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Voting in local and national elections: the role of local and national news consumption and news media preference

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ABSTRACT

While previous studies have examined the effect of news consumption on voting, the possible differential relationships between news consumption (local and national), news media preference (traditional and digital), and local and national voting have not been extensively examined. This study explores the role of news media consumption (local/national and traditional/digital) as predictors in voting in local and national elections, using a nationally representative data set from the Pew Research Center collected in 2016. Even though both types of news consumption are positive predictors of voting at both levels, local news consumption is more relevant when predicting local voting, and national news consumption when predicting national voting respectively. Moreover, the results indicate that traditional media are still a significant positive predictor of local voting while digital media are not. Neither traditional nor digital media platforms play a significant role in predicting national voting. The overall effect of news consumption on voting is more complicated and nuanced than hitherto discussed in the literature.

Introduction

In November 2020, voters in the United States cast their ballots, by mail and in person, in the presidential election as well as for other state and national political contests. Even though voting in the United States is a constitutional right and is seen as an important part of democracy, voter participation varies from election to election. According to *the Washington Post*, the 2020 presidential election saw the highest voter turnout in the last 100 years, with nearly 65% of eligible adults participating (Schaul, Rabinowitz, & Mellnik, 2020). This is dramatic increase from the 2016 presidential election which had lower voter turnout than the 2012 election (File, 2017). Midterms typically see lower voter turnout than presidential election years, but the 2018 elections had a 53.4% participation rate, an 11.5% increase from 41.9% in 2014 (Misra, 2019).

How and why people vote has been the topic of many research articles. A significant factor determining voter behaviors is the information individuals receive about candidates and political issues. People often seek information as a prerequisite for participation in the political sphere (Molyneux, 2017). In particular, news has played a significant role for voters in respect to issue salience (Roberts, 1992), voting decisions (Abbe, Goodliffe, Herrnson, & Patterson, 2003), and basic cognitive and attitudinal preconditions leading to candidate choice and voting (Hyun & Moon, 2014).

Today, through digital and traditional news media, voters have access to more information than ever. In particular, online news consumption is a growing trend. A Pew Research Center study conducted between October-November 2019 found that 18% of American adults got their news

primarily from social media (Mitchell, Jurkowitz, Oliphant, & Shearer, 2020). In August 2017, 43% of Americans indicated that they "often" obtain news on a mobile device, while an even larger percentage (85%) "sometimes" do (Barthel & Mitchell, 2017). Pew Research Center (2017) reports that 67% of U.S. adults say they get at least some news from social media. Moving from the traditional media era to the digital media era has changed news consumption habits. Following this trend, a number of studies have examined the relationship between online news consumption and political participation, as compared to traditional media, and many have found a positive relationship between online news consumption and political participation (Ekström, Olsson, & Shehata, 2014; Hao, Wen, & George, 2014; Su & Xiao, 2019).

The transition from traditional to digital news media also brought fundamental change to local and national news media (Wahl-Jorgensen, 2019). Whereas national news survived the transition, local journalism has been severely affected with the outright closure of local newspapers in several markets as well as budget cuts and layoffs in the surviving outlets (Darr, Hitt, & Dunaway, 2018). A critical question is how those changes have affected local and national voting. Though previous studies have examined the effect of diversification of news consumption on voting, the possible differential relationships between news consumption (local and national), news media preference (traditional and digital), and local and national voting have not been extensively examined yet. In order to bridge this gap, this study explores: 1) the relationship between national and local news media consumption and voting in local and national elections, 2) the relationship between traditional and digital news media consumption and voting in local and national elections, using a nationally representative data set from the Pew Research Center. In doing so, our study aims to provide significant implications about the differentiated association between types of news consumed (local vs. national), platform preference (digital vs. traditional) and voting participation at both the local and national levels.

