pornography online than Democrats (MacInnis and Hodson, 2015; Edelman, 2009). Adjusting for background attributes like age, gender etc., makes the differences go away.

Data

We use data from YouGov to measure the consumption of adult content (Sood, 2022). YouGov maintains a large panel that it recruits through various methods. YouGov uses matched sampling to survey respondents: it draws a random sample from a large synthetic representative sampling frame, finds respondents that match the sampled individuals from its panel, and invites them to take a survey. For data on how well YouGov is able to approximate a random sample, see Rivers and Bailey (2009). For our sample, panelists also shared de-identified web browsing data tracked via passive metering software installed voluntarily on their computers. The software, called RealityMine, captures online visits independent of the type of browser or browser-specific privacy settings.

The data are from 1,200 respondents for June, 2022. We have data on about 6 million visits. For each visit, we have information on the domain (e.g., wikipedia.org), the time of visit, and the time spent on the domain. The respondents visited about 64,000 unique domains.

Our data also includes characteristics of the respondents. We have data on demographic characteristics like birth year, state, gender, race, and education level. We also have information on their party identification. Except for 120 respondents who did not respond or picked "not sure" or "don't know," the rest selected the party they identified with or marked themselves as independents. Of those 1,080 individuals, 82 percent lean either Republican or Democrat. The remaining 18 percent identify as independent.

Measuring Pornographic Content

We code pornographic content at the domain level. Our main analysis depends on the domain classifications that come with YouGov data. We code domains that YouGov categorizes as "Adult" as pornographic. These include "Adult" (e.g., xvideos.com), "Adult, Business"

(e.g., onlyfans.com), and "Adult, Entertainment" (e.g., hentainfox.com). Yougov classifies some domains that do not primarily carry pornographic content, e.g., urbandictionary.com and 4chan.org, as 'Adult.' Given the skew in the data (See Figure SI 1.1 and Figure SI 1.2)¹, we manually checked the top adult domains to remove such sites. We code a domain as pornographic if there is nudity on the landing page or if the site is some form of erotica.

In SI 1.3, we leverage the piedomains package, which uses a machine learning model that uses the text of the website to classify the content of domains (Chintalapati and Sood, 2022). We leverage the probability estimates to produce a low false negative and low false positive version. The key conclusions remain unchanged.

Results

Our primary dependent variables of interest are total time spent on pornographic sites and the proportion of time spent on pornographic sites. (In SI 1.5.2, we analyze similar metrics for visits. The upshot is that the key conclusions are unaffected.)

Consumption of Pornography

Only about 32 percent of respondents consumed pornography online during the observation period. Of the 32% of the respondents who consumed any pornography during the month, the median consumer consumed less than an hour of pornography while the 80th percentile consumer consumed nearly 4.5 hours and the 95th percentile, nearly 20 hours (see Table SI 1.1). You see a similar picture when it comes to the proportion of time spent online consuming pornography-the 50th percentile is nearly 3%, the 80th percentile is about 14%, and the 95th percentile is about 58% (see SI 1.2).

¹We cite some of the statistical packages to compute key results (Pollard et al., 2018; Seabold and Perktold, 2010; Shen, 2022; Virtanen et al., 2020).

The consumption of pornography is also highly concentrated among a few sites, with the ten most frequented pornography sites receiving more than 12 times the traffic to all other pornographic sites (approximately 109 minutes vs. 9 minutes, see Figure SI 1.3). Close to 80 percent of the traffic to pornographic sites is to just one pornographic site. Looking at the characteristics of consumers of pornography, expectedly, consumers of pornography online are younger and are more likely to be male (see, for instance, Panel B of Table SI 1.6).

Partisan Differences in Consumption of Pornography Online

Our primary dependent variables of interest are total time spent on pornographic sites and the proportion of time spent on pornographic sites. (In SI 1.5.2, we analyze similar metrics for visits. The upshot is that the key conclusions are unaffected.)

Given the skew in the data, we ran a quantile regression, regressing the duration on party. As Figures 1, the 80th percentile of the difference is close to 0 but from thereon, there is a sharp diverging trend with the 95th percentile difference nearly 1.5 hrs. For context, the 80th and 95th percentile of time spent on pornographic sites online among Republicans is nearly .3 hours and 6.2 hours respectively. In contrast, the corresponding numbers are .2 hours and 4.5 hours for Democrats.²

Looking at the percentage of time spent on pornographic sites reveals a similar trend to the trend in total time spent on pornographic sites (see 2). The 80th percentile of the

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We analyze the consumption of pornography online among independents in Appendix SI 1.4. The median independent consumes more pornography than partisans (1.3 hours vs 0.7 hours in Table SI 1.10 and 3.4% vs 2.3% in Table SI 1.11). This pattern reverses somewhat near the right tail of the distribution.

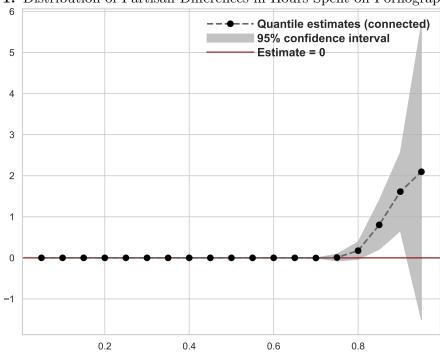


Figure 1: Distribution of Partisan Differences in Hours Spent on Pornographic Sites

Notes:

Dependent variable is the number of hours individuals in our sample spent on pornographic sites.

Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis.

95% confidence intervals constructed from standard errors.

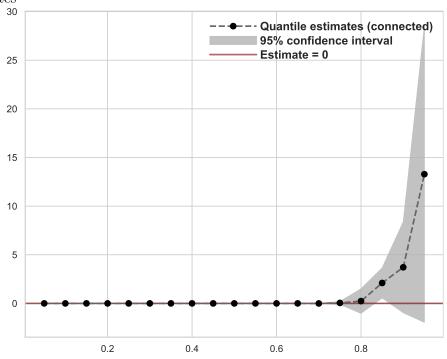
See Figure SI 1.5 for the same plot controlling for individual characteristics.

partisan difference is nearly 0 and then there is a sharply rising line with differences nearly 10% at the 100th percentile (albeit the number is very imprecisely estimated).

Looking at differences in the percentage of partisans who consume any pornographic content shows muted differences. Nearly 31% percent of Democrats and 30% percent of Republicans consumed at least some pornography online in June, 2022; the difference between the two is not statistically significant (Figure SI 1.7).

To what extent are the results "explained" by the confounding demographic differences between the parties? To learn that, we control for immutable characteristics like age and gender. (Table SI 1.5 shows differences in age, gender, and race by party identification.) We use these variables in our analyses of pornography consumption below. As Figure 1 shows, once you adjust for confounders, the partisan differences melt away.

Figure 2: Distribution of Partisan Differences in the Percentage of Time Spent on Pornographic Sites



Notes:

Dependent variable is the percentage of time individuals in our sample spent on pornographic sites.

Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis.

95% confidence intervals constructed from standard errors.

See Figure SI 1.6 for the same plot controlling for individual characteristics.

Discussion

Consumption of pornography has been attributed to a variety of ills. It is also considered problematic from a religious perspective. For instance, Christian theologians believe that consumption of pornography leads people away from purity and hence should be avoided.³ The Internet has dramatically increased access to pornography. This has led to the concern that pornography consumption has become very widespread and extensive. Our data suggest that pornography consumption online is highly concentrated with very few people consuming

help-for-pornography-users/effect-of-pornography

³https://www.churchofjesuschrist.org/study/manual/

a lot of pornography and most people consuming very little or none.

The second contribution of our paper is estimates of partisan differences in consumption of pornography online. Both parties claim the higher ground when it comes to women—one's case for morality is steeped in religion, the other's in enduring concern for women. Our data suggest that partisan differences are likely small.

Our research has three major limitations. The first concern with our data is that we may not have all the Internet visitation data of a user. If the respondent changes their behavior in response to the knowledge that their data is being collected (even if it is deidentified), for e.g., they may modify their behavior on the machine or figure out ways to evade detection, it may bias our results. In fact, we think it is likely that people would be less likely to search for pornography on machines on which they have installed passive monitoring software (though the data are de-identified). If that is so, our estimates are a lower bound of consumption of online pornography. If this bias varies by party, our estimates of partisan differences will also be biased.

The second concern with our measurement is that we code content at a domain level. This runs the risk of incurring some ecological fallacy. For instance, our classification codes websites like Tumblr as not carrying pornographic content but some of Tumblr's content is pornographic.

The third concern is that our measures are a point in time. We have data from one month in one year - June, 2022. It is possible that people consume less pornography online and instead spend time outside in June when the weather in many parts of the US is more pleasant than in the preceding or following months.

References

- Bridges, Ana J, Robert Wosnitzer, Erica Scharrer, Chyng Sun and Rachael Liberman. 2010. "Aggression and sexual behavior in best-selling pornography videos: A content analysis update." *Violence Against Women* 16(10):1065–1085.
- Chintalapati, Rajashekar and Gaurav Sood. 2022. "piedomains: Predict the kind of content hosted by a domain based on domain name and content.".

URL: https://github.com/themains/piedomains

- Donnerstein, Edward. 1984. "Pornography: Its effect on violence against women." *Pornography and sexual aggression* pp. 53–81.
- Edelman, Benjamin. 2009. "Markets Red Light States: Who Buys Online Adult Entertainment?" The Journal of Economic Perspectives 23(1):209–220.
- Foubert, John D, Matthew W Brosi and R Sean Bannon. 2011. "Pornography viewing among fraternity men: Effects on bystander intervention, rape myth acceptance and behavioral intent to commit sexual assault." Sexual Addiction & Compulsivity 18(4):212–231.
- Hald, Gert Martin, Neil M Malamuth and Carlin Yuen. 2010. "Pornography and attitudes supporting violence against women: Revisiting the relationship in nonexperimental studies." Aggressive Behavior 36(1):14–20.
- MacInnis, Cara C and Gordon Hodson. 2015. "Do american States with more religious or conservative populations search more for sexual content on google?" *Archives of sexual behavior* 44(1):137–147.
- Malamuth, Neil M, Gert Martin Hald and Mary Koss. 2012. "Pornography, individual differences in risk and men's acceptance of violence against women in a representative sample." Sex Roles 66(7-8):427–439.

Pollard, Tom, Alistair Johnson, Jesse Raffa and Roger Mark. 2018. "tableone: An open source Python package for producing summary statistics for research papers.".

URL: https://doi.org/10.1093/jamiaopen/ooy012

Rivers, Douglas and Delia Bailey. 2009. Inference from matched samples in the 2008 US national elections. In *Proceedings of the joint statistical meetings*. pp. 627–639.

Seabold, Skipper and Josef Perktold. 2010. statsmodels: Econometric and statistical modeling with python. In 9th Python in Science Conference.

Shen, Lucas. 2022. "Forestplot: A Python package to make publication-ready but customizable coefficient plots.".

URL: https://github.com/LSYS/forestplot

Sood, Gaurav. 2022. "YouGov Pulse Data for 1200 people for June 2022.".

URL: https://doi.org/10.7910/DVN/VIV4TS

Stewart, Destin N and Dawn M Szymanski. 2012. "Young adult women's reports of their male romantic partner's pornography use as a correlate of their self-esteem, relationship quality, and sexual satisfaction." Sex Roles 67(5-6):257–271.

Szymanski, Dawn M, Chandra E Feltman and Trevor L Dunn. 2015. "Male Partners' Pereived Pornography Use and Women's Relational and Psychological Health: The Roles of Trust, Attitudes, and Investment." Sex Roles 73(5-6):187–199.

Szymanski, Dawn M and Destin N Stewart-Richardson. 2014. "Psychological, relational, and sexual correlates of pornography use on young adult heterosexual men in romantic relationships." The Journal of Men's Studies 22(1):64–82.

Virtanen, Pauli, Ralf Gommers, Travis E. Oliphant, Matt Haberland, Tyler Reddy, David Cournapeau, Evgeni Burovski, Pearu Peterson, Warren Weckesser, Jonathan Bright,

Stéfan J. van der Walt, Matthew Brett, Joshua Wilson, K. Jarrod Millman, Nikolay Mayorov, Andrew R. J. Nelson, Eric Jones, Robert Kern, Eric Larson, C J Carey, İlhan Polat, Yu Feng, Eric W. Moore, Jake VanderPlas, Denis Laxalde, Josef Perktold, Robert Cimrman, Ian Henriksen, E. A. Quintero, Charles R. Harris, Anne M. Archibald, Antônio H. Ribeiro, Fabian Pedregosa, Paul van Mulbregt and SciPy 1.0 Contributors. 2020. "SciPy 1.0: Fundamental Algorithms for Scientific Computing in Python." Nature Methods 17:261–272.

Wright, Paul J and Ashley K Randall. 2012. "Internet pornography exposure and risky sexual behavior among adult males in the United States." Computers in Human Behavior 28(4):1410–1416.

SI 1 Supporting Information

SI 1.1 Descriptive Analysis

SI 1.1.1 Skew in Website Visits

Figure SI 1.1: Top 25 Pornography Sites

			0					
Site	Category (via YouGov)	Hours	Visits					
xvideos.com	Adult	311	9,368		1;			•
pornhub.com	Adult	184	7,811		1		•	
xnxx.com	Adult	207	6,540		1		•	
onlyfans.com	Adult, Business	53	5,805			•		
rule34.xxx	Adult	35	5,797		i	•		
fetlife.com	Adult, Business	10	3,577		1 •			
xhamster.com	Adult	104	3,465		. •			
chaturbate.com	Adult	23	2,798					
motherless.com	Adult	29	2,507		I•			
literotica.com	Adult	47	2,305		4			
myfreecams.com	Adult, Streaming Media	20	2,142		•			
hentaifox.com	Adult, Entertainment	5	1,468	•	i			
imagefap.com	Adult	8	1,235	•	1			
gelbooru.com	Adult	3	1,020	•	1			
spankbang.com	Adult	9	935	•				
youporn.com	Adult	32	926	•	1			
stripchat.com	Adult	9	904	•	1			
livejasmin.com	Adult	3	851	•	99th pe	ercentile		
porzo.com	Adult	1	719	•	i			
pornone.com	Adult	9	678	•	1			
pornpics.com	Adult	2	667	•	1			
dirtyleague.com	Adult	10	659	•				
nhentai.net	Adult, Entertainment	4	608	•	1			
hentairead.com	Adult, Entertainment	6	539	•	1			
manyvids.com	Adult, Shopping	5	528	•				
				<u> </u>	2.500	5,000	7 500	10

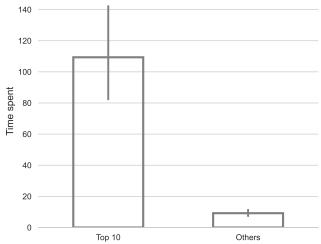
Notes: Table shows the top 25 pornographic sites that individuals visit in the sample period. Pornography sites are as categorized by YouGov (see the Data section). The Hours column are the total number of hours that individuals in the sample spent on the site. The Visits column is total number of visits by individuals in the sample to the site. Sites to the right of the vertical dashed are the top 1 percent of pornographic sites.