Literature review

Media consumption and political participation

The relationship between media consumption and political participation has been studied extensively. So far, there is no general consensus about this topic because both negative and positive relationships have been found depending on the media types. At the outset, it is imperative to clarify the relationship between general media consumption and political participation. General media consumption includes the use of the media for entertainment and information. Early studies have found watching TV impedes users' political participation because: 1) heavy TV viewers simply do not have time to participate in political activities due to the increasing amount of time for watching TV (Putnam, 2000, 2) heavy TV viewing weakens TV user's sense of belonging to his/her community by decreasing viewer's political engagement (Uslaner, 1998). Building on those arguments, Falck, Gold, and Heblich (2014) found a negative relationship between digital media consumption and political participation. They argued that internet use considerably increased entertainment consumption, which in effect, diverted users' time and attention that might have been devoted to political news and information.

In contrast to those studies, others have found a positive relationship in various media types such as newspapers (McLeod et al., 1996; McLeod, Scheufele, & Moy, 1999) and television (Hoffman & Thomson, 2009) on political participation. The emergence of new media, with greater potential for interactivity and selectivity, has renewed interest in the role of media in influencing political participation. The positive effect of online media use on political engagement has also been identified in other studies (Negrine & Papathanassopoulos, 2011; Ward & Vedel, 2006). These studies examined not only users' media consumption for information seeking but also for entertainment.

Especially interesting from our point of view is the positive impact of news media consumption on voting behavior because people tend to acquire information from news as a prerequisite for political participation (Molyneux, 2017). Previous studies explored why news consumption is related to political participation. Researchers have investigated how news consumption affects political knowledge and political efficacy, which in turn influences political participation. Jung, Kim, and de Zúñiga (2011) demonstrated news media consumption is positively impacts political knowledge and political efficacy separately, and that both positively affect people's political participation. Andersen, Bjarnøe, Albæk, and De Vreese (2016) developed a more complicated model about this relationship. They argued that individuals who watch hard TV news and online tabloids gain more political knowledge and therefore more political efficacy, which consequently leads to more active political participation. Besides the effect on political knowledge and efficacy, the study has also found that news has played a significant role for voters in respect to issue salience (Roberts, 1992), voting decisions (Abbe et al., 2003), and basic cognitive and attitudinal preconditions leading to candidate choice and voting (Hyun & Moon, 2014). Following those arguments, a central assumption of this paper is that news consumption is a key factor in affecting users' voting behavior.

From traditional to digital news media

Although previous studies have established that news consumption is a primary driver of voting behavior, the transition from traditional to digital news media has renewed questions about this relationship. The digital news revolution has brought far-reaching change to all stages of the chain of production, including in news production, distribution and consumption: a major theme is the shift of audiences and revenues from traditional news media to the new digital media. Over the last three decades, U.S. newspapers have endured a decline in circulation. Recently, between 2014 and 2015 alone, newspaper readership decreased by 7% (Mitchell & Holcomb, 2016), and the decline has accelerated since then. Declining circulation has, in turn, led to a reduction in revenue and jobs (Bureau of Labor Statistics, 2018; Delli Carpini, 2016), the restructuring of newsrooms and consolidation in the news industry (Jurkowitz, 2014). Meanwhile, trends for local and national television news are grim as well. Drawing from comScore's StationView Essentials® data, viewership for local TV stations, including ABC, CBS, FOX, and NBC affiliates dropped in all key time slots in 2017 (Pew Research Center, 2018a). Viewership for the evening news on all three major cable news channels, CNN, Fox News, and MSNBC, declined as well, even though the daytime viewership remained stable (Pew Research Center, 2018b).

Although there has been a decline in news consumption on traditional outlets, this is not to say that people are not consuming news. Rather, the outlets by which people access news are shifting from traditional media to digital and social media. For instance, online news consumption shows a growing trend. In August 2017, 43% of respondents indicated that they "often" obtain news on a mobile device, and an even larger percentage (85%) reported that they sometimes do so (Barthel & Mitchell, 2017). Pew Research Center (2017) reported that 68% of U.S. adults get at least some news from social media. The transition from the traditional media era to the digital media era has significantly altered our news consumption habits. As a result, the impact of online media on voting behavior calls for research attention. A critical question is whether the impact of digital news consumption is different from that of traditional news on voting.