Figure SI 1.2: Top 25 (Non-Porn) Domains

		•		,				
Site	Category (via YouGov)	Hours	Visits					
google.com	Search Engines and Portals	4,135	628,361				•	
facebook.com	Business, Social Networking	5,701	443,263	I		•		
google.com	Chat and Instant Messaging	2,664	278,233	I	•			
bing.com	News and Media, Search Engines and Portals	1,471	231,155		•			
youtube.com	Entertainment, Streaming Media	4,449	227,981	ı	•			
/ahoo.com	Chat and Instant Messaging	1,661	174,977	•				
twitter.com	Social Networking	1,112	111,320	•				
amazon.com	Shopping	1,401	103,487	•				
decipherinc.com	Business	250	84,099	•				
live.com	Chat and Instant Messaging	1,014	75,495	•				
reddit.com	Messageboards and Forums, News and Media	736	59,141	•				
instagram.com	Media Sharing, Social Networking	359	48,440	•				
google.com	Translation Sites	83	40,400	I •				
nsn.com	News and Media, Streaming Media	287	39,085	•				
/ahoo.com	Entertainment, News and Media	506	39,042	•				
aol.com	Chat and Instant Messaging	327	38,964	•				
clarity.ms	Business, Information Technology	91	34,935					
nicrosoftonline.com	Information Technology	195	34,335	99th percentile	9			
ebay.com	Shopping	333	28,497	•				
vikipedia.org	Education	377	26,998	•				
valmart.com	Shopping	324	26,489	•				
samplicio.us	Business	84	26,155	•				
orivatelink.de	Business	33	26,006	•				
sentry.io	Business, Information Technology	61	24,969	•				
capitaloneshopping.com	Shopping	110	23,353	•				
				0 150,000	300,000	450,000	600,000	750

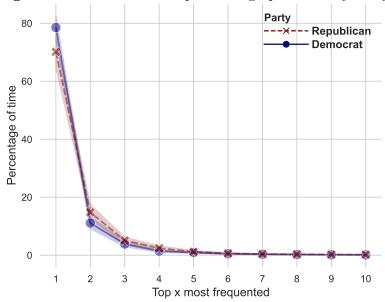
Notes: Table shows the top 25 non-pornographic sites that individuals visit in the sample period. The *Hours* column are the total number of hours that individuals in the sample spent on the site. The *Visits* column is total number of visits by individuals in the sample to the site. Sites to the right of the vertical dashed are the top 1 percent (of non-pornographic sites).

Figure SI 1.3: Traffic to Top 10 Pornographic Sites



Notes: The Top 10 bar indicates traffic to the top 10 pornographic sites in the data (see Figure SI 1.1). The Others bar indicates traffic to all other pornographic sites outside of the top 10. The y-axis is the total time spent on pornographic sites, averaged across individuals. Time units is hours. Vertical bars are 95% confidence intervals from bootstrapped standard errors (n = 1,000).

Figure SI 1.4: Traffic to Top x Pornographic Sites by Party



Notes: Figure shows concentration of pornography consumption based on individuals' most frequented pornographic sites. Shaded areas are 95% confidence intervals from bootstrapped standard errors (n = 1,000).

SI 1.1.2 Skew in Consumption of Pornographic Content

Table SI 1.1: Distribution of Consumption of Pornography Online

Percentile	Hours
0.00	0.0
0.10	0.0
0.20	0.1
0.30	0.2
0.40	0.4
0.50	0.7
0.60	1.5
0.70	2.4
0.80	4.5
0.90	10.1
0.95	20.0
0.96	22.0
0.97	26.8
0.98	29.1
0.99	40.8
1.00	94.0

Notes: Table shows key percentiles (each of the ten deciles plus quantiles at the right tail) and their corresponding values for the duration (hours) spent by individuals who consumed pornography in the sample period. See Table SI 1.2 for the distribution in terms of percentage of time.

Table SI 1.2: Percentage of Time Spent on Pornographic Sites

Percentile	% time
0.00	0.0
0.10	0.0
0.20	0.1
0.30	0.7
0.40	1.3
0.50	3.1
0.60	4.8
0.70	8.4
0.80	14.3
0.90	36.4
0.95	58.5
0.96	63.5
0.97	64.8
0.98	69.8
0.99	74.5
1.00	87.5

Notes: Table shows key percentiles (each of the ten deciles plus quantiles at the right tail) and their corresponding values for the percentage of time on pornography sites spent by individuals who consumed pornography in the sample period. See Table SI 1.1 for the distribution in terms of hours.

SI 1.2 Partisan Differences

SI 1.2.1 Distribution of Differences

Table SI 1.3: Distribution of Consumption of Pornography Online by Party

	Hours					
Percentile	Republicans	Democrats				
0.00	0.0	0.0				
0.10	0.1	0.0				
0.20	0.2	0.1				
0.30	0.3	0.1				
0.40	0.7	0.2				
0.50	1.4	0.5				
0.60	2.2	0.7				
0.70	3.0	1.5				
0.80	5.5	2.7				
0.90	11.2	7.0				
0.95	25.4	13.8				
0.96	27.1	18.3				
0.97	27.9	19.9				
0.98	30.0	22.0				
0.99	36.5	46.0				
1.00	37.5	90.5				

Notes: Table shows splits by party and by key percentiles (each of the ten deciles plus quantiles at the right tail) for the duration (hours) spent by individuals who consumed pornography in the sample period. See Table SI 1.4 for the distribution in terms of percentage of time. See Table SI 1.8 for the distribution using an alternate machine learning classifier of pornographic sites. A two-sample Kolmogorov–Smirnov test returns a p-value of 0.005, rejecting the null that the Republican and Democrat distributions are the same.