Local & national news consumption and local & national voting

The transition from traditional to digital news platforms also causes changes in the news content on different platforms. Wahl-Jorgensen (2019) argued that the decline of local news sources has accelerated in the digital era due to the rapid erosion of income from sales, subscriptions, and advertising. As a result, online news has become synonymous with national news in the digital era. Conversely, it seems that local media tend to depend on offline media as their main distribution platform. Therefore, consumers' choice about the platform on which they consume news (traditional or digital media) also conditions the type of news they are exposed to (local or national). This, too, needs to be considered in order to understand the complicated and nuanced relationship between news consumption and voting in the digital society. Accordingly, we explore the relationship between news consumption and voting with respect to the following two aspects: 1) the content of news between local and national, 2) the preference of news media between traditional and digital.

We hypothesize that local news media and national news media cover different content and offer different perspectives. As Ha et al. (2013) asserted, local news media frame local and national events within a local perspective, drawing out local connections to national and international news. Meanwhile, national news media rarely deal with local events and news, and this different news content may affect consumers' political efficacy and voting behavior. Previous studies demonstrated that the decline of local newspapers due to changes in the media environment is one contributor to lowers the voting participation rate (Hayes & Lawless, 2015; Schulhofer-Wohl & Garrido, 2013). This is because local news provides local political information (Kübler & Goodman, 2019). In addition to the existing literature, we test how local and national news consumption are related to local and national voting, respectively. We assume that local news media provides local political news, while national news rarely covers local news. This different news content would affect the news consumer's local and national voting behavior distinctly. Therefore, we proposed our first two hypotheses:

H1a. Local news consumption is positively associated with local voting

H1b. National news consumption is positively associated with national voting

With respect to the preference of news media, previous studies have paid attention to the role of local newspapers in voting (Darr et al., 2018; Druckman, 2005; Hayes & Lawless, 2015). Hayes and Lawless (2015) found that citizens who consumed less local news were less likely to vote. Following their argument, Darr et al. (2018) focused on the decline of local newspapers due to changes in the media environment. They argued that local newspaper closures in the digital era make Americans depend more on national news, and this change has resulted in the nationalization of politics in America. Interestingly, these two studies assume that the change in the media environment from traditional to digital weakens local newspapers, and the decline of local newspapers negatively affects the voting rate. In order to add to the existing literature, we added three more media (radio, local TV, and cable TV) for traditional news media and three digital media (social network sites, websites and apps) to test the relationship between news media consumption (through traditional and digital) and local and national voting. Accordingly, we frame the following hypotheses:

H2a. News media consumption through traditional media (newspaper, radio, local TV, and cable TV) is positively associated with local voting

H2b. News media consumption through digital media (social network sites, websites, and apps) is positively associated with national voting

Method

Sample

This paper uses a national survey dataset of 4,654 individuals collected by the Pew Research Center's Internet and American Life Project (Pew Research Center, 2018c). The American Trends Panel Wave 14 survey was conducted between January-February 2016 and queried respondents about their news media preference (traditional and digital), political participation (local voting and national voting), and interest in news consumption (local news and national news). In addition, the database also contains demographic information about the respondents (age, income, political ideology, education, gender, and race).



As a first step, we removed 489 respondents (10.5%) with unanswered questions or missing data. After these deletions, data for 4,165 respondents (50.4% male and 49.6% female) above the age of 18 were used (15.7% 18-29 years, 31% 30-49 years, 30.9% 50-64 years, and 22.4% above 65 years). Approximately one in six respondents (14.7%) were high school graduates or less, 32.3% had some college, and 53% were college graduates. In terms of annual income, 5.3% had less than 10,000, USD 6.6% from 10,000 USD to under 20,000, USD 8.7% from 20.000 USD to under 30,000, USD 9.5% from 30,000 USD to under 40,000, USD 9.1% from 40,000 USD to under 50,000, USD 17.9% from 50,000 USD to under 75,000, USD 15% from 75,000 USD to under 100,000, USD 15.9% from 100,000 USD to under 150,000, USD and 12% from 150,000 USD or more. On race, 81.6% of the respondents were white while nonwhite respondents were 18.4%. In terms of political ideology, 9.5% indicated that they are very conservative, 23.7% are conservative, 36.1% are moderate, 20.5% are liberal, and 10.2% are very liberal.