Table SI 1.4: Percentage of Time Spent on Pornographic Sites by Party

	% time					
Percentile	Republicans	Democrats				
0.00	0.0	0.0				
0.10	0.1	0.0				
0.20	0.5	0.1				
0.30	0.9	0.3				
0.40	2.3	0.9				
0.50	4.0	1.3				
0.60	6.6	3.2				
0.70	10.7	5.7				
0.80	20.8	12.3				
0.90	36.8	35.8				
0.95	46.4	53.4				
0.96	54.8	58.6				
0.97	63.3	64.0				
0.98	68.7	65.0				
0.99	71.9	72.9				
1.00	87.5	77.4				

Notes: Table shows splits by party and by key percentiles (each of the ten deciles plus quantiles at the right tail) for the percentage of time spent on pornography by individuals who consumed pornography in the sample period. See Table SI 1.3 for the distribution in terms of percentage of time. See Table SI 1.9 for the distribution using an alternate machine learning classifier of pornographic sites. A two-sample Kolmogorov–Smirnov test returns a p-value of 0.025, rejecting the null that the Republican and Democrat distributions are the same at the 5% level.

SI 1.2.2 Accounting for Confounders

Table SI 1.5: Differences in Pornography Consumption and Individual Characteristics by Party

]	Panel	A. Measures of	of pornography	y consumption	L	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Subgroups	NA	Total	Democrat	Republican	P-val	SMD
n			1200	530	356		
Consume porn, n (%)	No	65	774 (68.2)	343 (68.5)	235 (70.6)	0.569	0.046
	Yes		361 (31.8)	158 (31.5)	98 (29.4)		
Minutes, mean (SD)		65	73.4 (342.1)	58.8 (331.7)	75.8 (277.4)	0.423	0.056
% of time, mean (SD)		65	3.4(11.2)	2.9(10.7)	3.5(11.1)	0.486	0.049
Visits, mean (SD)		65	74.3 (328.9)	59.9 (298.9)	73.7(271.1)	0.489	0.048
% of visits, mean (SD)		65	2.2 (7.1)	1.7(6.1)	2.3(7.1)	0.238	0.085
			Panel B. Indi	ividual charac	teristics		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Subgroups	NA	Total	Democrat	Republican	P-val	SMD
n			1200	530	356		
Party (7-point), mean (SD)		120	3.6(2.2)	1.7(0.8)	6.3(0.8)	< 0.001	5.670
2020 Pres. election, n (%)	Other/No vote	170	270(26.2)	97(20.2)	47 (14.1)	< 0.001	3.296
	Vote Biden		419 (40.7)	369 (76.9)	8 (2.4)		
	Vote Trump		341 (33.1)	14(2.9)	278 (83.5)		
Age, mean (SD)		0	49.5 (18.1)	48.7 (17.8)	55.4 (18.0)	< 0.001	0.373
Gender, n (%)	Female	0	635 (52.9)	312 (58.9)	174 (48.9)	0.004	0.201
	Male		565 (47.1)	218 (41.1)	182 (51.1)		
Race, n (%)	Asian	0	49(4.1)	31 (5.8)	6(1.7)	< 0.001	0.747
	Black		152 (12.7)	96 (18.1)	7(2.0)		
	Hispanic		176 (14.7)	87 (16.4)	35 (9.8)		
	Others		61 (5.1)	29 (5.5)	9(2.5)		
	White		762 (63.5)	287 (54.2)	299 (84.0)		
Education, n (%)	College	0	525 (43.8)	258 (48.7)	158 (44.4)	0.625	0.091
	HS		354 (29.5)	146 (27.5)	103 (28.9)		
	No HS		73(6.1)	24 (4.5)	17 (4.8)		
	Some college		248 (20.7)	102 (19.2)	78(21.9)		
Region, n (%)	Midwest	8	239(20.1)	100 (19.0)	83(23.4)	0.034	0.204
	Northeast		$210\ (17.6)$	103 (19.6)	50 (14.1)		
	South		502 (42.1)	208 (39.6)	159 (44.8)		
	West		$241\ (20.2)$	114 (21.7)	63 (17.7)		

Notes: Table shows splits by party for pornography consumption and for individual characteristics for the 1,200 individuals. Party identification is based on a 7-point scale. We code 1–3 as "Democrat", 4 as "Independent", 5–7 as "Republican". Column (1) shows subgroups for categorical variables. Column (2) indicates the count of missing variables, if any. Columns (3)–(5) show means and standard deviations for continuous variables and count and percentage of data for categorical variables, for the full sample, Democratic individuals, and Republican individuals. Standard deviations and percentages in parentheses. Column (6) and column (7) report the p-values and standardized mean differences for Democrats vs Republicans. Given the skew in consumption of pornography, we also performed tests for difference in medians for the measures of pornography consumption by party (see Table SI 1.7).

Table SI 1.6: Differences in Pornography Consumption and Individual Characteristics by Pornography Consumers

		Par	nel A. Measure	es of pornography	consumption		
	(1)	$\overline{(2)}$	(3)	(4)	(5)	(6)	(7)
	Subgroups	ŇÁ	Total	Non-Consumers	Consumers	P-val	SMD
n			1200	774	361		
Minutes, mean (SD)		65	73.4 (342.1)	0.0(0.0)	230.8 (576.3)	< 0.001	0.566
% of time, mean (SD)		65	3.4 (11.2)	0.0(0.0)	10.6 (17.9)	< 0.001	0.833
Visits, mean (SD)		65	74.3 (328.9)	0.0(0.0)	233.5 (550.8)	< 0.001	0.599
% of visits, mean (SD)		65	2.2(7.1)	0.0(0.0)	6.9 (11.2)	< 0.001	0.870
			Panel B. I	ndividual characte	ristics		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Subgroups	NA	Total	Non-Consumers	Consumers	P-val	SMD
n			1200	774	361		
Party (7-point), mean (SD)		120	3.6(2.2)	3.6(2.2)	3.6(2.1)	0.580	-0.037
Party, n (%)	D	120	530 (49.1)	343 (49.4)	158 (48.8)	0.226	0.115
	I		194 (18.0)	117 (16.8)	68 (21.0)		
	R		356(33.0)	235 (33.8)	98 (30.2)		
2020 Pres. election, n (%)	Other/No vote	170	270(26.2)	145(22.1)	110(34.9)	< 0.001	0.287
	Vote Biden		419 (40.7)	281 (42.8)	114 (36.2)		
	Vote Trump		341 (33.1)	230 (35.1)	$91\ (28.9)$		
Age, mean (SD)		0	49.5 (18.1)	51.3 (18.2)	$46.1\ (17.1)$	< 0.001	-0.295
Gender, n (%)	Female	0	635 (52.9)	487 (62.9)	109(30.2)	< 0.001	0.695
	Male		565 (47.1)	287(37.1)	252 (69.8)		
Race, n (%)	Asian	0	49(4.1)	37(4.8)	9(2.5)	0.059	0.193
	Black		152 (12.7)	86 (11.1)	58 (16.1)		
	Hispanic		176 (14.7)	$113 \ (14.6)$	55 (15.2)		
	Others		61 (5.1)	36 (4.7)	20 (5.5)		
	White		762 (63.5)	502 (64.9)	219 (60.7)		
Education, n (%)	College	0	525 (43.8)	363 (46.9)	131 (36.3)	0.002	0.244
	HS		354 (29.5)	228 (29.5)	115 (31.9)		
	No HS		73 (6.1)	46 (5.9)	22(6.1)		
	Some college		248 (20.7)	137 (17.7)	$93\ (25.8)$		
Region, n (%)	Midwest	8	239(20.1)	147 (19.2)	78(21.7)	0.659	0.081
	Northeast		$210\ (17.6)$	140 (18.3)	60 (16.7)		
	South		502 (42.1)	328 (42.8)	146 (40.6)		
	West		$241\ (20.2)$	152 (19.8)	76(21.1)		

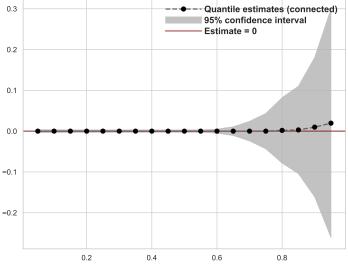
Notes: Table shows splits by consumers of pornography for pornography consumption and for individual characteristics for the 1,200 individuals. 65 of the 1,200 individuals did not clocked any browsing activity and are in the first panel. These 65 individuals are not substantially different in characteristics than those included in the sample (untabulated). Party identification is based on a 7-point scale. We code 1–3 as "Democrat", 4 as "Independent", 5–7 as "Republican". Column (1) shows subgroups for categorical variables. Column (2) indicates the count of missing variables, if any. Columns (3)–(5) show means and standard deviations for continuous variables and count and percentage of data for categorical variables, for the full sample, non-consumers of pornography, and consumers of pornography. Standard deviations and percentages in parentheses. Column (6) and column (7) report the p-values and standardized mean differences for non-consumers vs consumers.

Table SI 1.7: Differences (in Medians) in Pornography Consumption

			,	0 1 7	1				
		Measures of pornography consumption							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)		
	Subgroups	NA	Total	Democrats	Republicans	P-val	SMD		
n			1200	530	356				
Minutes, median [Q1,Q3]		65	0.0 [0.0, 4.8]	$0.0 \ [0.0, 3.1]$	$0.0 \ [0.0, 3.6]$	0.981	0.056		
% of time, median [Q1,Q3]		65	0.0 [0.0, 0.1]	0.0 [0.0, 0.1]	0.0 [0.0, 0.1]	0.842	0.049		
Visits, median [Q1,Q3]		65	$0.0 \ [0.0, 8.0]$	$0.0 \ [0.0, 6.0]$	$0.0 \ [0.0, 8.0]$	0.933	0.048		
% of visits, median [Q1,Q3]		65	$0.0 \ [0.0, 0.2]$	$0.0 \ [0.0, 0.1]$	$0.0 \ [0.0, 0.2]$	0.916	0.085		

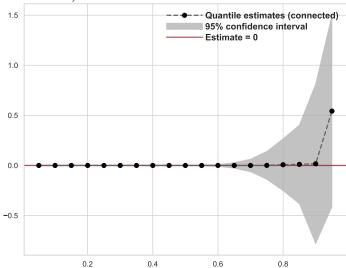
Notes: Table shows splits by party for pornography consumption and for individual characteristics for the 1,200 individuals. This table focuses on differences in medians. Party identification is based on a 7-point scale. We code 1–3 as "Democrat", 4 as "Independent", 5–7 as "Republican". Column (1) shows subgroups for categorical variables. Column (2) indicates the count of missing variables, if any. Columns (3)–(5) show the medians, the first quartiles, and the third quartiles, for the full sample, Democrats, and Republicans. 1st and 3rd quartiles in brackets. Column (6) and column (7) report the p-values and standardized median differences for Democrats vs Republicans. See Panel A of Table SI 1.5 for differences in means.