Dependent variables

Local Voting (M = 3.74, SD = 1.32). In order to measure local voting participation, participants were asked to respond on a 5-point Likert scale to the following statement: "How often do you vote in each type of elections?" "LOCAL ELECTIONS, such as for mayor or a school board". The response options included "1 = always"; "2 = nearly always"; "3 = part of the time"; "4 = seldom" and "5 = never". After removing non-responses, responses to the question were reverse coded to ensure that higher numbers indicated a high frequency of local voting and vice versa.

National Voting (M = 4.41, SD = 1.14). To measure national voting participation, participants were asked to rate, again on a 5-point Likert scale, the following statement: "How often do you vote in each type of election?" "NATIONAL ELECTION for U.S. president." The response options included "1 = always"; "2 = nearly always"; "3 = part of the time"; "4 = seldom" and "5 = never." These responses too were reverse coded for the same reason as above.

Independent variables

News media preference

The survey includes measures for the use of six types of media: "reading news in a print newspaper" (M = 2.63, SD = 1.04); "listening to news on the radio" (M = 2.86, SD = 1.01); "watching local television news" (M = 2.98, SD = 1.04); "watching cable television news such as CNN, The Fox News Cable channel, or MSNBC (M = 2.76, SD = 1.09)"; "getting news from a social network site such as Facebook or Twitter" (M = 2.51, SD = 1.12); "getting news from a news website or app" (M = 3.03, SD = .99). Respondents who "refused" were not included in the analysis.

Interest in local news consumption

(M = 2.99, SD = .73). Pew asked participants to answer three questions that indicated their interest in local news consumption: "How closely do you follow local news?"; "How closely do you follow news about your neighborhood?" and "How closely do you follow each type of news, either in the newspaper, on television, radio, or the internet? People and events in your own community." Four options were offered for these questions: "1 = very closely"; "2 = somewhat closely"; 3 = not very closely" and "4 = not at all closely." Again, non-responses were removed and the average of the three items was calculated and reversed. After the reverse coding, higher ratings indicated a high intensity of local news consumption and lower ratings less local news consumption. The 3-item scale had high reliability (Cronbach's alpha = .84).

Interest in national news consumption

(M = 3.25, SD = .76). To assess the respondents' interest in national news consumption, Pew asked the question "How closely do you follow national news?" Respondents are expected to answer this



question on a four-point scale including "1 = very closely"; "2 = somewhat closely"; 3 = not very closely" and "4 = not at all closely." After the reverse coding, higher ratings indicated a high intensity of national news consumption.

In addition to these variables, the Pew database also contains information on the demographics of the respondents – age (M = 2.60, SD = 1.00), gender (M = .50, SD = .50), income (M = 5.75, SD = 2.33), education (M = 2.38, SD = .73), race (M = .82, SD = .39), and political ideology (M = 2.98, SD = 1.11). These variables were used as controls in the analysis since these were found to influence voting in prior research (Knoll, Matthes, & Heiss, 2018).

Analysis and results

Before the hierarchical regression analysis, descriptive statistics of the data, including means, standard deviations and correlations were calculated using SPSS Statistics version 26.0. Table 1 presents the descriptive statistics and Pearson product correlations for all variables. Respondents who often vote in local elections are more likely to consume national news (r = .33), to consume local news (r = .37), to read newspaper (r = .29), to listen radio news (r = .20), to watch local TV news (r = .21), to watch cable TV news (r = .19), and to get news from website or app (r = .05). However, they are less likely to get news from SNS such as Facebook or Twitter (r = -.12). Users who more often participate in national voting are more likely to consume national news (r = .32), local news (r = .17), to read newspaper (r = .18).16), to listen radio news (r = .15), to watch local TV news (r = .08), to watch cable TV (r = .13), and to get news from website or app (r = .09). However, they are less likely to get news from SNS such as Facebook or Twitter (r = -.11). These correlation results indicate both the strength of the relationship and the direction of the relationship between dependent and independent variables.

Multicollinearity check

Since many of the variables are correlated, we conducted a VIF test to detect if multicollinearity may be an issue. According to Kline (2016), a tolerance value below .10 or variance inflation factor (VIF) greater than 10.0 indicate severe multicollinearity issues. All tolerance values are greater than .10 and VIF lower than 10.0. These results verified multicollinearity is not a serious issue for this analysis.