Figure SI 1.5: Quantile Estimates—Hours Spent on Pornographic Sites by Party (with covariates)



Notes: Dependent variable is the number of hours individuals in our sample spent on pornographic sites. Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis. Covariates included on the right-hand side are: gender (Female/Male), race (White/Black/Hispanic/Asian/Others), education level (no HS/HS graduate/some college/college graduate), age and its quadratic, and region (NE/MW/S/W). 95% confidence intervals constructed from standard errors. See Figure 1 for the same plot without covariates.

Figure SI 1.6: Quantile Estimates–Percentage of Time Spent on Pornographic Sites by Party (with covariates)



Notes: Dependent variable is the percentage of time individuals in our sample spent on pornographic sites. Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis. Covariates included on the right-hand side are: gender (Female/Male), race (White/Black/Hispanic/Asian/Others), education level (no HS/HS graduate/some college/college graduate), age and its quadratic, and region (NE/MW/S/W). 95% confidence intervals constructed from standard errors. See Figure 2 for the same plot without covariates.

SI 1.3 Alternate Ways of Measuring Pornography

Table SI 1.8: Distribution of Consumption of Pornography Online by Party

	Hours					
Percentile	Republicans	Democrats				
0.00	0.0	0.0				
0.10	0.0	0.0				
0.20	0.0	0.0				
0.30	0.1	0.0				
0.40	0.2	0.1				
0.50	0.6	0.2				
0.60	1.1	0.4				
0.70	1.8	0.9				
0.80	3.4	2.0				
0.90	6.4	5.0				
0.95	16.3	7.8				
0.96	18.7	9.9				
0.97	24.0	13.1				
0.98	29.9	18.4				
0.99	31.7	33.4				
1.00	33.7	34.4				

Notes: Table shows splits by party and by key percentiles (each of the ten deciles plus quantiles at the right tail) for the duration (hours) spent by individuals who consumed pornography in the sample period. Classification of pornography sites are based on a machine learning classifier (Chintalapati and Sood, 2022). See Table SI 1.9 for the corresponding distribution in terms of percentage of time. A two-sample Kolmogorov–Smirnov test returns a p-value of 0.0481, rejecting the null that the Republican and Democrat distributions are the same at the 5% level.

Table SI 1.9: Percentage of Time Spent on Pornographic Sites by Party

	% time					
Percentile	Republicans	Democrats				
0.00	0.0	0.0				
0.10	0.0	0.0				
0.20	0.1	0.0				
0.30	0.2	0.1				
0.40	0.5	0.3				
0.50	1.1	0.7				
0.60	3.4	1.4				
0.70	5.4	3.0				
0.80	10.8	7.1				
0.90	33.4	18.2				
0.95	42.1	41.9				
0.96	46.5	44.7				
0.97	60.6	46.3				
0.98	70.6	50.9				
0.99	71.8	56.6				
1.00	74.6	70.5				

Notes: Table shows splits by party and by key percentiles (each of the ten deciles plus quantiles at the right tail) for the percentage of time spent on pornography by individuals who consumed pornography in the sample period. Classification of pornography sites are based on a machine learning classifier (Chintalapati and Sood, 2022). See Table SI 1.8 for the corresponding distribution in terms of percentage of time. A two-sample Kolmogorov–Smirnov test returns a p-value of 0.19, failing to reject the null that the Republican and Democrat distributions are the same at the 5% level.

SI 1.4 Consumption of Pornography Among Independents

Table SI 1.10: Distribution of Consumption of Pornography Online Among Independents

	(1)	(2)	(3)	(4)	(5)
Percentile	Republicans	Democrats	Partisans	Independents	${\bf Independents/DK}$
0.00	0.0	0.0	0.0	0.0	0.0
0.10	0.1	0.0	0.0	0.0	0.0
0.20	0.2	0.1	0.1	0.2	0.1
0.30	0.3	0.1	0.2	0.4	0.3
0.40	0.7	0.2	0.3	0.7	0.6
0.50	1.4	0.5	0.7	1.3	1.2
0.60	2.2	0.7	1.3	2.4	2.0
0.70	3.0	1.5	2.2	3.1	2.8
0.80	5.5	2.7	4.3	6.5	4.6
0.90	11.2	7.0	9.7	14.0	12.0
0.95	25.4	13.8	19.1	22.7	20.6
0.96	27.1	18.3	21.4	24.7	23.2
0.97	27.9	19.9	26.0	26.7	26.4
0.98	30.0	22.0	29.4	27.4	27.6
0.99	36.5	46.0	37.1	33.3	43.8
1.00	37.5	90.5	90.5	44.3	94.0

Notes: Table shows splits by partisans and non-partisans, by key percentiles (each of the ten deciles plus quantiles at the right tail) for the duration (hours) spent by individuals who consumed pornography in the sample period. Column (1) includes Democrats (n=154). Column (2) includes Republicans (n=95). Column (3) includes both Republicans and Democrats (n=249). Column (4) includes Independents (n=67). Column (5) includes Independents, those who report "Don't Know" for partisan identification, and those who do not report (n=104).