Hierarchical linear regression analysis

In order to examine the relationships between news consumption (local and national), news media preference (traditional and digital), and local and national voting, hierarchical linear regression analyses were conducted. Hierarchical linear regression is a framework for model comparison of nested regression models. By adding variables step-wisely, we were able to determine whether the newly added variables could improve the proportion of explained variance in the dependent variable by the models. Table 2 provides the result of three models predicting local and national voting. For local voting, demographic variables (age, income, political ideology, gender, education, and race) were tested in Model 1, which accounted for 17% of the variance, F(6, 4158) = 138.42, p < .001, $R^2 = .17$. When news consumption variables were entered in Model 2, an additional 9% of variance was explained and this change in R^2 was significant, F(8, 4156) = 183.84, p < .001, $R^2 = .26$. Adding news media platforms to the regression in Model 3 explained an additional 1% of variance and this change in R^2 was also significant, F(14, 4150) = 112.09, p < .001, $R^2 = .27$. Model 3 has a better variation compared to the other two models. According to the regression result of the Model 3, people who prefer reading newspapers ($\beta = .08$, p < .001), listening radio news ($\beta = .08$, p < .001), and getting news from website or app ($\beta = .03$, p < .001) tend to participate in local voting more frequently. In terms of news consumption, both national news consumption ($\beta = .10$, p < .001) and local news consumption ($\beta = .24$, p < .001) are positively related to local voting. However, local news consumption has a stronger effect on

Table 1. Descriptive Statistics and Zero-Order Correlations.	
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Variables	×	SD	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15
1. Age	2.60	1.00	ı														
2. Income	5.75	2.33	.17**	1													
3. Political ideology	2.98	1.11	12**	.01	1												
4. Education	2.38	.73	**50.	.41*	.16**	ı											
5. Gender	.50	.50	.03	.13**	**80	.05**	1										
6. Race	.82	39	**81.	.16**	03	**01.	02	1									
7. National news consumption	3.25	9/.	.34**	**61.	02	**91.	.18**	**40.	1								
8. Local news consumption	2.99	.73	.27**	.01	**60'-	11*	**60	.02	.36**	ı							
9. Newspaper	2.63	1.04	.35**	** 20.	.03	**50.	01	.05**	.26**	.37**	1						
10. Radio	2.86	1.01	**80:	.14*	00.–	.11*	**90	.05**	.22**	.17**	.18*	1					
11. TV	2.98	1.04	**08.	**80 [.] –	14**	20**	**80	***0	.24**	**05.	.27**	**80	1				
12. Cable	2.76	1.09	.31**	.05	19**	**60	.05**	*40	**04.	.28**	.21**	**60'	.45**	ı			
13. SNS	2.51	1.12	35**	12**	**80:	**90	16**	**60'-	11**	*40.	13**	03	03*	**00	1		
14. Website or app	3.03	66:	16**	.16**	**/0	**81.	.11*	02	**61.	.03	05**	**11.	13**	01	.22**	1	
15. Local voting	3.74	1.32	**88:	.18**	**80	.13**	**40.	**01.	.33**	.37**	.29**	.20**	.21**	.19**	12**	.05**	1
16. National voting	4.41	1.14	**08.	.26**	01	.25**	*60.	.16**	.32**	.17**	.16**	.15**	**80`	.13**	11**	**60	.65**
Note: *p <.05, **p <.01																	

Table 2. Results of hierarchical linear regression analyses.

	Mo	odel 1	Me	odel 2	Me	odel 3
Independent variables	Local voting	National voting	Local voting	National voting	Local voting	National voting
Step 1: Demographic variables						
Age group	.35***	.26***	.24***	.18***	.23***	.19***
Income	.09***	.13***	.07***	.11***	.06***	.11***
Political ideology	05**	.001	04**	.001	05**	.00
Gender (0: female; 1: male)	.02	001	.02 [†]	02	.02	03^{\dagger}
Education	.09***	.17***	.10***	.16***	.09***	.15***
Race (0: nonwhite; 1: white)	.01	.08***	.02	.08***	.01	.08***
Step 2: News consumption						
National news consumption			.12***	.18***	.10***	.17***
Local news consumption			.27***	.07***	.24***	.07***
Step 3: News media preference						
Newspaper(print)					.08***	.01
Radio					.08***	.05**
TV					01	004
Cable					02	01
Social media					01	02
Website or app					.03***	.04**
R^2	.17	.17	.26	.21	.27	.21
ΔR^2			.09	.04	.01	.004
ΔF	138.42***	138.39***	266.98***	103.97***	12.39***	3.45**

Note: 1. All regression coefficients are standardized.

local voting than national news consumption does. These results support our hypothesis 1a. Among demographics factors, age (β = .23, p < .001), income (β = .06, p < .001), and education (β = .09, p < .001) are positive predictors of local voting. Meanwhile, political ideology (β = -.05, p < .01) is the negative predictors of local voting, which indicates that if the respondent is more conservative, he or she would be more participate in local elections. There is no significant association between watching local TV news (β = -.01, p = .72), cable TV (β = -.02, p = .29), getting news from social network site (β = -.01, p = .51) and local voting.

For national voting shown in Table 2, demographic variables (age, income, political ideology, gender, education and race) were tested, which accounted for 17% of the variance, F(6, 4158) = 138.39, p < .001, $R^2 = .17$. When news consumption variables were entered in Model 2, an additional 4% of variance in national voting was explained and this change in R^2 was significant, F(8, 4156) = 134.93, p < .001, $R^2 = .21$. Finally, the addition of news media platforms to the regression in Model 3 explained an additional 0.4% of variance and this change in \mathbb{R}^2 was also significant, F(14, 4150) = 78.85, p < .01, and $R^2 = .21$. Model 3 has also improved its variance comparing to model 1 and 2. Listening to news from radio, getting news from website or app, national news consumption, local news consumption, age, education, income, and race are positive and significant predictors of national voting. Gender is a negative predictor at a marginal significant level ($\beta = -.03$, p = .061). People who prefer listening to news from radio ($\beta = .05$, p < .01) and getting news from a website or app ($\beta = .04$, p < .01) are more likely to vote in national elections. People who consume more national news ($\beta = .17$, p < .001) and local news ($\beta = .07$, p < .001) are more like to participate in national voting. Interestingly, the effect of national news consumption on national voting is greater than that of local news consumption. These results also support hypothesis 1b. Older people are more like to participate in national voting ($\beta = .19$, p < .001), and so are white ($\beta = .08$, p < .001), better educated ($\beta = .15$, p < .001) and higher income (β =.11, p < .001) individuals.

In order to test hypotheses 2a and 2b, we aggregated six types of media into two categories: traditional media and digital media and estimated their relationship with local and national voting. The "newspaper" variable was measured using the question of "reading news in a print newspaper." The "radio" was measured by the question of "listening to news on the radio." And the "local TV" and "cable TV" were measured the questions of "watching local television news" and "watching cable

 $^{2.^{\}dagger} p < .1; *p < .05; **p < .01, ***p < .001$

television news such as CNN, The Fox News Cable channel, or MSNBC." For "traditional media preference," we summed four variables: "newspaper," "radio" "local TV" and "cable TV." The variables of "SNS" and "website or app" were measured the questions of "getting news from a social network site such as Facebook or Twitter" and "getting news from a news website or app". For the variable "digital media preference," we summed two variables: "SNS" and "website or app." For both new variables, a higher number indicated a stronger preference for digital media and traditional media, respectively, and lower numbers a weaker preference. Again, hierarchical linear regression models were then run with these new variables - digital media and traditional media - as predictors of local and national