Table SI 1.11: Percentage of Time Spent on Pornographic Sites Among Independents

Percentile	(1) Republicans	(2) Democrats	(3) Partisans	(4) Independents	(5) Independents/DK
0.00	0.0	0.0	0.0	0.0	0.0
0.10	0.1	0.0	0.0	0.1	0.0
0.20	0.5	0.1	0.1	0.6	0.3
0.30	0.9	0.3	0.6	1.5	1.1
0.40	2.3	0.9	1.0	2.6	2.1
0.50	4.0	1.3	2.3	3.4	3.4
0.60	6.6	3.2	4.3	6.9	6.7
0.70	10.7	5.7	7.3	9.7	9.8
0.80	20.8	12.3	13.9	14.3	14.2
0.90	36.8	35.8	36.5	32.2	33.6
0.95	46.4	53.4	52.5	66.4	63.5
0.96	54.8	58.6	59.3	68.5	64.1
0.97	63.3	64.0	64.1	69.9	67.5
0.98	68.7	65.0	68.5	72.3	69.7
0.99	71.9	72.9	73.3	77.9	73.4
1.00	87.5	77.4	87.5	86.5	86.5

Notes: Table shows splits by partisans and non-partisans, by key percentiles (each of the ten deciles plus quantiles at the right tail) for the percentage of time spent on pornography by individuals who consumed pornography in the sample period. Column (1) includes Democrats (n=154). Column (2) includes Republicans (n=95). Column (3) includes both Republicans and Democrats (n=249). Column (4) includes Independents (n=67). Column (5) includes Independents, those who report "Don't Know" for partisan identification, and those who do not report (n=104).

SI 1.5 Alternate Measures

SI 1.5.1 Proportion of Partisans Who Consumed Any Pornography

0.4

Age bound on the state of
Figure SI 1.7: Pornography Consumption by Party

Notes: Figure shows proportion of individuals in the sample who ever consumed pornography in the sample period by party. Capped vertical bars are 95% confidence intervals from bootstrapped standard errors (n = 1,000).

SI 1.5.2 Analyses of Visits

1,500
2,000
1,000
500
10 20 30 40 50 60 70 80 90 100

Figure SI 1.8: Distribution of Traffic to Pornography Online

Notes: Figure shows the number of visits to pornography sites by individuals who consumed pornography in the sample period. Individuals are split into deciles with each bin containing approximately the same number of individuals. Height of bars indicate mean of each bin. Capped vertical bars are 95% confidence intervals.

Secure 31 1.9: Percentage of Trainic to Pornography (

Figure SI 1.9: Percentage of Traffic to Pornography Online

Notes: Figure shows the proportion of visits to pornography sites by individuals who consumed pornography in the sample period. Individuals are split into deciles with each bin containing approximately the same number of individuals. Height of bars indicate mean of each bin. Capped vertical bars are 95% confidence intervals.

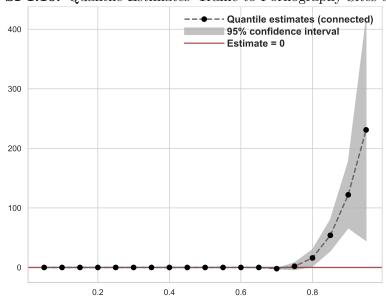


Figure SI 1.10: Quantile Estimates—Traffic to Pornography Sites by Party

Notes: Dependent variable is the number of visits to pornographic sites by individuals in our sample. Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis. 95% confidence intervals constructed from standard errors.

12

------ Quantile estimates (connected)
95% confidence interval

Estimate = 0

4

0.2

Figure SI 1.11: Quantile Estimates-Percentage of Traffic to Pornographic Sites by Party

Notes: Dependent variable is the percentage of traffic to pornographic sites by individuals in our sample. Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis. 95% confidence intervals constructed from standard errors.

0.6

0.8

0.4

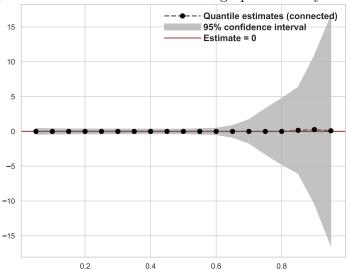
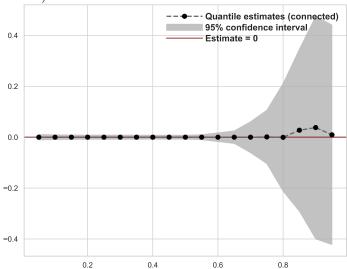


Figure SI 1.12: Quantile Estimates—Traffic to Pornographic Sites by Party (with covariates)

Notes: Dependent variable is the number of visits to pornographic sites by individuals in our sample. Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis. Covariates included on the right-hand side are: gender (Female/Male), race (White/Black/Hispanic/Asian/Others), education level (no HS/HS graduate/some college/college graduate), age and its quadratic, and region (NE/MW/S/W). 95% confidence intervals constructed from standard errors.

Figure SI 1.13: Quantile Estimates—Percentage of Traffic to Pornographic Sites by Party (with covariates)



Notes: Dependent variable is the percentage of traffic to pornographic sites by individuals in our sample. Each point indicates the difference between Republicans and Democrats and corresponds to a quantile regression at the quantile indicated by the x-axis. Covariates included on the right-hand side are: gender (Female/Male), race (White/Black/Hispanic/Asian/Others), education level (no HS/HS graduate/some college/college graduate), age and its quadratic, and region (NE/MW/S/W). 95% confidence intervals constructed from standard errors.