Table 3 shows the relationship between traditional & digital media preference and local & national voting. For local voting, the demographic variables (age, income, political ideology, gender, education and race) were tested in Model 4, which accounted for 17% of the variance, F(6, 4158) = 138.42, p < .001, R^2 = .17. When news consumption variables were entered in Model 5, an additional 9% of variance was explained and this change in R^2 was significant, F(8, 4156) = 183.84, p < .001, $R^2 = .26$. Adding news media platforms to the regression in Model 6 explained an additional 0.4% of variance and this change in R^2 was also significant, F(9, 4155) = 166.72, p < .001, and $R^2 = .26$. Therefore, Model 6 has improved its variance comparing to model 4 and 5. Specifically, a preference for getting news from traditional media is a positive and significant predictor of local voting ($\beta = .08$, p < .001), while there is no significant relationship between getting news from digital media on local voting (β = .02, p = .23). These results support hypothesis 2a. For the impact of traditional and digital media preference on national voting, the demographic variables (age, income, political ideology, gender, education and race) were tested in Model 4, which accounted for 17% of the variance, F(6, 4158) = 138.39, p < .001, $R^2 = .17$. When news consumption variables were entered in Model 5, an additional 4% of variance was explained and this change in R^2 was significant, F(8, 4156) = 134.93, p < .001, $R^2 = .21$. Finally, the addition of news media platforms to the regression in Model 6 revealed a slightly better model fit than model 2 with a significant portion of the variance, F(9, 4155) = 120.19, p < .001, $R^2 = .21$. However, comparing to model 5, the model's change in the F value is not statistically significant (p = .16). Thus, the fits of model 5 and model 6 have no significant differences. Difference from predictors of local voting, getting news from traditional media ($\beta = .03$, p = .14) have no significant relationship with national voting. Moreover, getting news from digital media (β = .02, p = .14) also have no significant relationship with national voting. These results do not support hypothesis 2b.

Table 3. Results of hierarchical linear regression analyses (combined).

	Mo	odel 4	Mo	odel 5	M	odel 6
Independent variables	Local voting	National voting	Local voting	National voting	Local voting	National voting
Step 1: Demographic variables						
Age group	.09***	.26***	.24***	.18***	.23***	.18***
Income	05***	.13***	.07***	.11***	.07***	.11***
Political ideology	.02**	.001	04**	.001	03*	.002
Gender (1: female; 0: male)	.09	001	.02	02	.03	02
Education	.01***	.17***	.10***	.16***	.11***	.16***
Race (1: white; 0: nonwhite)	.09	.08***	.02	.08***	.02	.08***
Step 2: News consumption						
National news consumption			.12***	.18***	.09***	.17***
Local news consumption			.27***	.07***	.24***	.06***
Step 3: News media preference						
(Combined)						
Digital					.02	.02
Traditional					.08***	.03
R^2	.17	.17	.26	.21	.26	.21
ΔR^2			.09	.04	.004	.001
ΔF	138.42***	138.39***	266.98***	103.97***	11.79***	2.12

Note: 1. All regression coefficients are standardized.

^{2. *}p <.05; **p <.01, ***p <.001



Discussion

The 2020 presidential election in United States recorded the highest voter turnout rate among eligible citizens since 1900 (Schaul et al., 2020). Accordingly, how and why people vote has again received much attention from both the news media and academia. As a precursor to political action, information seeking through news consumption is still a key factor driving voter participation (Hayes & Lawless, 2015; Molyneux, 2017). News consumption increases individuals' political knowledge and efficacy resulting in more political participation (Jung et al., 2011). As the literature review shows, media scholars have examined the diversification of news consumption and its impact on voting behavior (Darr et al., 2018; Druckman, 2005; Oberholzer-Gee & Waldfogel, 2009). However, less research has investigated the linkage between the content (local and national), types of news consumption (traditional and digital), and voting, differentiating between local and national as in this study. Through hierarchical linear regression analysis, we examined the relationships between the content of news consumption (local or national), news media preference (traditional or digital media), and local and national voting.

First, on the news content, the results show that both local and national news consumption are positive predictors of local voting. But local news consumption has a stronger effect on local voting compared to national news consumption. In terms of national voting, local and national news consumption are also positive predictors. However, the effect of national news consumption is stronger than that of local news consumption. This difference may be traceable to the topics covered and the emphasis on local and national news. Local news media cover more local community content and offer a more localized perspective on international or national news (Ha et al., 2013). Thus, our findings are consistent with the literature that draws a connection between local news media and local political engagement. If a citizen is likely to consume local news, they as voters would pay more attention to public affairs within the scope of the local community, incentivizing them to participate in local elections (Darr et al., 2018; Druckman, 2005; Hayes & Lawless, 2015). Interestingly, we also found that national news consumption has a role in predicting local voting, though its effect is comparatively weaker than consuming local news. Generally, consuming any news regardless of national or local can affect individual political efficacy and motivate the individual to turn out, as previous research has found (Tewksbury & Rittenberg, 2012). This explains why we found that national news consumption has a role in predicting local voting, though its effect is comparatively weaker than consuming local news. Similarly, national news consumption is a stronger predictor of national voting than local news consumption because national news covers political news with a national perspective.

Second, the association between news media preference and voting participation is another focus of our paper. Our results suggest that traditional media use is a still significant positive predictor of local voting while digital media is not. Meanwhile, for predicting national voting, neither traditional nor digital media platform preference plays a significant role. The United States has experienced a broadbased shift away from traditional news consumption via newspapers and network television to new digital media platforms, which has altered our news consumption habits (Barthel & Mitchell, 2017; Pew Research Center, 2017). In addition, the digital transformation has affected local and national news coverage differently. As Wahl-Jorgensen (2019) points out, the decline of local news source has accelerated in the digital era due to the rapid erosion of income from sales, subscriptions, and advertising. At the same time, the impact on national news sources has been relatively less severe; online news has become synonymous with national news in the digital era. In other words, a preference for traditional news media platforms would expose consumers to both local and national news. In contrast, those who predominantly consume online news would be exposed only to national news (Ha et al., 2013). Therefore, consumers of traditional news media would be more willing to turn out in local elections. However, our results do not demonstrate the causal relationship between the content of news (local and national), preference of news media (traditional and digital), and voting (local and national). For a clearer explanation, this relationship should be further examined in the future studies. For national voting, there are no differences between the traditional media consumer and the digital media consumer.



Because no matter what platforms they prefer, either traditional or digital, consumers are exposed to national news. Therefore, it does not affect voters' intention during the national electoral events.

Conclusion

Scholars and public intellectuals have advocated that one of the greatest threats to journalism is the collapse of local news (Delli Carpini, 2016). One of the consequences of this could be the lack of attention to local public affairs and less interest in voting in local elections. Lack of engagement with local affairs may lead to less interest in local news and information, leading to even less local engagement: a vicious cycle. The digital transformation exacerbates this effect since new digital platforms carry even less local news and information than traditional media. Especially for consumers who rely exclusively or predominantly on digital media for news and information, the lack of access to local news - and consequently in participating in local elections - becomes a significant factor. As a result, Darr et al. (2018) argued changes in the news environment from traditional to digital contribute to the nationalization of politics and the media in America. They are concerned that the nationalization of politics accelerates political polarization in America. The solution to this ultimately lies in the revival of news media in general, and especially local news and information. The current business models that emphasize revenue and profitability over social utility and public life cannot sustain robust news ecosystems. The call to rejuvenate local journalism cannot be answered without collaboration among professionals and academics, community organizations and citizen journalists. However, such long-term solutions are beyond the scope of this paper.

Although the present study offers a contribution to the literature concerning the relationship between news consumption and voting behavior, operationalized as local and national voting, more research is needed in future studies to overcome the limitations of this paper. First, the present study used a Pew dataset, and there are several weaknesses of that dataset; 1) some of the independent variables are measured using four-point scales. These scales do not reflect nuanced and detailed differences between the respondents; 2) the influence of social desirability could have had on participants' responses. This weakness would not reflect exact real-world phenomena, although this dataset still provides significant resources; 3) a self-reported willingness or intention to vote might not be an accurate measure of electoral participation. More longitudinal data on actual voting behaviors are needed to more accurately analyze these relationships.

Second, our study does not clarify the causal or conditional relationships between news consumption and local and national voting. Therefore, these relationships could be further explored through mediation or moderation analysis in the future studies. Lastly, the potential pull of community engagement and real-world social networks on local and national electoral participation may be investigated in the future studies for a better understanding of the relationship between news consumption and voting behavior. Despite these limitations, this paper adds to the literature by disaggregating both news consumption and voting behaviors into two levels, local and national or traditional and digital, and presenting a more nuanced model of their interrelationships. In doing so, our findings provide significant insights into voting behavior and news consumption in the digital era and broaden the scholarship of political communication and journalism studies.

Disclosure statement

No potential conflict of interest was reported by the authors.

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